2000

**Linking Learning & Serving: Teaching Core Content through Service Learning**

Kentucky Department of Education

Follow this and additional works at: https://digitalcommons.unomaha.edu/slcecurriculum

🔗 Part of the Service Learning Commons

Please take our feedback survey at: https://unomaha.az1.qualtrics.com/jfe/form/SV_8cchtFmpDyGfBLE

---

**Recommended Citation**


https://digitalcommons.unomaha.edu/slcecurriculum/30

---

This Report is brought to you for free and open access by the Service Learning and Community Engagement Examples at DigitalCommons@UNO. It has been accepted for inclusion in Curriculum by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.
Linking Teaching Core Content through Service Learning & Serving

Kentucky Department of Education . 2000
# TABLE OF CONTENTS

## Introduction
- Service-Learning Defined
- PARC Model for Implementing Service-Learning
- ASLER Standards for Service-Learning

## Service-Learning Strategies for Teaching Core Content
- Reading
- Writing
- Mathematics
- Science
- Social Studies
- Arts and Humanities
- Practical/Vocational Studies

## Service-Learning Units of Study
- Education
- Environment
- Human Services
- Program Evaluation
- Kentucky's Learning Goals
- Web Sites/Training

---

**NSLC**  
c/o ETR Associates  
4 Carbonero Way  
Scotts Valley, CA 95066
INTRODUCTION

PURPOSE: Experts agree that students learn best when their learning experience is hands-on, immediate, relevant, and what they are learning is directly tied to an experience with another human being. Service-learning is a teaching strategy that connects a service experience in the community to classroom curriculum. This book highlights ways teachers can engage students in service-learning projects that will both satisfy the core content guidelines and make learning more meaningful for students.

Keep in mind that this document only briefly touches on how to utilize service-learning to meet required core content. While the ideas contained in this document just skim the surface of the possibilities for blending core content concepts with service-learning, it is hopeful that the information contained in this document will lead you to explore other avenues for integrating service-learning with the core curriculum.

PART ONE
As you begin to teach a core concept, use Part One of this guide to provide suggestions on ways to involve students in real life experiences in the communities in which they live. While the student has an opportunity to practice their role as a community citizen, the service-learning projects also help to cement in his/her mind the concepts you are teaching.

PART TWO
This section contains actual units of study written and implemented by classroom teachers. The intent of these units of study is to demonstrate how service-learning projects have met core content areas. Use these units to gain ideas for projects and to get a better understanding of how to tie service-learning and core content together.
SERVICE-LEARNING DEFINED

Service-learning is a method by which young people learn and develop through active participation in thoughtfully organized service experiences that.

- meet community needs;
- are coordinated in collaboration with the school and community;
- are integrated into each young person’s academic curriculum;
- provide structured time for a young person to think, talk, and write about what he/she did and saw during the actual service activity;
- provide young people with opportunities to use newly acquired academic skills and knowledge in real life situations in their own communities;
- enhance what is taught in the school by extending student learning beyond the classroom; and
- help to foster the development of a sense of caring for others.

From the Alliance for Service-Learning in Education Reform
May, 1993
(1) PREPARATION

The preparation phase is an essential component of a successful service-learning project. It is important that students are oriented to the service project and are prepared for what they will be doing. Students should know what is expected of them and what to expect from the project. Simply “throwing them in” can result in confusion and frustration, especially if they are going to be working with people that are unfamiliar to them.

A few ideas for preparation activities include:

- **Inviting a guest speaker from the community to talk with the students**
  This is beneficial in many ways. It provides the background information about the issue the students will be addressing which will help them understand why they are doing the service. Students will be given the opportunity to ask questions of the speaker; often these are questions the teacher does not have the background to answer. A guest speaker also provides a sense of familiarity. When the students enter a facility to do a project there is often uneasiness at first. The familiar face of the speaker will be a welcome sight for students, and they will feel more at ease about beginning their project.

- **Student research**
  Providing a topic for the students to research will give them the time and attention necessary to learn about the issue your service project is trying to address. For example, if the project is a food drive for a local soup kitchen, students could study and read about homelessness issues in this country and write a report before beginning their project. They could then share their report with other students.

- **Open discussions**
  Simply gathering the students in a circle and discussing the issue at hand can provide a wonderful learning experience. This forum, if conducted in an open and honest way by the facilitator, can help students freely discuss their stereotypes about people different from themselves. Although these ideas may not be pleasant to hear, it is important that the students have the freedom to express their opinions. This would also give the teacher a chance to teach about counter stereotypes. It is equally important to do this after the project to find out if their opinions have changed.
(2) ACTION

The action phase takes three forms: direct (putting students face to face with the service recipients), indirect (benefits the community as a whole rather than a particular person or group), and advocacy (students voice their opinions on issues of importance to their community). The direct service should always focus on a real community need. The work should be both meaningful and challenging to the students involved. Think about the following points when considering a project:

- Are the students and the community agency involved in the planning?
- Are both the students and the community agencies committed to the project goals?
- Are students taking ownership?

(3) REFLECTION

Reflection is the real difference between service-learning and community service. Reflection involves the use of critical thinking skills in order to help students prepare for, succeed in, and learn from the service experience. The many ways to reflect are limited only by the imagination of the teacher and students. When planning for reflection activities, remember that not everyone learns in the same way. Offer a variety of methods and let students choose which one they would like to use to help them best analyze their experience. The following are some reflective activities:

- one-on-one or large group discussions -- consider asking questions such as “What was the best thing that happened during the project?”, “What could have been done better?”, “What do you think about the people you served?”, “What else can be done to address this issue?”, and “Did anyone say anything to you that surprised you?”
- journals -- this is most effective when done both before and after a project to help students visualize if and how their attitudes changed
- art projects such as painting, sketching, sculpting, or making a collage depicting their feelings about the project
- teaching what they learned to others -- this is often the ultimate form of reflection because students not only process their experience, but learn how to share their thoughts with others
- developing a multi-media presentation on their project -- not only do students process their learning, they gain skills in the use of technology
- creating and performing a skit about their experience

(4) CELEBRATION

This step simply recognizes students for their efforts and helps them understand that they did make a difference. Celebration often goes hand in hand with reflection.
STANDARDS OF QUALITY FOR SCHOOL-BASED SERVICE-LEARNING

Members of the Alliance for Service-Learning in Education Reform (ASLER) developed these standards to promote quality school-based and community-based service-learning programs.

I. Effective service-learning efforts strengthen service and academic learning.

II. Model service-learning provides concrete opportunities for youth to learn new skills, to think critically, and to test new roles in an environment that encourages risk-taking and rewards competence.

III. Preparation and reflection are essential elements in service-learning.

IV. Youths' efforts are recognized by those served, including their peers, the school, and the community.

V. Youth are involved in the planning.

VI. The service students perform makes a meaningful contribution to the community.

VII. Effective service-learning integrates systematic formative and summative evaluation.

VIII. Service-learning connects the school or sponsoring organization and its community in new and positive ways.

IX. Service-learning is understood and supported as an integral element in the life of a school or sponsoring organization and its community.

X. Skilled adult guidance and supervision are essential to the success of service-learning.

XI. Preservice training, orientation, and staff development that include the philosophy and methodology of service-learning best ensure that program quality and continuity are maintained.
## READING

### Reading Skills

(assessed across all reading types)

**Academic Expectation 1.2**

**CORE CONTENT**

| Reading Skills enable students to comprehend all types of reading materials. |
| RD-M-x.0.1 | Identify an author’s purpose in literary, informational, persuasive, and practical/workplace materials. |
| RD-M-x.0.2 | Use knowledge of synonyms, antonyms and homonyms to comprehend a passage. |
| RD-M-x.0.3 | Identify words that have multiple meanings and select the appropriate meaning for the context. |
| RD-M-x.0.4 | Know the meanings of common prefixes and suffixes to comprehend unfamiliar words. |
| RD-M-x.0.5 | Formulate questions to guide reading. |
| RD-M-x.0.6 | Scan to find key information. |
| RD-M-x.0.7 | Skim to get the general meaning of a passage. |
| RD-M-x.0.8 | Make predictions, draw conclusions, and make generalizations about what is read. |
| RD-M-x.0.9 | Reflect on and evaluate what is read. |

### Middle School

**SERVICE-LEARNING IDEAS**

- Collect books and donate them to needy children with information about the importance of reading.
- Schedule regular times when students can read to elementary or preschool children. Follow this with a discussion of the story read.
- Read children’s books on tape for visually impaired children in your school/district.
- Make children’s books with students developing their own characters and stories.
- Tutor peers or x-age students in reading.
## Literature

### Subdomain 1

### Academic Expectation 1.2

## Service-Learning Ideas

There are many books available for young adults that can be read to enhance a service-learning project you are planning. The following is a brief listing:

- **The Hundred Dresses** by Eleanor Estes  
  Issues covered: poverty, peer pressure
- **Come the Morning** by Mark Jonathon Harris  
  Issue covered: homelessness
- **Sam and the Moon Queen** by Allison Herzig  
  Issues covered: homelessness, single-parent households
- **The Return** by Sonia Levitin  
  Issues covered: Ethiopian culture, famine, caring for others
- **Tails from the Bronx** by Jill Pinkwater  
  Issue covered: homelessness
- **Waterman’s Boy** by Susan Harpe  
  Issue covered: water pollution
- **The Golden Days** by Gail Radley  
  Issues covered: elderly, caring for others
- **A Begonia for Mrs. Applebaum** by Paul Zindel  
  Issues covered: elderly, terminal illness, caring for others
- **All Joseph Wanted** by Ruth Yaffe Radin  
  Issue covered: literacy

## Core Content

<table>
<thead>
<tr>
<th>Literary Reading</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes whole texts and excerpts from materials such as short stories, novels, essays, poetry, plays, and scripts. The reading materials represent various historical and cultural perspectives.</td>
<td></td>
</tr>
<tr>
<td><strong>RD-M-1.0.11</strong></td>
<td>Explain the meaning of a passage taken from texts appropriate for middle-level students.</td>
</tr>
<tr>
<td><strong>RD-M-1.0.12</strong></td>
<td>Identify characteristics of short stories, novels, poetry, and plays.</td>
</tr>
<tr>
<td><strong>RD-M-1.0.13</strong></td>
<td>Describe literary elements (e.g., characterization, setting, plot, theme, point of view) in a passage.</td>
</tr>
<tr>
<td><strong>RD-M-1.0.14</strong></td>
<td>Analyze the relationship between events in a story and a character’s behavior.</td>
</tr>
<tr>
<td><strong>RD-M-1.0.15</strong></td>
<td>Explain how a conflict in a passage is resolved.</td>
</tr>
<tr>
<td><strong>RD-M-1.0.16</strong></td>
<td>Identify literary devices such as foreshadowing, imagery, and figurative language (e.g., similes, metaphors, personification, hyperbole).</td>
</tr>
</tbody>
</table>
# READING

## Information

Subdomain 2  
Academic Expectation 1.2

### CORE CONTENT

**Informational Reading** includes whole texts and excerpts from materials such as journals, magazines, newspaper articles, letters, brochures, reference materials, essays, nonfiction books, and electronic texts.

**RD-M-2.0.11**  
Use text features (e.g., lists, charts, graphs, tables of contents, indexes, glossaries, captions, diagrams, headings) to understand a passage.

**RD-M-2.0.12**  
Apply knowledge of organizational patterns (e.g., cause and effect, comparison, contrast, sequence) to understand a passage.

**RD-M-2.0.13**  
Identify supporting details and explain their importance in a passage.

**RD-M-2.0.14**  
Summarize information from a passage.

### Middle School

### SERVICE-LEARNING IDEAS

- Read magazines, newsletters, or other information about environmental issues facing your community. Organize a project based on the current needs or problems.

- Read the newspaper about current events in your hometown. Plan projects based on needs of community agencies that you read about, or to help an agency or family who is in need of services (i.e. victims of fire, racially motivated crime, etc.)

- Read articles about youth doing service. Organize and conduct a project based on what you have read.

- Read about local heroes in your community. Develop a book about them and distribute to the Chamber of Commerce or Welcome Wagon.
**CORE CONTENT**

<table>
<thead>
<tr>
<th>Persuasive Reading</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes whole texts and excerpts from materials such as magazine and newspaper articles, brochures, letters, proposals, speeches, editorials, electronic texts, essays, opinion columns, and advertisements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RD-E-3.0.6</strong> Identify an author’s opinion about a subject.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RD-E-3.0.7</strong> Identify fact and/or opinion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RD-E-3.0.8</strong> Identify information that is supported by fact.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Teach younger students how to distinguish between fact and opinion, particularly in advertisements aimed at children.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Make a collage of propaganda techniques from printed ads found in newspapers, magazines, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Gather facts and opinions from various sources to determine which community issues can best be addressed through a service-learning project.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## READING
Practical/Workplace
Subdomain 4
Academic Expectation 1.2

### CORE CONTENT

<table>
<thead>
<tr>
<th>Practical/Workplace Reading includes whole texts and excerpts from materials such as articles, letters, memos, brochures, electronic texts, warranties, recipes, forms, consumer texts, manuals, schedules, and directions.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RD-M-4.0.11</strong></td>
</tr>
<tr>
<td>Locate and apply information for a specific purpose (e.g., following directions, completing a task).</td>
</tr>
<tr>
<td><strong>RD-M-4.0.12</strong></td>
</tr>
<tr>
<td>Identify the sequence of activities needed to carry out a procedure.</td>
</tr>
<tr>
<td><strong>RD-M-4.0.13</strong></td>
</tr>
<tr>
<td>Explain how organizational patterns and/or text features (e.g., pictures, charts, graphs, format) relate to the content of a practical/workplace passage.</td>
</tr>
<tr>
<td><strong>RD-M-4.0.14</strong></td>
</tr>
<tr>
<td>Interpret the meaning of specialized vocabulary.</td>
</tr>
</tbody>
</table>

### Middle School

### SERVICE-LEARNING IDEAS

- Help senior citizens understand manuals for household items.
- Use recipes to make nutritious snacks for reading buddies.
- Make and illustrate a how-to-book on a successfully completed service-learning project.
- Develop a specialized vocabulary list for a project during the preparation phase of a project.
**WRITING**
Criteria
(assessed in all types of writing)
Academic Expectation 1.11

## CORE CONTENT

<table>
<thead>
<tr>
<th>WRITING CRITERIA</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose/Audience</strong></td>
<td>The writer establishes and maintains a focused purpose to communicate with an audience by: narrowing the topic to establish a focus; analyzing and addressing the needs of the intended audience; adhering to the characteristics (e.g., format, organization) of the form; employing a suitable tone; and allowing voice to emerge when appropriate.</td>
<td>• Service-learning broadens students’ writing experiences. It focuses on writing in a variety of real world forms, to communicate ideas, to authentic audiences for realistic purposes.</td>
</tr>
<tr>
<td><strong>Idea Development</strong></td>
<td>The writer develops and supports main ideas and deepens the audience’s understanding by using: logical, justified, and suitable explanation; relevant elaboration; related connections and reflections; and idea development strategies (e.g., bulleted lists, definitions) appropriate for the form.</td>
<td>• Although all of the writing suggestions will not be suitable for the portfolio, they will provide practical experience for the students as they begin to develop portfolio pieces.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>The writer creates unity and coherence to accomplish the focused purpose by: engaging the audience and establishing a context for reading; placing ideas and support in a meaningful order; guiding the reader through the piece with transitions and transitional elements; and providing effective closure.</td>
<td>• Using writing to provide a reflection component to a service-learning project is perhaps the most frequent use of writing through service-learning.</td>
</tr>
</tbody>
</table>
**WRITING**
Criteria
(assessed in all types of writing)
Academic Expectation 1.11

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sentences</strong></td>
<td>The writer creates effective sentences that are:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>varied in structure and length, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>complete and correct.</td>
<td></td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>The writer demonstrates:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>effective word choice;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• strong verbs and nouns,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• concrete and/or sensory details,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• language appropriate to the content, purpose,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and audience.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>concise use of language, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>correct usage/grammar.</td>
<td></td>
</tr>
<tr>
<td><strong>Correctness</strong></td>
<td>The writer demonstrates:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>correct spelling;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>correct punctuation;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>correct capitalization, and appropriate documentation (e.g., citing authors or titles within the text, listing sources) of ideas and information from outside sources.</td>
<td></td>
</tr>
</tbody>
</table>
Reflective Writing

Reflective Writing includes the writer's examination of his/her writing skills, abilities, approaches, and products. The reflective form in the portfolio is the Letter to the Reviewer, which contains discussion of the student's personal growth as a writer and reflection on pieces in the portfolio.

Characteristics of reflective writing/Letter to the Reviewer may include discussion of:

- goals as a writer
- growth as a writer through the years
- influences (who and/or what) on the writer's progress and growth
- techniques and/or strategies used by the student when composing
- selection of portfolio pieces
- application of writing process (prewriting, drafting, revision, editing, publishing)

Various writings, as a result of participation in service-learning activities, serve as pieces in the portfolio, which can be examined and reflected upon.

- Develop a class instructional portfolio handbook made up of Letters to the Reviewer, to showcase student's growth as writers and to illustrate examples of reflective writing to new students.
WRITING
Personal
Academic Expectation 1.11

CORE CONTENT

WR·E·1.2
PERSONAL WRITING

| Personal writing focuses on the life experiences of the writer. Personal forms in the portfolio may include a personal narrative (focusing on the significance of a single event) or memoir (focusing on the significance of the relationship of the writer with a particular person, place, animal, or thing). |

Characteristics of personal writing may include:
- development of ideas based on personal experience
- sensory details
- writer’s thoughts and feelings
- first person point-of-view
- dialogue where appropriate

Middle School

SERVICE-LEARNING IDEAS

- Write a reflection paper on their role during an environmental service-learning project, address all of the sensory details.
- Develop a memoir relating to a person they met during an intergenerational project.
- Establish a pen pal relationship with someone from a different culture to promote understanding.
- Write a personal narrative on pre-thoughts and feelings concerning an upcoming service-learning project followed by a first person point of view based on personal experience as a result of the project.
<table>
<thead>
<tr>
<th>WRITING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literary</td>
</tr>
<tr>
<td>Academic Expectation 1.11</td>
</tr>
</tbody>
</table>

### CORE CONTENT

<table>
<thead>
<tr>
<th>WR-E-1.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITERARY WRITING</td>
</tr>
</tbody>
</table>

**Literary writing** artfully communicates with the reader about the human condition. Literary forms in the portfolio include poems, short stories, and scripts.

**Characteristics of literary writing may include:**
- literary elements of the selected form (e.g., short story – plot, poem – imagery, script – stage directions)
- descriptive language
- literary devices (e.g., simile, metaphor, flashback)
- effective ordering of events, impressions, and descriptions
- creation of an effect (e.g., comedy, irony, suspense, horror, paradox)
- focus on engaging an audience

### Middle School

<table>
<thead>
<tr>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
</table>
- Write and illustrate books for homeless children or read finished product with nursing home resident.
- Write the script for a play or puppet show to deliver a health, safety, or personal actions message to peers or younger children.
- Use poetry to reflect on a completed service-learning project.
## WRITING

### Transactive

**Academic Expectation 1.11**

### CORE CONTENT

<table>
<thead>
<tr>
<th>WR-E-1.4</th>
<th>TRANSACTIVE WRITING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transactive writing</strong> is informative/persuasive writing that presents ideas and information for authentic audiences to accomplish realistic purposes like those students will encounter in their lives. In transactive writing, students will write in a variety of forms such as the following:</td>
<td></td>
</tr>
<tr>
<td>letters, speeches, editorials, articles in magazines, academic journals, newspapers, proposals, brochures, and other kinds of practical workplace writing.</td>
<td></td>
</tr>
</tbody>
</table>

### CHARACTERISTICS OF TRANSACTIONAL WRITING

- text and language features of the selected form
- information to engage/orient the reader to clarify and justify purposes
- ideas which communicate the specific purpose for the intended audience
- explanation and support to help the reader understand the author's purpose
- well-organized idea development and support (e.g., facts, examples, reasons, comparisons, anecdotes, descriptive detail, charts, diagrams, photos/pictures) to accomplish a specific purpose
- effective conclusions

### Middle School SERVICE-LEARNING IDEAS

- Develop informational brochures related to the curriculum and school (1st day at school, safety on the playground, healthy habits, our neighborhood, etc.)
- Letters to legislators about issues students are interested in.
- School newspaper for community.
- Letters to the editor on community issues
- Publish a local history pamphlet based on oral history interviews.
### Concepts - Students will describe properties of, define, give examples of, and/or apply to both real-world and mathematical situations:

<table>
<thead>
<tr>
<th>MA-M-1.1.1</th>
<th>Rational numbers (integers, fractions, decimals, percents).</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-M-1.1.2</td>
<td>Irrational numbers (square roots and ( \pi ) only).</td>
</tr>
<tr>
<td>MA-M-1.1.3</td>
<td>Meaning of proportion (equivalent ratios).</td>
</tr>
<tr>
<td>MA-M-1.1.4</td>
<td>Place value of whole numbers and decimals.</td>
</tr>
<tr>
<td>MA-M-1.1.5</td>
<td>Positive whole number exponents.</td>
</tr>
<tr>
<td>MA-M-1.1.6</td>
<td>Representation of numbers and operations in a variety of equivalent forms using models, diagrams, and symbols (e.g., number lines, 10 by 10 grids, rectangular arrays, number sentences).</td>
</tr>
</tbody>
</table>

### Skills - Students will perform the following mathematical operations and/or procedures accurately and efficiently, and explain how they work in real-world and mathematical situations:

<table>
<thead>
<tr>
<th>MA-M-1.2.1</th>
<th>Add, subtract, multiply, and divide rational numbers (fractions, decimals, percents, integers) to solve problems.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-M-1.2.2</td>
<td>Compute (e.g., estimate use pencil and paper, use calculator, round, use mental math) large and small quantities and check for reasonable and appropriate computational results.</td>
</tr>
</tbody>
</table>

### Middle School Service-Learning Ideas

- Tutor peers or younger children in math.
- Create a math board game for younger children or donate it to the school library for other children to use.
- Compute the cost of vandalism to your school or district. Contact your principal or superintendent to determine how much money is spent on vandalism each year. Share this information with the school and show how that money could be spent in a more positive way. Develop ways to reduce vandalism in your school.
- Estimate the amount of food collected in a food drive and/or how many people it will feed.
- Estimate the number of trees or amount of landfill space is/can be saved by the school’s recycling efforts.
- After a food drive, calculate the space needed at a food pantry to stock the shelves with your collection.
- Collect pennies/coins for charity
  - Estimate space, weight, or how long it will take to collect a set number of coins.
  - With the coins collected, graph the frequency of different years the coins were made.
  - Conduct probability tests – toss coins and predict the probability of it landing heads or tails. Tabulate the results.
### CORE CONTENT

**MA-M-1.2.3**  
Apply ratios, proportional reasoning, and percents (e.g., constant rate of change, unit pricing)

**MA-M-1.2.4**  
Identify and use number theory concepts, prime numbers, prime factorization, composite numbers, factors, multiples, divisibility, greatest common factor (GCF), least common multiple (LCM) to solve problems

**MA-M-1.2.5**  
Apply order of operations

### Middle School

**Relationships** - Students will show connections and how connections are made between concepts and skills, explain why procedures work, and make generalizations about mathematics in meaningful ways for the following relationships:

**MA-M-1.3.1**  
How whole numbers, natural numbers, integers, fractions, decimals, percents, and irrational numbers (square roots and \( \pi \) only) relate to each other (e.g., convert between forms of rational numbers, compare, order)

**MA-M-1.3.2**  
How properties such as commutative, associative, distributive, and identities show relationships among operations and may be used to justify steps in solving problems

**MA-M-1.3.3**  
How operations (addition and subtraction; multiplication and division; squaring and taking the square root of a number) are inversely related

### SERVICE-LEARNING IDEAS
## MATHEMATICS
### Geometry/Measurement
### Academic Expectation 1.5-1.9, 2.8-2.12

### CORE CONTENT

- **Concepts** – Students will describe properties of, define, give examples of, and/or apply to both real-world and mathematical situations:
  - **MA-M-2.1.1**
    - Basic geometric elements that include points, segments, rays, lines, angles, and planes
  - **MA-M-2.1.2**
    - Two-dimensional shapes including circles, regular polygons, quadrilaterals (square, rectangle, rhombus, parallelogram, trapezoid), and triangles (acute, obtuse, right, equilateral, scalene, isosceles)
  - **MA-M-2.1.3**
    - Common three-dimensional shapes including spheres, cones, cylinders, prisms (with polygonal bases), and pyramids (with polygonal bases)
  - **MA-M-2.1.4**
    - Congruence, symmetry, and similarity
  - **MA-M-2.1.5**
    - U.S. Customary and metric units of measurement

- **Skills** – Students will perform the following mathematical operations and/or procedures accurately and efficiently and explain how they work in real-world and mathematical situations:
  - **MA-M-2.2.1**
    - Identify characteristics (e.g., sides, vertices, angles, faces, edges, congruent parts) of two-dimensional and three-dimensional shapes
  - **MA-M-2.2.2**
    - Use appropriate tools and strategies (e.g., combining and subdividing shapes) to find measures of both regular and irregular shapes

### SERVICE-LEARNING IDEAS

- Make puzzles out of geometric shapes and donate to a children's center or preschool.
- Make books on shapes for preschool children – relate this to safety signs (i.e. octagon = stop sign, triangle = caution, etc.)
- Using geometric shapes and/or measurement skills, make a quilt:
  - donate it to a local homeless shelter
  - make smaller lap quilts for nursing home residents
  - raffle it and give the proceeds to a local charity
- Teach younger students the difference between two-dimensional and three-dimensional shapes.
- Create a garden on school grounds – with scale drawings, have students measure an area, plant seeds according to package directions, and keep records of growth patterns, rainfall, and temperature.
# MATHEMATICS

**Geometry/Measurement**  
Academic Expectation 1.5-1.9, 2.8-2.12

## CORE CONTENT

<table>
<thead>
<tr>
<th>MA-M-2.2.3</th>
<th>Move shapes in a coordinate plane: translate (slide), rotate (turn), reflect (flip), and dilate magnify, reduce</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-M-2.2.4</td>
<td>Estimate measurements in standard units</td>
</tr>
<tr>
<td>MA-M-2.2.5</td>
<td>Use formulas to find area and perimeter of triangles and quadrilaterals, area and circumference of circles, and surface area and volume of rectangular prisms</td>
</tr>
<tr>
<td>MA-M-2.2.6</td>
<td>Estimate and determine measurement of angles</td>
</tr>
<tr>
<td>MA-M-2.2.7</td>
<td>Use Pythagorean theorem to find hypotenuse</td>
</tr>
</tbody>
</table>

**Relationships** – Students show connections and how connections are made between concepts and skills, explain why procedures work, and make generalizations about mathematics in meaningful ways for the following relationships:

<table>
<thead>
<tr>
<th>MA-M-2.3.1</th>
<th>How measurements and measurement formulas are related or different (perimeter and area; rate, time, and distance; circumference and area of a circle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-M-2.3.2</td>
<td>How two-dimensional and three-dimensional figures are related as seen in different orientations (e.g., top view, side view, three-dimensional shapes drawn on isometric dot paper)</td>
</tr>
<tr>
<td>MA-M-2.3.3</td>
<td>How proportional figures are related (scale drawings, similar figures)</td>
</tr>
</tbody>
</table>

**Middle School**

**SERVICE-LEARNING IDEAS**
# MATHEMATICS

**Probability/Statistics**

*Academic Expectation 1.5-1.9, 2.7, 2.10, 2.13*

## CORE CONTENT

### Concepts - Students will describe properties of, define, give examples of, and/or apply to both real-world and mathematical situations:

| MA-M-3.1.1 | Meaning of central tendency (mean, median, mode) |
| MA-M-3.1.2 | Meaning of dispersion (range, cluster, gaps, outliers) |
| MA-M-3.1.3 | Characteristics and appropriateness of graphs (e.g., bar, line, circle), and plots (e.g., line, stem-and-leaf, box-and-whiskers, scatter) |

### Skills - Students will perform the following mathematical operations and/or procedures accurately and efficiently, and explain how they work in real-world and mathematical situations:

| MA-M-3.2.1 | Organize, represent, analyze, and interpret sets of data |
| MA-M-3.2.2 | Construct and interpret displays of data (e.g., table, circle graph, line plot, stem-and-leaf plot, box-and-whiskers plot) |
| MA-M-3.2.3 | Find mean, median, mode, and range; recognize outliers, gaps, and clusters of data |
| MA-M-3.2.4 | Calculate theoretical probabilities and tabulate experimental results from simulations |
| MA-M-3.2.5 | Make predictions and draw conclusions from statistical data and probability experiments |

## Middle School

### SERVICE-LEARNING IDEAS

- Visit senior citizen center and gather statistical information such as oldest, youngest, where people were born, etc. Make a display of this information to give to the center.

- Conduct a survey of the needs of your community or school. Publicize/display the information for your entire school. Graph the results and calculate mean, median, and mode. Make a list of possible projects to meet those needs. Organize the project with each grade/class helping in some way.

- Study homelessness, both nationally and locally. Graph the statistics and display at your school or in the community to increase awareness. Include in your display how people can help this cause in your community.

- Track the amount of paper or food scrap waste in your school over specific periods of time. Graph the results and develop ways to recycle this waste.

- Discuss with senior citizens how the cost of living has changed over the last two generations. Calculate and graph price increases for specific items.

- Graph daily school attendance. Have students determine percentages of students absent each day and look for patterns. Do a promotional campaign to encourage increasing attendance in your school.
# Mathematics

## Probability/Statistics

### Academic Expectation 1.5-1.9, 2.7, 2.10, 2.13

### Core Content

<table>
<thead>
<tr>
<th>MA-M-3.2.6</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use counting techniques, tree diagrams, area models, and tables to solve probability problems</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MA-M-3.2.7</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Represent probabilities in multiple ways such as fractions, decimals, percents, and area models</td>
<td></td>
</tr>
</tbody>
</table>

### Relationships – Students will show connections and how connections are made between concepts and skills, explain why procedures work, and make generalizations about mathematics in meaningful ways for the following relationships:

<table>
<thead>
<tr>
<th>MA-M-3.3.1</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>How different representations of data (e.g., tables, graphs, diagrams, plots) are related</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MA-M-3.3.2</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>How theoretical probability and experimental probability are related</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MA-M-3.3.3</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>How data gathering, bias issues, faulty data analysis, and misleading representations affect interpretations and conclusions about data (e.g., changing the scale on a graph, polling only a specific group of people, using limited or extremely small sample size)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MA-M-3.3.4</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>How probability and statistics are used to make predictions and/or draw conclusions</td>
<td></td>
</tr>
</tbody>
</table>
### CORE CONTENT

#### Concepts – Students will describe properties of, define, give examples of, and/or apply to both real-world and mathematical situations:

**MA-M-4.1.1**  
Variables, equations, inequalities, and algebraic expressions

**MA-M-4.1.2**  
Functions (e.g., the relationship between time and cost of some long distance phone calls, \( y = 2x + 1 \)) through tables, graphs, verbal rules, and algebraic notations

**MA-M-4.1.3**  
Rectangular (Cartesian) coordinate system/grid and ordered pairs

#### Skills – Students will perform the following mathematical operations and/or procedures accurately and efficiently, and explain how they work in real-world and mathematical situations:

**MA-M-4.2.1**  
Simplify numerical and algebraic expressions

**MA-M-4.2.2**  
Solve simple equations and inequalities

**MA-M-4.2.3**  
Model equations and inequalities concretely (e.g., algebra tiles or blocks), pictorially (e.g., graphs, tables), and abstractly (e.g., equations)

**MA-M-4.2.4**  
Use variables to describe numerical patterns

**MA-M-4.2.5**  
Represent and use functions through tables, graphs, verbal rules, and equations

**MA-M-4.2.6**  
Write and solve equations that represent everyday situations

### SERVICE-LEARNING IDEAS

- Graph items collected for a food or clothing drive.
- Make graphs for your school’s recycling program.
- Graph the destruction of rainforests. Compute the amount of areas that is destroyed each day, week, month, or year. Compare this space with the state of Kentucky. Promote saving rainforests for future generations.
- Convert recipes to single and/or two person servings. Publish recipe book for couples and those living alone.
- Study the demographics of your community. Graph the results in various forms. Publish and share this information.
## CORE CONTENT

### Relationships

Students will show connections and how connections are made between concepts and skills, explain why procedures work, and make generalizations about mathematics in meaningful ways for the following relationships:

<table>
<thead>
<tr>
<th>MA-M-4.3.1</th>
<th>How everyday situations, tables, graphs, patterns, verbal rules, and equations relate to each other</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-M-4.3.2</td>
<td>How the change in one variable affects the change in another variable (e.g., if rate remains constant, an increase in time results in an increase in distance)</td>
</tr>
</tbody>
</table>
SCIENCE
# SCIENCE

**Physical Science**

Academic Expectation 2.2, 2.3, 2.4, 2.5, 2.6

## CORE CONTENT

<table>
<thead>
<tr>
<th>Properties and Changes of Properties in Matter</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-M-1.1.1</td>
<td></td>
<td>- Conduct simple experiments with younger children to help them understand these science concepts.</td>
</tr>
<tr>
<td>A substance has characteristic physical properties (e.g., density, boiling point, solubility) that are independent of the amount of the sample. A mixture of substances often can be separated into the original substances by using one or more of these characteristic physical properties.</td>
<td></td>
<td>- Discuss how acid rain can damage metal or stone structures. Help repair such structures in your community.</td>
</tr>
<tr>
<td>SC-M-1.1.2</td>
<td></td>
<td>- Paint playground equipment to prevent rust or corrosion.</td>
</tr>
<tr>
<td>The chemical properties of a substance cause it to react in predictable ways with other substances to form compounds with different characteristic properties. In chemical reactions, the total mass is conserved. Substances are often classified into groups if they react in similar ways.</td>
<td></td>
<td>- Publicize a seat-belt campaign using motion and force principles.</td>
</tr>
<tr>
<td>SC-M-1.1.3</td>
<td></td>
<td>- Broadcast energy-saving tips over the PA each day at school.</td>
</tr>
<tr>
<td>Chemical elements do not break down during normal laboratory reactions such as heating, exposure to electric currents, or reaction with acids. Elements combine in many ways to produce compounds.</td>
<td></td>
<td>- Have students conduct an energy audit of your school and make suggestions for improving energy conservation.</td>
</tr>
<tr>
<td>SC-M-1.2.1</td>
<td></td>
<td>- Make an energy fact sheet for parents.</td>
</tr>
<tr>
<td>The motion of an object can be described by its relative position, direction of motion, and speed. That motion can be measured and represented on a graph.</td>
<td></td>
<td>- Conduct a campaign at school to turn off lights when not in use.</td>
</tr>
<tr>
<td>SC-M-1.2.2</td>
<td></td>
<td>- Learn how to complete a circuit by making a matching board on the topic of your choice (the board lights up when a correct match is made) and donate to a preschool or elementary school.</td>
</tr>
<tr>
<td>An object remains at rest or maintains a constant speed and direction of motion unless an unbalanced force acts on it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC-M-1.2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When an unbalanced force acts on an object, the change in speed and/or direction depends on the size and direction of the force.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Transfer of Energy

**SC-M-1.3.1**
Energy is a property of many substances and is associated with heat, light, electricity, and sound. Energy is transferred in many ways.

**SC-M-1.3.2**
Heat energy moves in predictable ways, flowing from warmer objects to cooler ones, until both objects reach the same temperature.

**SC-M-1.3.3**
Light energy interacts with matter by transmission (including refraction), absorption, or scattering (including reflection).

**SC-M-1.3.4**
The Sun is a major source of energy for changes on Earth’s surface. The Sun loses energy by emitting light. A tiny fraction of that light reaches Earth, transferring energy from the Sun to Earth.

**SC-M-1.3.5**
Electrical circuits provide a means of transferring electrical energy when heat, light, sound, and chemical changes are produced.
# SCIENCE
Earth and Space Sciences
Academic Expectation 2.2, 2.3, 2.4, 2.5, 2.6

## CORE CONTENT

### Structure of the Earth System: Lithosphere, Hydrosphere, Atmosphere

**SC-M-2.1.1**
The Earth is layered. The lithosphere is the thin crust of the Earth. Lithospheric plates move slowly in response to movements in the mantle. There is a dense core at the center of the Earth.

**SC-M-2.1.2**
Landforms are a result of a combination of constructive and destructive forces. Constructive forces include crustal deformation, volcanic eruption, and deposition of sediment, while destructive forces include weathering and erosion.

**SC-M-2.1.3**
Materials found in the lithosphere and mantle are changed in a continuous process called the rock cycle.

**SC-M-2.1.4**
Soil consists of weathered rocks and decomposed organic material from dead plants, animals, fungi, protists, and bacteria. Soils are often found in layers, with each having a different chemical composition and texture.

**SC-M-2.1.5**
Water, which covers the majority of the Earth’s surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle. Water dissolves minerals and gases and may carry them to the oceans.

**SC-M-2.1.6**
Earth is surrounded by a relatively thin blanket of air called the atmosphere. The atmosphere is a mixture of nitrogen, oxygen, and trace gases that include water vapor. The atmosphere has different properties at different elevations.

## Middle School

## SERVICE-LEARNING IDEAS

- Discuss solutions for an erosion-prone area in your community and conduct a project to fix the problem.
- Participate in disaster relief efforts.
- Do basic soil tests on school grounds. Plant trees or herbaceous plants to help improve soil conditions.
- Start a compost pile at school and teach others how kitchen and yard waste can be turned into nutritious mulch for plants.
- Teach others about the importance of conserving water and give suggestions of how to do it at home and at school.
- Test rainwater for acidity. Publish your results in a local newspaper.
- Teach others about the causes of and solutions to air pollution.
- Write legislators about the need for clean air in your community.
- Teach children about the importance of using sunscreen and problems that occur from overexposure to the sun.
### SCIENCE
Earth and Space Sciences
Academic Expectation 2.2, 2.3, 2.4, 2.5, 2.6

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-M-2.1.7</td>
<td></td>
<td>• Make a fossil garden at your school, which can be a learning tool for other teachers and students.</td>
</tr>
<tr>
<td>Global patterns of atmospheric movement influence local weather. Oceans have a major effect on climate, because water in the ocean holds a large amount of heat.</td>
<td></td>
<td>• Discuss how human activity affects the Earth. Teach other people how this happens and how everyone can help reduce environmental problems.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Earth's History</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-M-2.2.1</td>
</tr>
<tr>
<td>The Earth's processes we see today, including erosion, movement of lithospheric plates, and changes in atmospheric composition, are similar to those that occurred in the past. Earth's history is also influenced by occasional catastrophes such as the impact of an asteroid or comet.</td>
</tr>
</tbody>
</table>

| SC-M-2.2.2     |              | • Make a miniature planetarium in your school using cut out constellations and a flashlight. Provide tours to help others understand how to identify constellations. |
| Fossils provide important evidence of how environmental conditions and life have changed. |              | |

<table>
<thead>
<tr>
<th>Earth in the Solar System</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-M-2.3.1</td>
</tr>
<tr>
<td>Earth is the third planet from the Sun in a system that includes the moon, the Sun, eight other planets and their moons, and smaller objects such as asteroids and comets. The Sun, an average star, is the central and largest body in the solar system.</td>
</tr>
</tbody>
</table>

| SC-M-2.3.2                |              | |
| Most objects in the solar system are in regular and predictable motion. Those motions explain such phenomena as the day, the year, phases of the moon, and eclipses. |              | |

| SC-M-2.3.3                |              | |
| Gravity is the force that keeps that planets in orbit around the Sun and governs the rest of the motion in the solar system. The gravitational pull of the Sun and moon on Earth's oceans is the major cause of tides. |              | |
### SCIENCE
Life Science
Academic Expectation 2.2, 2.3, 2.4, 2.5, 2.6

#### CORE CONTENT

<table>
<thead>
<tr>
<th>Structure and Function in Living Systems</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-M-3.1.1</td>
<td></td>
</tr>
<tr>
<td>Living systems at all levels of organization demonstrate the complementary nature of structure and function. Important levels of organization for structure and function include cells, tissues, organs, organ systems, organisms (e.g., bacteria, protists, fungi, plants, animals), and ecosystems.</td>
<td></td>
</tr>
<tr>
<td>SC-M-3.1.2</td>
<td></td>
</tr>
<tr>
<td>All organisms are composed of cells, the fundamental unit of life. Most organisms are single cells; other organisms, including plants and animals are multicellular.</td>
<td></td>
</tr>
<tr>
<td>SC-M-3.1.3</td>
<td></td>
</tr>
<tr>
<td>Cells carry on the many functions needed to sustain life. They grow and divide, thereby producing more cells. This requires that they take in nutrients, which they use to provide energy for the work that cells do and to make the materials that a cell or an organism needs.</td>
<td></td>
</tr>
<tr>
<td>SC-M-3.1.4</td>
<td></td>
</tr>
<tr>
<td>Specialized cells perform specialized functions in multicellular organisms. Groups of specialized cells cooperate to form tissues. Different tissues are, in turn, grouped together to form larger functional units called organs. Each type of cell, tissue, and organ has a distinct structure and set of functions that serve the organism.</td>
<td></td>
</tr>
</tbody>
</table>

#### Regulation and Behavior

| SC-M-3.2.1 |  |
| All organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment. |  |

#### SERVICE-LEARNING IDEAS

- Discuss the importance of organ donation and make others aware of its importance and how to do it.
- In conjunction with a creek clean-up, look for and identify both single-cellular and multi-cellular organisms in the water.
- Plant trees in the community.
- Plant a school garden while studying botany. Invite soup kitchen personnel to utilize the fruits and vegetables you grow.
- Assess what types of organisms are living in an area of your school grounds. Do a beautification project or develop an outdoor classroom. Reassess the area to determine if new or different organisms are living in the area.
- Discuss adaptations of local endangered species and either write legislators about the importance of saving them or develop ways to improve the habitat of these animals in your community.
### SCIENCE
Life Science

**Academic Expectation 2.2, 2.3, 2.4, 2.5, 2.6**

#### Core Content

<table>
<thead>
<tr>
<th>SC-M-3.2.2</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulation of an organism’s internal environment involves sensing the internal environment and changing physiological activities to keep conditions within the range required to survive. Maintaining a stable internal environment is essential for an organism’s survival.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SC-M-3.2.3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behavior is one kind of response an organism may make to an internal or environmental stimulus. A behavioral response requires coordination and communication at many levels including cells, organ systems, and organisms. Behavioral response is a set of actions determined in part by heredity and in part from experience.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SC-M-3.3.1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reproduction is a characteristic of all living systems and is essential to the continuation of every species. Some organisms reproduce asexually; others reproduce sexually. In species that reproduce sexually, including humans and plants, male and female sex cells carrying genetic information unite to begin the development of a new individual.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SC-M-3.3.2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Every organism requires a set of instructions for specifying its traits. This information is contained in genes located in the chromosomes of each cell. Heredity is the passage of these instructions from one generation to another.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SC-M-3.4.1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biological change over time accounts for the diversity of species developed through gradual processes over many generations. Biological adaptations include changes in structures, behaviors, or physiology that enhance survival and reproductive success in a particular environment.</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Service-Learning Ideas

- Discuss the pet overpopulation problem:
  - Conduct a campaign to help others understand the importance of spaying and neutering their pets and what can happen when they don’t (unwanted animals are euthanized).
  - Do a collection project of needed items for the local humane society.

- Produce a videotape, book, play, or puppet show for younger students on the proper care of pets and other animals.

- Conduct research on the endangered species in your community or state. Help others understand the importance of protecting endangered species or do a project to help restore habitat of these animals or plants.

- Survey all plant/animal species in an area near your school while conducting a clean-up or habitat restoration project.

- Teach younger students about food webs and their importance to ecosystems through plays or skits.

- Adopt a local stream or pond. Do litter clean-ups, test water quality, and develop solutions to environmental problems. Report results to Kentucky Water Watch.
### SCIENCE

**Life Science**

Academic Expectation 2.2, 2.3, 2.4, 2.5, 2.6

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-M-3.4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient to allow its survival. Extinction of species is common; most of the species that have lived on Earth no longer exist.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Populations and Ecosystems**

| SC-M-3.5.1   |              |                        |
| A population consists of all individuals of a species that occur together at a given place and time. All populations living together and the physical factors with which they interact compose an ecosystem. |

| SC-M-3.5.2   |              |                        |
| Populations of organisms can be categorized by the function they serve in an ecosystem. Plants and some microorganisms are producers because they make their own food. All animals, including humans, are consumers, and obtain their food by eating other organisms. Decomposers, primarily bacteria and fungi, are consumers that use waste materials and dead organisms for food. Food webs identify the relationships among producers, consumers, and decomposers in an ecosystem. |

| SC-M-3.5.3   |              |                        |
| For most ecosystems, the major source of energy is sunlight. Energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis. That energy then passes from organism to organism in food webs. |

| SC-M-3.5.4   |              |                        |
| The number of organisms an ecosystem can support depends on the resources available and abiotic factors (e.g., quantity of light and water, range of temperatures, soil composition). Given adequate biotic and abiotic resources and no diseases or predators, populations (including humans) increase at rapid rates. Lack of resources and other factors, such as predation and climate, limit the growth of populations in specific niches in the ecosystem. |
# SCIENCE
Scientific Inquiry
Academic Expectation 2.1

## CORE CONTENT

<table>
<thead>
<tr>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students will</strong></td>
</tr>
</tbody>
</table>

- refine and refocus questions that can be answered through scientific investigation combined with scientific information.
- use appropriate equipment, tools, techniques, technology, and mathematics to gather, analyze, and interpret scientific data.
- use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.
- design and conduct scientific investigations.
- communicate (e.g., write, graph) designs, procedures, observations, and results of scientific investigations.
- review and analyze scientific investigations and explanations of other students.

## SERVICE-LEARNING IDEAS

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use scientific inquiry to determine real problems in their community (erosion, pollution, etc.) that lend themselves to service-learning projects.</strong></td>
</tr>
<tr>
<td><strong>Communicate through brochures, newspaper articles, presentations or fairs the results of scientific investigations conducted in above idea.</strong></td>
</tr>
<tr>
<td><strong>Teach peers or younger students how to conduct a scientific investigation.</strong></td>
</tr>
</tbody>
</table>
## SCIENCE
### Applications/Connections
### Academic Expectation 2.2-2.6

### CORE CONTENT

**Students will**

#### Science and Technology
- describe how science helps drive technology and technology helps drive science. Because perfectly designed solutions do not exist, technological solutions have intended benefits and unintended consequences.

#### Science in Personal and Social Perspectives
- describe the individual’s roles and responsibilities in the following areas: changes in populations, resources and environments including ecological crises and environmental issues, natural hazards, science and technology in society, and personal and societal issues about risks and benefits.

#### History and Nature of Science
- Demonstrate the role science plays in everyday life: past, present, and future. Science is a human endeavor. Men and women of various social and ethnic backgrounds engage in activities of science (to include careers in science). Scientists formulate and test their explanations of nature using observations, experiments, and theoretical and mathematical models. It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists.

### Middle School

### SERVICE-LEARNING IDEAS

- Determine community needs or challenges resulting from technology (noise, air, water pollution, etc.) and apply scientific theories in developing a service-learning project (community awareness, stream clean-up, air and water monitoring/reporting, tree planting, etc.) that addresses the problem.

- Design and conduct a scientific investigation on the use or misuse of the natural resources in their area and develop a presentation to show how science and technology play a role in their use and preservation.
### CORE CONTENT

| People form governments to establish order, provide security, and accomplish common goals. |
| SS-M-1.1.1 |
| Governments may take different forms (e.g., constitutional, totalitarian, democratic, republic). |

| SS-M-1.1.2 |
| Democratic governments function to preserve and protect the rights (e.g., voting), liberty, and property of their citizens by making, enacting, and enforcing appropriate rules and laws (e.g., constitutions, laws, statutes). |

| SS-M-1.1.3 |
| The Constitution of the U.S. is a flexible document that changes (amendments) and is interpreted (judicial review) over time to meet the needs of its citizens. |

| The Constitution of the United States establishes a government of limited powers, which are shared among different levels and branches. |

| SS-M-1.2.1 |
| The U.S. Constitution separates power among the legislative, executive, and judicial branches to prevent the concentration of political power and to establish a system of checks and balances. |

| SS-M-1.2.2 |
| Federal (national) and state governments have both separate and shared powers. |

### Middle School

### SERVICE-LEARNING IDEAS

- Teach children about the U.S. Constitution, using simple terms they can understand.
- Create an exhibit which addresses important issues in a democracy.
- Survey youth about their needs/opinions and convey this information to local policy makers.
- Teach children about the importance of the flag.
- Work with local government officials in your community to help solve problems such as graffiti, shoplifting, and drugs.
- Organize a teen court to help reduce discipline problems at school.
- Research important social issues the Supreme Court has made decisions on and show how this impacts people’s lives. Make this information available to others.
**SOCIAL STUDIES**  
Government and Civics  
Academic Expectation 2.14, 2.15

### CORE CONTENT

**SS-M-1.3.1**  
The United States Declaration of Independence, the Constitution, the Bill of Rights, and state constitutions guarantee certain rights (e.g., freedom of movement and residence, freedom of religion, freedom of expression and association, personal privacy) for all citizens.

**SS-M-1.3.2**  
In order for the U.S. government to function as a democracy, citizens must assume responsibilities (e.g., performing community service, voting in elections) and duties (paying taxes, serving in the armed forces) for its functioning.

### SERVICE-LEARNING IDEAS

- Act out skits for children which convey the bill of rights.
- Conduct interviews with senior citizens about the type and function of social organizations in the past and how they are different today.
- Conduct mock elections to help students understand the importance of voting OR make a video on how/why to vote and show on local cable access or within the school.
- Identify community action groups (Red Cross, Big Brothers/Sisters, Habitat for Humanity, SADD, MADD, Friends of the Earth) and determine how the class can become involved.
### Culture and Society

**CORE CONTENT**

<table>
<thead>
<tr>
<th>Culture is a system of beliefs, knowledge, traditions, and skills shared by a group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SS-M-2.1.1</strong></td>
</tr>
<tr>
<td>Culture is influenced by language, literature, arts, beliefs, and behaviors and may result in unique perspectives.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Different cultures address human needs in similar and different ways.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SS-M-2.2.1</strong></td>
</tr>
<tr>
<td>All cultures develop institutions, customs, beliefs, and holidays reflecting their unique histories, situations, and perspectives.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social institutions (government, economy, religion, family) respond to human needs, structure society, and influence behavior.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SS-M-2.3.1</strong></td>
</tr>
<tr>
<td>Various human needs are met through interaction in and among social institutions and groups (e.g., family, schools, teams, clubs, religious groups, and governments).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social interactions among individuals and groups assume various forms.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SS-M-2.4.1</strong></td>
</tr>
<tr>
<td>Conflict and competition (e.g., political, economic, religious, ethnic) may occur as cultures emerge and develop.</td>
</tr>
<tr>
<td><strong>SS-M-2.4.2</strong></td>
</tr>
<tr>
<td>Compromise and cooperation are possible choices for positive social interaction and resolution of conflict.</td>
</tr>
</tbody>
</table>

### Middle School

**SERVICE-LEARNING IDEAS**

- Hold a multi-cultural forum for your community, highlighting different cultural backgrounds in your area.
- Investigate inequities in the treatment of minorities in community development and present your findings to the community.
- Organize a club at your school which works to promote cultural understanding.
- Research other cultures, and then develop pen pal relationships through the Internet with youth from other countries to help break down stereotypes.
- Produce a video about how to avoid problems caused by cliques in your school.
- Do a video or poster on the negative effects of peer pressure.
- Conduct a workshop at your school about how to resolve conflicts in nonviolent ways.
- Assist someone in the community who has been a victim of violence or prejudice.
- Teach conflict resolution skills to others OR make a video on conflict resolution for teens and show on a local cable channel.
- Do oral histories with senior citizens about how violence, stereotypes, prejudice or discrimination have changed over the years.
SOCIAL STUDIES
Economics
Academic Expectation 2.18

**CORE CONTENT**

<table>
<thead>
<tr>
<th>The basic economic problem confronting individuals and societies is the scarcity, or imbalance between unlimited wants and limited resources available for satisfying those wants.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SS-M-3.1.1</strong></td>
</tr>
<tr>
<td>Productive resources (land, labor, capital) are limited and do not satisfy all the wants of individuals, societies, and governments (scarcity).</td>
</tr>
<tr>
<td><strong>SS-M-3.1.2</strong></td>
</tr>
<tr>
<td>To make informed choices, consumers must analyze advertisements, consider personal finances, and examine the opportunity cost.</td>
</tr>
<tr>
<td><strong>To deal with the problem of scarcity, people and societies create economic systems and institutions.</strong></td>
</tr>
<tr>
<td><strong>SS-M-3.2.1</strong></td>
</tr>
<tr>
<td>Economic systems include traditional, command, or market. Modern economies use a &quot;mixed system&quot; that has features of all three.</td>
</tr>
<tr>
<td><strong>SS-M-3.2.2</strong></td>
</tr>
<tr>
<td>The hope of earning profit motivates businesses to take the risks involved in producing goods and services.</td>
</tr>
<tr>
<td><strong>Markets are institutional arrangements that enable buyers and sellers to exchange goods and services.</strong></td>
</tr>
<tr>
<td><strong>SS-M-3.3.1</strong></td>
</tr>
<tr>
<td>Prices of goods and services are determined by supply and demand. The market price is reached when quantity supplied equals quantity demanded.</td>
</tr>
<tr>
<td><strong>SS-M-3.3.2</strong></td>
</tr>
<tr>
<td>Money (unit of account) can be used to express the market value of goods and services. Money makes it easier to trade, borrow, invest, save.</td>
</tr>
</tbody>
</table>

**SERVICE-LEARNING IDEAS**

- Design a display that shows how limited natural resources should be protected for use by future generations.
- Study advertisements and help children or senior citizens understand how they may be deceptive. Explain how to recognize false advertising.
- Do simple economic lessons with elementary students.
- Discuss the difference between for-profit and non-profit organizations. Do a needed project for a non-profit in your community.
- Start a school-based business and give the profits to charity.
- Explain to elementary children how supply and demand influence the cost of items in a grocery store.
- Work with children to help them understand the concept of money and making change.
- Start a school-based business with students deciding what products sell based on their market audience. Donate the profits to charity.
### SOCIAL STUDIES
**Economics**
**Academic Expectation 2.18**

#### CORE CONTENT

| SS-M-3.3.3 | Competition among buyers and sellers impacts the price of goods and services. |
| All societies must deal with questions about production, distribution, and consumption. |
| SS-M-3.4.1 | The basic economic issues addressed by producers are production, distribution, and consumption of goods and services. |
| SM-M-3.4.2 | Productivity can be improved by specialization, new knowledge, and technology/tools. |
| SM-M-3.4.3 | Personal, national, and international economic activities are interdependent. |

#### SERVICE-LEARNING IDEAS
**SOCIAL STUDIES**  
**Geography**  
**Academic Expectation 2.19**

## CORE CONTENT  
Middle School  

<table>
<thead>
<tr>
<th>Patterns on the Earth’s surface can be identified by examining where things are, how they are arranged, and why they are in particular locations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS-M-4.1.1</td>
</tr>
<tr>
<td>Maps (e.g., map projections – Mercator and Robinson), globes, photographs, models, and satellite images are representations of Earth with different characteristics and uses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Earth is vastly complex with each place on its surface having human and physical characteristics; to deal with this complexity people create regions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS-M-4.2.1</td>
</tr>
<tr>
<td>Places can be made distinctive by human activities (e.g., building houses, stores, roads, railroads, irrigation) that alter physical features.</td>
</tr>
</tbody>
</table>

|SS-M-4.2.2 |
| Places and regions change over time as new technologies, resources, and knowledge become available. |

|SS-M-4.2.3 |
| Regions can be different in size and defined in different ways. |

## SERVICE-LEARNING IDEAS

- Draw a map of the U.S. on the playground to use as a learning tool. In the future, state lines, capitals, and other landmarks could be added.
- Produce maps and guides for local parks, libraries, etc.
- Prepare a video showing the relevant geographical features of your area which can be shown on a local cable access channel. Hold roundtable discussions afterward to consider the impact of geography on the community.
- Make a brochure, including maps, which explains geographical features of your community for newcomers.
- Make a map of recreational activities for kids 5-15 and distribute in the community.
- Conduct oral histories with senior citizens focusing on what your community looked like when they were young. Make maps which show the past and present.
- Assist people who have been affected by a natural disaster.
- Do oral histories with senior citizens about technological changes that have occurred during their lifetime.
SOCIAL STUDIES
Geography
Academic Expectation 2.19

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patterns emerge as humans move, settle, and interact on Earth's surface.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS-M-4.3.1</td>
<td>Human settlement develops in different ways based on the culture and needs of settlers.</td>
<td>• Research other communities in the state via the Internet. E-mail with students elsewhere to learn about their community and to share your community’s unique characteristics with them.</td>
</tr>
<tr>
<td>SS-M-4.3.2</td>
<td>Human populations may change and/or migrate because of factors such as war, famine, disease, economic opportunity, and technology.</td>
<td>• Interview senior citizens about these changes and their opinions about those changes.</td>
</tr>
<tr>
<td>Human actions modify the physical environment and, in turn, the physical environment limits or promotes human activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS-M-4.4.1</td>
<td>Technology assists human modification of the physical environment (e.g., damming a river, irrigating a desert, cooling or heating a living area).</td>
<td>• Interview recent immigrants to your community and learn about their culture. Organize a “Welcome to our community” party for them.</td>
</tr>
<tr>
<td>SS-M-4.4.2</td>
<td>The physical environment both promotes and limits human activities (e.g., exploration, migration, trade).</td>
<td>• Help elementary schools set up recycling programs in their school.</td>
</tr>
<tr>
<td>SS-M-4.4.3</td>
<td>The natural resources of a place or region impact its political, social, and economic development.</td>
<td>• Build a solar oven and teach others how to use it.</td>
</tr>
<tr>
<td>SS-M-4.4.4</td>
<td>Individual perspectives impact the use of natural resources (e.g., watering lawns, planting gardens, recycling paper).</td>
<td>• Do presentations for the community on the importance of fresh drinking water.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Design a community display which shows how humans can reduce their impact on the environment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• On a world map, locate areas where reserves of fossil fuels are located. Teach others about the importance of conserving these natural resources.</td>
</tr>
</tbody>
</table>
**SOCIAL STUDIES**

**History**

**Academic Expectation 2.20**

## CORE CONTENT

| **History is an account of human activities which is interpretive in nature.** |
| **SS-M-5.1.1** |
| Different perspectives (e.g., gender, race, region, ethnic group, nationality, age, economic status, religion, politics) result in different interpretations of historical events. |

| **SS-M-5.1.2** |
| Primary sources, secondary sources, artifacts, and time lines are essential tools in the study and interpretation of history. |

| **SS-M-5.1.3** |
| History is a series of connected events shaped by multiple cause-and-effect relationships, tying the past to the present. |

**The history of the United States is a chronicle of a diverse people and the nation they formed.**

| **SS-M-5.2.1** |
| America’s diverse society began with the “great convergence” of European, African, and Native American people beginning in the late 15th century. |

| **SS-M-5.2.2** |
| The ideals of equality and personal liberty (rise of individual rights, economic freedom, colonial governments, religious diversity, Declaration of Independence, Constitution of the United States), as developed during the colonial period, were motivations for the American Revolution and proved instrumental in forging a new nation. |

| **SS-M-5.2.3** |
| The growth of democracy and geographic expansion were significant in American history (e.g., Louisiana Purchase, Manifest Destiny, impact on Native Americans, early industrialization, early women’s rights movement). |

## SERVICE-LEARNING IDEAS

- Interview senior citizens about events in their lives and how it affected them. Compare to see if people view the same event differently. Write up the history and give back to the senior citizen to share with their family and friends.

- Contact the local historical society and find out if they need help with any projects.

- Investigate the architecture of buildings in your community. Conduct a photo survey of the structures to compare history, style, age, and original purpose. Compile your findings for the local library or historical society.
### SOCIAL STUDIES

**History**

**Academic Expectation 2.20**

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SS-M-5.2.4</strong></td>
<td>Political, social, economic, and cultural differences (e.g., slavery, tariffs, industrialism vs. agrarianism, federal vs. states' rights) among sections of the U.S. resulted in the American Civil War.</td>
<td>• Design a history day focusing on an important era in history. Invite the community to attend.</td>
</tr>
<tr>
<td><strong>SS-M-5.3.1</strong></td>
<td>The history of the world is a chronicle of human activities and human societies.</td>
<td>• Using any of the historical events you study, design a presentation about it for elementary students.</td>
</tr>
<tr>
<td><strong>SS-M-5.3.2</strong></td>
<td>As early hunters and gatherers developed new technologies, they settled into organized civilizations.</td>
<td></td>
</tr>
<tr>
<td><strong>SS-M-5.3.3</strong></td>
<td>The rise of classical civilizations and empires, and the development of major religions have lasting impacts on the world in government, philosophy, architecture, art, drama, and literature.</td>
<td></td>
</tr>
<tr>
<td><strong>SS-M-5.3.4</strong></td>
<td>The rise of non-Western cultures continues to influence the modern world in government, philosophy, art, drama, and literature.</td>
<td></td>
</tr>
<tr>
<td><strong>SS-M-5.3.5</strong></td>
<td>Developments during the Middle Ages (feudalism, nation states, monarchies, religious institutions, limited government, trade, trade associations, capitalism) influenced modern societies.</td>
<td></td>
</tr>
<tr>
<td><strong>SS-M-5.3.5</strong></td>
<td>The Age of Exploration produced extensive contact among isolated cultures and brought about massive political, economic, and social changes.</td>
<td></td>
</tr>
</tbody>
</table>
## ARTS AND HUMANITIES
### Music

**Academic Expectation 1.14, 2.22, 2.23, 2.24, 2.25, 2.26**

### CORE CONTENT

#### Elements of Music

| Creating |
|-----------------|-----------------|
| **AH-M-1.1.11** | Create and notate in similar style answers to musical phrases. [PE] (1.14, 2.22, 2.23) |
| **AH-M-1.1.12** | Improvise variations on given melodies. [EPE] (1.14, 2.22) |
| **AH-M-1.1.13** | Compose and notate short pieces of music demonstrating unity/variety, tension/release, and balance. [EPE] (1.14, 2.22, 2.23) |

#### Performing

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AH-M-1.1.21</strong></td>
<td>Use electronic/synthesized sounds, electronic instruments, and/or computers to perform music. [PE] (1.14, 2.22, 2.23)</td>
</tr>
<tr>
<td><strong>AH-M-1.1.22</strong></td>
<td>Sing or play alone, and sustain own part in an ensemble, a given piece of music with increasingly complex melodies and rhythmic patterns in treble and bass clef (with practice). [EPE] (1.14, 2.22)</td>
</tr>
<tr>
<td><strong>AH-M-1.1.23</strong></td>
<td>Sing familiar songs accurately and expressively. [EPE] (1.14, 2.22)</td>
</tr>
<tr>
<td><strong>AH-M-1.1.24</strong></td>
<td>Analyze, interpret, and evaluate the quality of own composition and performance using specific musical terms and elements to describe technical and expressive qualities. [PE] (1.14, 2.22, 2.23, 2.24, 2.25, 2.26)</td>
</tr>
</tbody>
</table>

### Middle School

- Present choral or music presentations at nursing homes.
- Present concerts for the community and donate admission charges to a local charity.
- Raise funds to purchase musical instruments OR to pay for music lessons for children who cannot afford them.
- Study music from each decade of the 20th century. Interact with the elderly by playing a game where they guess from which decade a musical selection came.
- Create songs/rap about any given unit (reflection)
- Rhythms used to recognize patterns (peer education)
- Rhythms used for counting (peer education)
- Compare and contrast music across eras (senior citizens)
- How popular music reflects social and political views of any given era (senior citizens)
- Recognizing poetic devices in music lyrics (presentations)
# ARTS AND HUMANITIES

**Music**

**Academic Expectation 1.14, 2.22, 2.23, 2.24**

## CORE CONTENT

<table>
<thead>
<tr>
<th>Responding</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and define elements of music and their symbols: (2.22, 2.23, 2.24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-1.1.31</strong></td>
<td></td>
<td>• How music reflects different cultures (presentations)</td>
</tr>
<tr>
<td>Rhythm: syncopation, time signature (6/8), asymmetrical meter (5/4, rhythmic durations (16&lt;sup&gt;th&lt;/sup&gt; notes and rests, dotted notes)</td>
<td></td>
<td>• Effects of music on the body, mind, and attitudes (presentations)</td>
</tr>
<tr>
<td><strong>AH-M-1.1.32</strong></td>
<td></td>
<td>• &quot;War songs&quot; across history – similarities and contrasts (senior citizens/presentations)</td>
</tr>
<tr>
<td>Tempo: Allegro, Moderato, Largo</td>
<td></td>
<td>• Teach songs to younger children</td>
</tr>
<tr>
<td><strong>AH-M-1.1.33</strong></td>
<td></td>
<td>• Organize a community choir – perform at fund-raisers for local non-profit organizations.</td>
</tr>
<tr>
<td>Melody: phrase, cadence, bass clef sign; pitch notation (notes): letter names of bass clef, lines and spaces, sharps (#), flats (b); key signatures: up to 2 flats and 2 sharps</td>
<td></td>
<td>• Work with community agencies to write jingles or theme songs.</td>
</tr>
<tr>
<td><strong>AH-M-1.1.34</strong></td>
<td></td>
<td>• Sing with a group of senior citizens.</td>
</tr>
<tr>
<td>Harmony: harmonic progression, triads (chords) based on major/minor scale patterns of whole and half steps</td>
<td></td>
<td>• Create and perform a rap for elementary students which focuses on drug refusal skills.</td>
</tr>
<tr>
<td><strong>AH-M-1.1.35</strong></td>
<td></td>
<td>• Teach these concepts to peers or younger children.</td>
</tr>
<tr>
<td>Form: rondo, theme and variations, 1&lt;sup&gt;st&lt;/sup&gt; and 2&lt;sup&gt;nd&lt;/sup&gt; endings, D.C. (dacapo), D.S. (dal segno), al fine, coda, coda sign</td>
<td></td>
<td>• Hold a multicultural fair highlighting the different cultures/regions you are studying.</td>
</tr>
<tr>
<td><strong>AH-M-1.1.36</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timbre: acoustic instruments, synthesized sounds, electronic instruments, voices (soprano, alto, tenor, bass), keyboards</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-1.1.37</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamics: crescendo, decrescendo, very loud (fortissimo), very soft (pianissimo), dynamic markings: pp, mp, mf, f, ff, &lt;,&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ARTS AND HUMANITIES
Music
Academic Expectation 1.14, 2.22, 2.23, 2.24

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH-M-1.1.38</td>
<td>Describe the use of elements in musical examples. (2.22, 2.23, 2.24, 2.25, 2.26)</td>
<td></td>
</tr>
<tr>
<td>AH-M-1.1.39</td>
<td>Analyze musical forms (see list under elements). (1.14, 2.23)</td>
<td></td>
</tr>
<tr>
<td>AH-M-1.1.310</td>
<td>Identify and classify folk and orchestral instruments according to family. (2.23)</td>
<td></td>
</tr>
<tr>
<td>AH-M-1.1.311</td>
<td>Distinguish between voice parts (soprano, alto, tenor, and bass). (2.23)</td>
<td></td>
</tr>
</tbody>
</table>

Historical and Cultural Context Responding

| AH-M-1.2.31  | Identify and compare various styles and functions (recreational, ceremonial, and artistic expression) of music from European and Asian cultures using appropriate vocabulary. (2.25, 2.26) | |
| AH-M-1.2.32  | Identify and compare various styles of music (jazz, spirituals/gospel, Broadway musicals, opera, ballads). (2.24, 2.25, 2.26) Analyze, interpret, and evaluate how factors such as time, place, and ideas are reflected in the music of the Renaissance, Baroque, Classical, Romantic, and 20th Century. (2.22, 2.23, 2.24, 2.25, 2.26) | |
## ARTS AND HUMANITIES

### Dance

**Academic Expectation 1.14, 1.15, 2.22, 2.23, 2.24**

### CORE CONTENT

<table>
<thead>
<tr>
<th>Creating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AH-M-2.1.11</strong> CREATE MOVEMENT IDEAS</td>
</tr>
<tr>
<td>Create movement ideas that could be used to compose a dance based upon a theme, using dance elements and principles of choreography which include contrast and transition. [PE] (1.15, 2.22)</td>
</tr>
</tbody>
</table>

| **AH-M-2.1.12** COMPOSE A DANCE USING LOCOMOTOR AND NON-LOCOMOTOR MOVEMENTS | SERVICE-LEARNING IDEAS |
| Compose a dance using locomotor (step-hop, grapevine, polka, waltz, two-step) and non-locomotor movements (push, pull, rise, fall, dodge, sway) to express an idea and/or emotions. [PE] (1.15, 2.22) |

| **AH-M-2.1.13** CREATE A GROUP DANCE WITH 2-3 OTHER PEOPLE | |
| Create a group dance with 2-3 other people using dance elements and principles of contrast and transition using one of the following compositional forms: AB, ABA, call and response, or narrative. [EPE] (1.15, 2.22, 2.23) |

| **AH-M-2.1.14** COMPOSE A SHORT DANCE (AT LEAST 32 COUNTS) BASED ON A THEME | |
| Compose a short dance (at least 32 counts) based on a theme. [EPE] (1.15, 2.22) |

### Performing

| **AH-M-2.1.21** ACCURATELY RECALL AND REPRODUCE A DANCE SEQUENCE | |
| Accurately recall and reproduce a dance sequence at least 32 counts in length. [EPE] (1.15, 2.22, 2.23) |

| **AH-M-2.1.22** REPRODUCE A RHYTHMIC PATTERN | |
| Reproduce a rhythmic pattern by clapping, playing a rhythmic instrument, or moving. [EPE] (1.15, 2.22) |

| **AH-M-2.1.23** DEMONSTRATE AND DESCRIBE SKILLS OF BODY ALIGNMENT, BALANCE, ISOLATION OF BODY PARTS, ELEVATION, AND LANDING WHILE MOVING | |
| Demonstrate and describe skills of body alignment, balance, isolation of body parts, elevation, and landing while moving. [EPE] (1.15, 2.22) |

- Teach younger students these dance movements.
- Go to a Senior Citizen Center and ask if they can teach these dances to the students.
- Go to a Senior Citizen Center once a month to interact and dance with seniors as part of a recreational activity for them.
- Compose a dance to reflect upon a service-learning project.
- Combine dance movement with a rap to deliver a health or safety message to younger children.
## ARTS AND HUMANITIES

### Dance

**Academic Expectation 1.14, 1.15, 2.22, 2.23, 2.24**

### Core Content

<table>
<thead>
<tr>
<th>AH-M-2.1.24</th>
<th>Describe the movement, dance elements, and steps in a live or videotaped performance using appropriate dance vocabulary. [PE] (1.15, 2.23)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responding</strong></td>
<td></td>
</tr>
<tr>
<td>AH-M-2.1.31</td>
<td>Describe the movement, dance elements, and steps in a live or videotaped performance using appropriate dance vocabulary. [PE] (1.15, 2.23)</td>
</tr>
<tr>
<td>AH-M-2.1.32</td>
<td>Discuss how dances are composed of a variety of locomotor (step, hop, grapevine, polka, waltz, two-step) and non-locomotor (push, pull, rise, dodge, sway) movements. (1.15, 2.23)</td>
</tr>
<tr>
<td>AH-M-2.1.33</td>
<td>Explain dance movements and how they differ from other movements (athletic, pedestrian). (1.15, 2.23, 2.25)</td>
</tr>
<tr>
<td>AH-M-2.1.34</td>
<td>Design a warm-up exercise and explain how it prepares the body expression. (1.15, 2.22, 2.23)</td>
</tr>
<tr>
<td>AH-M-2.1.35</td>
<td>Analyze, interpret, and evaluate the use of compositional forms (ABA, call and response, narrative) in dance. (1.15, 2.23, 2.24)</td>
</tr>
<tr>
<td>AH-M-2.1.36</td>
<td>Analyze, interpret, and evaluate the skills of body alignment, balance isolation of body parts, elevation, and landing. (1.15, 2.23)</td>
</tr>
</tbody>
</table>

### Historical and Cultural Context

<table>
<thead>
<tr>
<th>AH-M-2.2.31</th>
<th>Discuss contributions of dance to society as an activity. (1.15, 2.23, 2.25)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responding</strong></td>
<td></td>
</tr>
<tr>
<td>AH-M-2.2.32</td>
<td>Identify and describe dances from different cultures (Latin American, Caribbean), purposes (ceremonial - initiation; recreational - square dance, social; artistic - ballet, jazz) and/or styles. (1.15, 2.25, 2.26)</td>
</tr>
</tbody>
</table>

### Service-Learning Ideas

- Video dance used in reflection and describe using appropriate dance vocabulary
- Design and conduct dance warm-up exercises for younger children or senior citizens before a recreational or instructional dance session.
- Perform and teach traditional folk, square, ethnic dances at community festivals, nursing homes and school functions.
# ARTS AND HUMANITIES
## Drama/Theatre
### Academic Expectation 1.5, 2.22, 2.23, 2.24, 2.5, 2.6

<table>
<thead>
<tr>
<th>Core Content</th>
<th>Middle School</th>
<th>Service-Learning Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creating/Performing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AH-M-3.1.41</td>
<td>Create a script that can be used in a dramatic performance. [PE] (2.22)</td>
<td>- Perform for a senior citizen center or nursing home.</td>
</tr>
<tr>
<td>AH-M-3.1.42</td>
<td>Use the elements of production to create a dramatic work. [PE] (2.22, 2.23)</td>
<td>- Create short skits or plays with positive messages and present them to your school.</td>
</tr>
<tr>
<td>AH-M-3.1.43</td>
<td>Improvise short dialogues and monologues to describe ideas and events. [PE] (2.23, 2.24, 2.25, 2.26)</td>
<td>- Perform plays on current issues and then facilitate discussion around these topics.</td>
</tr>
<tr>
<td>AH-M-3.1.44</td>
<td>Create a design to communicate setting and mood using music and a variety of sound sources. [PE] (2.23, 2.24, 2.25, 2.26)</td>
<td>- Research and write plays around current events or community issues to increase awareness.</td>
</tr>
<tr>
<td>AH-M-3.1.45</td>
<td>Assume roles that communicate aspects of a character and contribute to the action based on experience, imagination, or characters in literature, history, or script. [EPE] (1.15, 2.22, 2.23, 2.24, 2.25, 2.26)</td>
<td>- Produce a play for the community with a positive message about today’s youth.</td>
</tr>
<tr>
<td>AH-M-3.1.46</td>
<td>Create characters using the elements of performance. [PE] (2.22)</td>
<td>- Help with a community play production.</td>
</tr>
<tr>
<td>AH-M-3.1.47</td>
<td>Create and describe characters based upon the observation of interactions, ethical choices, and emotional responses of people. [PE] (2.22, 2.23)</td>
<td>- Teach younger students or community members about these works through a dramatic presentation.</td>
</tr>
</tbody>
</table>
# ARTS AND HUMANITIES
## Drama/Theatre
### Academic Expectation 1.5, 2.22, 2.23, 2.24, 2.5, 2.6

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify and define the components of drama/theatre:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-3.1.31</strong></td>
<td>Elements of drama: plot development, rising action, turning point, falling action, suspense theme, language, empathy, motivation, discovery</td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-3.1.32</strong></td>
<td>Elements of production: staging, scenery, props, lighting, sound, costumes, make-up</td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-3.1.33</strong></td>
<td>Elements of performance: breath control, diction, body alignment, control of isolated parts of the body</td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-3.1.34</strong></td>
<td>Compare and contrast the use of the elements of drama in a variety of works using appropriate vocabulary (2.23, 2.24, 2.25)</td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-3.1.35</strong></td>
<td>Identify elements of production for a scripted scene, using appropriate vocabulary (2.23, 2.24)</td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-3.1.36</strong></td>
<td>Describe, using appropriate vocabulary, how the elements of production communicate setting and mood (2.23, 2.24)</td>
<td></td>
</tr>
<tr>
<td><strong>AH-M-3.1.37</strong></td>
<td>Describe characters’ use of elements of performance, using appropriate vocabulary (2.23)</td>
<td></td>
</tr>
</tbody>
</table>
**ARTS AND HUMANITIES**  
**Drama/Theatre**  
**Academic Expectation 1.5, 2.22, 2.23, 2.24, 2.5, 2.6**

**CORE CONTENT**  

| AH-M-3.1.38 | Identify and describe the types of stages (arena, thrust, proscenium) (2.23, 2.24) |
| AH-M-3.1.39 | Identify the skills necessary for jobs associated with theatre (playwright, director, actor, actress, designers – scenery, props, lighting, sounds, costume, make-up) |
| AH-M-3.1.310 | Discuss the collaborative artistic processes of planning, playing, responding, and evaluating a performance. |
| AH-M-3.1.311 | Compare and contrast the forms of theatre, musical theatre, TV, film, and dance using appropriate vocabulary (2.22, 2.23) |
| AH-M-3.1.312 | Relate the theme of a theatrical work to personal experiences. (2.23) |

**Middle School**

| Historical and Cultural Context |
| Responding |
| AH-M-3.2.31 | Identify the characteristics of theatrical works from different cultures, periods, and styles (Greek, Elizabethan, Modern). (2.23, 2.24, 2.26) |
| AH-M-3.2.32 | Discuss how diverse cultures, periods, and styles affect drama (2.23, 2.25, 2.26) |

**SERVICE-LEARNING IDEAS**
# ARTS AND HUMANITIES

## Visual Arts

**Academic Expectation 2.22, 2.23, 2.24**

## CORE CONTENT

<table>
<thead>
<tr>
<th>Creating/Performing</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AH-M-4.1.41</strong> Create art for specific purposes using the elements of art and principles of design to communicate ideas. [PE] (1.13, 2.22)</td>
<td></td>
<td>• Conduct a service project for a local art gallery</td>
</tr>
<tr>
<td><strong>AH-M-4.1.42</strong> Effectively use a variety of art media, processes, and subject matter to communicate ideas, feelings, and experiences. [PE] (1.13, 2.22)</td>
<td></td>
<td>• Design and paint a mural around a community theme</td>
</tr>
<tr>
<td><strong>AH-M-4.1.31</strong> Describe, analyze, and/or interpret works of art using visual art terminology. (1.13, 2.22, 2.23, 2.24)</td>
<td></td>
<td>• Paint over graffiti in the community</td>
</tr>
<tr>
<td><strong>AH-M-4.1.32</strong> Art Elements: line, shape, color (tints and shades) and color groups (monochromatic), form, texture, space (positive/negative and perspective), and value (light and shadow)</td>
<td></td>
<td>• Make a personalized artwork for senior citizens</td>
</tr>
<tr>
<td><strong>AH-M-4.1.33</strong> Principles of Design: repetition, pattern, balance (symmetry/asymmetry), emphasis (focal point), contrast (light and dark), rhythm, proportion, and movement</td>
<td></td>
<td>• Teach art lessons to children or senior citizens</td>
</tr>
<tr>
<td><strong>AH-M-4.1.34</strong> Identify and describe a variety of art media, art processes, and subject matter to communicate ideas, feelings, experiences, and stories. (1.13, 2.22, 2.23)</td>
<td></td>
<td>• Create a photo essay depicting the cultural diversity in your community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Teach preschool children about primary colors and how to mix them to produce new colors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use an art form to reflect upon a service-learning project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Photograph unique areas in your community and display this at a local library, art gallery, or other community agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make paintings for community agencies such as homeless shelters or soup kitchens OR make paintings, sell them, and donate the money to a local charity</td>
</tr>
</tbody>
</table>
## ARTS AND HUMANITIES
### Visual Arts
### Academic Expectation 2.22, 2.23, 2.24

### CORE CONTENT

<table>
<thead>
<tr>
<th>AH-M-4.1.35</th>
<th>Media: two dimensional – crayon, pencil, fabric, yarn, paint (tempera, watercolor), ink, and pastels.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH-M-4.1.36</td>
<td>Media: three-dimensional – clay, papier-mâché’, found objects (used to produce artwork), wood, glass, metal, and stone (Properties of media need to be known in order to respond to artworks)</td>
</tr>
<tr>
<td>AH-M-4.1.37</td>
<td>Art Processes: two-dimensional – painting, fabric design, printmaking, and mosaics</td>
</tr>
<tr>
<td>AH-M-4.1.38</td>
<td>Art Processes: Art Processes: three-dimensional – ceramics, sculpture, and architecture</td>
</tr>
<tr>
<td>AH-M-4.1.39</td>
<td>Subject Matter: landscape, portrait, still life, abstract, and non-objective</td>
</tr>
</tbody>
</table>

### Middle School

### SERVICE-LEARNING IDEAS

- Teach younger students the basics of painting
- Do a painting activity with senior citizens
- Involve students in an Empty Bowls project where they make ceramic bowls and make them available to the community, asking for donations for the purchase of each bowl, with all proceeds going to local agencies that address hunger issues.
- Make portraits of senior citizens to give to them and their families
- Teach others about the unique qualities of art form these cultures or time periods
ARTS AND HUMANITIES
Literature
Academic Expectation 1.2, 2.23, 2.24, 2.25

<table>
<thead>
<tr>
<th>Elements of Literature</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AH-M-5.1.31</strong></td>
<td><strong>Responding</strong></td>
<td><strong>Read and explain various forms of literature to peers, younger students, and/or senior citizens</strong></td>
</tr>
<tr>
<td>Analyze the characters’ actions, considering their situations and basic motivations (1.2, 2.24, 2.25)</td>
<td></td>
<td><strong>Create and publish a literary piece of work employing the attached codes and present homeless children or students with limited reading materials in their homes</strong></td>
</tr>
<tr>
<td><strong>AH-M-5.1.32</strong></td>
<td></td>
<td><strong>Use literature (folk literature, poetry, essays, plays, short stories, and novels) to set the stage for a service-learning project</strong></td>
</tr>
<tr>
<td>Explain how an author uses the elements of literature (plot and structure, characters, setting, point of view, language and style, and theme) to create literary work (1.2, 2.23)</td>
<td></td>
<td><strong>Use the above as a means to enrich reflection sessions</strong></td>
</tr>
<tr>
<td><strong>AH-M-5.1.33</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify characteristics of fiction and nonfiction and literary genres (folk literature, poetry, essays, plays, short stories, novels) (1.2, 2.23)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PRACTICAL LIVING/
VOCATIONAL STUDIES
## PRACTICAL LIVING/VOCATIONAL STUDIES
### Health Subdomain
#### Academic Expectation 2.29

<table>
<thead>
<tr>
<th>Core Content</th>
<th>Middle School</th>
<th>Service-Learning Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive interactions in groups contribute to mental and emotional well-being</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PL-M-1.1.1</strong> Individuals have personal rights and responsibilities (e.g., cooperation, communication, patience) when dealing with others (e.g., families, classmates, teams)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PL-M-1.1.12</strong> Conflict-resolution strategies (e.g., problem identification, effective communication, mediation, walking away) provide effective means for dealing with conflict.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PL-M-1.1.13</strong> Communication, cooperation, rules, and respect are important to the effective functioning of groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reproduction and sexuality are issues of concern for individual well-being and healthy relationships</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PL-M-1.2.1</strong> Knowledge of the basic structures and function of the reproductive system is important to understanding the human life cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PL-M-1.2.2</strong> Physical, social, and emotional changes occur during adolescence</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PL-M-1.2.3</strong> Abstinence is the only sure means of preventing pregnancy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Any community service-learning project you involve your students in will help them develop a better understanding of their responsibilities as citizens in their community.
- Do a project based on the needs of local agencies that help families and children. Develop a booklet that lists those agencies, with addresses and phone numbers, and distribute to families at school.
- Help with projects at a Youth Service Center or Family Resource Center.
- Organize multi-cultural games and sporting events with everyone sharing how to play different games.
- Teach conflict resolution techniques to younger students through skits, stories, or presentations.
- Develop skits on the concept of respect and present them to elementary students.
### CORE CONTENT

<table>
<thead>
<tr>
<th>Behavioral choices/habits contribute to the promotion of an individual’s physical health, the prevention of illnesses/diseases, and the ability to remain mentally and emotionally healthy.</th>
</tr>
</thead>
</table>
| **PL-M-1.3.1**  
Diet, exercise, rest, and other choices (e.g., tobacco, alcohol, and other drug use) affect body systems (e.g., circulatory, respiratory, digestive) |
| **PL-M-1.3.2**  
Knowledge of the transmission and prevention of communicable diseases and personal illnesses (e.g., hepatitis, colds, influenza, mononucleosis, TB, AIDS/HIV/STDs) contributes to the health of the community |
| **PL-M-1.3.3**  
Identification, prevention, and treatment of noncommunicable diseases (e.g., cancer, asthma) among adolescents contribute to community health |
| **PL-M-1.3.4**  
There are risks associated with unhealthy habits and behaviors (e.g., substance use/abuse, dietary habits, irregular exercise habits, sexual activity) that affect the physical health of adolescents |
| **Nutritious foods are necessary for growth, development, and maintenance of healthy bodies** |
| **PL-M-1.4.1**  
Six basic nutrients (minerals, vitamins, fat, carbohydrates, water, protein) are needed for proper growth and development |
| **PL-M-1.4.2**  
Using dietary guidelines, food guide pyramid, and other nutritional resources (e.g., food tables) helps make daily food choices |

### Middle School

**SERVICE-LEARNING IDEAS**

- Analyze an environmental health problem in your community. Work to solve or raise awareness of this problem in your community.
- Invite senior citizens to come into school for shuffleboard, ping-pong, croquet, or other sports activities.
- Teach senior citizens about the importance of diet and exercise. Visit the local senior citizen center or nursing home and do exercises.
- Do an educational campaign for peers on HIV/AIDS/STD’s or develop an AIDS fair for the community.
- Write to children in the hospital with diabetes, cancer, or asthma.
- Write daily PA announcement with health tips.
- Organize a blood drive for parents.
- Design and construct an exercise trail for the community.
- Write and perform anti-drug skits for peers or younger students.
- Teach nutrition lessons to senior citizens or elementary students. Show them how to prepare healthy snacks.
# PRACTICAL LIVING/VOCATIONAL STUDIES

## Health Subdomain

### Academic Expectation 2.31

<table>
<thead>
<tr>
<th>CORE CONTENT</th>
<th>Middle School</th>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-1.4.3</strong></td>
<td>Exercise and dietary habits (e.g., cultural food choices, vegetarian diets, overindulgence in fatty foods, excessive salt consumption) can affect the way adolescents look, feel, and perform</td>
<td>- Design health and nutrition posters for senior citizen centers, childcare centers, nursing homes, and school cafeterias.</td>
</tr>
<tr>
<td><strong>The health benefits of exercise and fitness to health go beyond weight control.</strong></td>
<td></td>
<td>- Do regular exercises with elementary students or senior citizens.</td>
</tr>
<tr>
<td><strong>PL-M-1.5.1</strong></td>
<td>Body changes (e.g., body composition, decreased heart rate, reduced cholesterol level) occur following a regular exercise program</td>
<td>- Organize an exercise class before or after school for peers.</td>
</tr>
<tr>
<td><strong>PL-M-1.5.2</strong></td>
<td>Exercise benefits physical development (e.g., body shape, posture, coordination, muscle development)</td>
<td>- Study household hazard waste and teach others less harmful substitutes through demonstrations.</td>
</tr>
<tr>
<td><strong>Applying the principles of fitness training and conditioning (frequency, intensity, time/duration) are necessary to get the most from exercise.</strong></td>
<td></td>
<td>- Do safety inspections at school and report your findings to the principal.</td>
</tr>
<tr>
<td><strong>PL-M-1.5.3</strong></td>
<td>Self-assessment of health status (e.g., strength, flexibility, cardiovascular endurance, body composition) contributes to health maintenance</td>
<td>- Teach children how to prevent common household accidents through presentations, a videotape, or a book.</td>
</tr>
<tr>
<td><strong>Accidents are a major cause of injury and death to children and adolescents</strong></td>
<td></td>
<td>- Teach elementary or preschool students the importance of wearing a seat belt.</td>
</tr>
<tr>
<td><strong>PL-M-1.6.1</strong></td>
<td>Health and safety hazards (e.g., firearms, traffic, transportation, horseplay) encountered by adolescents can be life threatening</td>
<td>- Display posters for home safety awareness and display in the community.</td>
</tr>
<tr>
<td><strong>PL-M-1.6.2</strong></td>
<td>Traffic and transportation related safety practices (e.g., wear seat belts, use life vests) on the ground and in the water contribute to reduction in injuries and death</td>
<td>- Teach senior citizens safety tips to reduce occurrence of thefts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Conduct a campaign about how the 911 emergency systems work to help the community. Teach peers or elementary students how and when to use it.</td>
</tr>
</tbody>
</table>
## CORE CONTENT

### PL-M-1.6.3
Using safety strategies (e.g., walking in opposite direction of violence, staying calm in dangerous situations) and wearing protective gear (e.g., helmets, knee pads, elbow pads) reduce the incidence of injury or death.

### PL-M-1.6.4
Following basic first-aid procedures when responding to a variety of life-threatening emergencies (e.g., choking, shock, poisons, burns, temperature-related emergencies, animal and insect bites) helps reduce the severity of injuries.

**Behavioral choices/habits contribute to mental and emotional health and the promotion of physical well-being**

### PL-M-1.7.1
Symptoms and causes of mental illnesses (e.g., depression, anxiety) vary with the individual.

### PL-M-1.7.2
There are consequences and risks of behavioral choices (e.g., tobacco, alcohol, and other drug use; sexual involvement; violent behaviors) and alternatives to situations faced by adolescents.

### PL-M-1.7.3
Resources (e.g., guidance counselors, drug counselors, parents, teachers) are helpful for an individual seeking treatment of drug addiction.

### PL-M-1.7.4
Effects of eating disorders (e.g., heart failure, weight changes, kidney failure, hair loss, nervousness) indicate a need for counseling.

## Middle School

### SERVICE-LEARNING IDEAS
- Assemble first aid kits and distribute to homeless shelters, housing projects, or other community agencies. Teach other students what items should be in first aid kits.
- Study simple first aid techniques and demonstrate to younger children.
- Graph smoking and non-smoking trends over the last 50 years. Share results with your school while conducting an anti-smoking campaign.
- Gather and distribute information to peers on community agencies that provide treatment of eating disorders.
- Survey, by grade level, areas in which students feel the most pressure to conform. Record the data and graph the results.
- Research ways to reduce violence and teach these concepts to others.
# PRACTICAL LIVING/VOCATIONAL STUDIES
## Health/Physical Education Subdomain
### Academic Expectation 2.32, 2.3, 2.34

## CORE CONTENT

<table>
<thead>
<tr>
<th>People often need established strategies for remaining mentally and emotionally healthy. Application of these strategies also affects physical wellness</th>
</tr>
</thead>
</table>

**PL-M-1.8.1**  
The use of appropriate strategies (e.g., assertiveness, refusal skills, decision-making techniques) are positive ways to cope with peer pressure  

**PL-M-1.8.2**  
Strategies (e.g., studying in advance; talking with counselors, parents, and/or friends; planning; getting ample rest; eating properly) for managing stressful situations (e.g., test taking, deadlines, change, grief, rejection) reduce anxiety  

**PL-M-1.8.3**  
Strategies (e.g., walking away, communication skills, conflict resolution) for preventing violence vary with the situation  

**PL-M-1.8.4**  
Using appropriate coping strategies (e.g., realistic goal-setting, effective time management, decision-making processes) promotes mental and emotional health  

**Development of psychomotor skills contributes to the development of social and cognitive skills**  

| Principles of motor skills refinement (e.g., accuracy, technique, movement) require a logical and sequential approach.  
|---|

**PL-M-2.1.2**  
Knowledge of the combinations of locomotor (moving from one place to another) (e.g., running, skipping, hopping) and nonlocomotor (stationary) (e.g., bending, stretching, twisting) movements is necessary for the improvement of transitional motor skills (e.g., punting, serving, vaulting)  

## SERVICE-LEARNING IDEAS

- Write, perform, and critique skits which communicate effective refusal skills and present to peers.  
- Design a peer pressure survey of attitudes students have toward different areas. Compare across grade levels. Publish findings in a school newsletter.  
- Help with Special Olympics.  
- Organize sporting activities for elementary students.
# PRACTICAL LIVING/VOCATIONAL STUDIES

## Health/Physical Education Subdomain

### Academic Expectation 2.35

**Service-Learning Ideas Core Content**

### Middle School

<table>
<thead>
<tr>
<th>Physical, mental, emotional, and social health is strengthened by regular involvement in physical activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-2.2.1</strong></td>
</tr>
<tr>
<td>Physical, emotional/mental, and social benefits can be gained from regular participation in leisure/recreational and/or competitive physical activities</td>
</tr>
<tr>
<td><strong>Physical benefits:</strong></td>
</tr>
<tr>
<td>* increased energy</td>
</tr>
<tr>
<td>* improved strength</td>
</tr>
<tr>
<td>* fitness</td>
</tr>
<tr>
<td>* improved control of body movements</td>
</tr>
<tr>
<td><strong>Social benefits:</strong></td>
</tr>
<tr>
<td>* self-esteem</td>
</tr>
<tr>
<td>* friendship</td>
</tr>
<tr>
<td>* self-expression</td>
</tr>
<tr>
<td><strong>Emotional/mental benefits:</strong></td>
</tr>
<tr>
<td>* improved confidence</td>
</tr>
<tr>
<td>* increased self-esteem</td>
</tr>
<tr>
<td>* stress reduction</td>
</tr>
<tr>
<td>* self-expression</td>
</tr>
</tbody>
</table>

### Rules of behavior, fair play, and cooperation enhance the quality of participation in games and activities and mental, emotional, and social health

<table>
<thead>
<tr>
<th>Knowledge of offensive and defensive strategies in games and/or sports makes them interesting and enjoyable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-2.3.1</strong></td>
</tr>
</tbody>
</table>

### Rules of behavior and fair play (e.g., accepting authoritative decisions, assessing one’s own performance level, accepting skills and abilities of others through verbal and nonverbal actions for spectators and/or participants) during games are necessary

| - Organize an exercise group before or after school. |
| - Teach elementary students how to play these sports. |
| - Organize sporting activities for children in homeless shelters. |
| - Design and construct an exercise trail in your community and promote its use. |
| - Teach elementary students the importance of being a good spectator. Show them how to react or not react and appropriate/inappropriate actions in various situations. |
# Practical Living/Vocational Studies

## Consumerism Subdomain

### Academic Expectation 2.30

### Core Content

| PL-M-3.1.1 | A comparison of needs vs. wants will influence consumer decisions |
| PL-M-3.1.2 | Products and services are compared and evaluated based on a range of considerations (e.g., price vs. quality, generic vs. name-brand, comparison shopping vs. impulse shopping, immediate availability vs. advance ordering) |
| PL-M-3.1.4 | There are positive and negative aspects of advertising strategies (e.g., providing accurate or misleading information, gimmicks) |
| PL-M-3.1.5 | Environmental issues (e.g., pollution) should be considered when making consumer decisions (e.g., recycling, reducing, reusing) |

### Service-Learning Ideas

- Investigate buying trends of young people. Visit local stores and develop comparison charts of prices and quality of selected items that adolescents purchase. Make this information available to other students.

- Teach younger students about the influence of advertising.

- Research characteristics of false advertising or those ads with advertising gimmicks (i.e., contests where you send them money) and teach senior citizens how to be wary of these types of ads.

- Make a display in the school or community which shows how consumer decisions can impact the environment.

- With a set budget, adopt a local family and purchase needed items for them, with the students determining how to get the most for their money.
CORE CONTENT

<table>
<thead>
<tr>
<th>People rely on services and resources provided through private, public, and voluntary agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-3.3.1</strong></td>
</tr>
<tr>
<td>A range of resources and services are provided by community agencies:</td>
</tr>
<tr>
<td>• public health department</td>
</tr>
<tr>
<td>• fire department</td>
</tr>
<tr>
<td>• police department</td>
</tr>
<tr>
<td>• family resource centers</td>
</tr>
<tr>
<td>• hospitals</td>
</tr>
<tr>
<td>• nonprofit organizations (e.g., American Health Association, American Red Cross, American Cancer Society)</td>
</tr>
</tbody>
</table>

Middle School

SERVICE-LEARNING IDEAS
PRACTICAL LIVING/VOCATIONAL STUDIES
Vocational Studies Subdomain
Academic Expectation 2.36

CORE CONTENT

<table>
<thead>
<tr>
<th>Jobs/Careers reflect both individual and societal needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-4.1.1</strong> People work to provide for their wants (e.g., entertainment, hobbies, brand-name clothing/shoes) and needs (e.g., food, clothing, shelter) and often for personal satisfaction (e.g., self-worth)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jobs and career opportunities (e.g., manufacturing, business-industry, food services, natural resources, entertainment) vary within and among communities and global regions based, in part, on available resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-4.1.3</strong> New jobs and careers emerge and others are deleted due to the needs of society (e.g., increased need for nursing home care due to people living longer, day care due to more people working)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Many factors need to be considered when selecting and preparing for a career path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-4.2.1</strong> Interests and abilities can be identified through a variety of means (e.g., formal assessment, trying new experiences, job fair)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jobs and careers differ in ways that match a person’s interests, aptitudes, and career goals (e.g., salary, benefits, demands of job, work environment)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-M-4.2.2</strong></td>
</tr>
</tbody>
</table>

Middle School

SERVICE-LEARNING IDEAS

- Give students salaries and monthly expenses and have them set up a budget for the month. Discuss what happens when people do not have enough money to cover expenses. This project can lead into a food or clothing drive for a local charity or social service organization.

- While conducting a community service project, discuss careers related to the organization with which you are working. For example, discuss career opportunities at homeless shelters, retirement homes, schools, and social service agencies.

- Teach elementary children about careers.

- Set up opportunities for students to shadow people who work in local community agencies. Have students do presentations for others about the career they shadowed.

- Organize a career fair at your school. Invite elementary children to attend.
PRACTICAL LIVING/VOCATIONAL STUDIES
Vocational Studies Subdomain
Academic Expectation 2.36, 237

CORE CONTENT

PL-M-4.2.3
There are resources (e.g., Internet, government publications, newspapers, magazines, counselors) and experiences (e.g., shadowing, mentoring) available for locating job and career information.

PL-M-4.2.4
There are various postsecondary options available (e.g., technical or vocational schools, 2-year college, 4-year college, apprenticeship, military service).

PL-M-4.3.1
Opportunities for individual success are enhanced by identifying weak or negative work habits and making changes for improvement.

PL-M-4.3.2
The work habits and work ethics (e.g., cooperation, respect, time, management, team/individual responsibilities) of an individual can impact the success of a group.

PL-M-4.4.1
Certain academic skills (e.g., communication, research, math, science) are important to specific jobs or careers.

PL-M-4.4.2
The use of various types of technology (e.g., word processing, Internet access) has increased, continues to change, and has an impact on the workplace.

PL-M-4.4.3
Both individual and team skills (e.g., identify goals, use listening skills, follow directions, communicate orally, ask questions about tasks, use problem-solving skills) contribute to the successful completion of a task.

SERVICE-LEARNING IDEAS

- Operate a school-based business and donate the profits to community agencies. Have the students evaluate each other. Discuss the positive and negative work habits observed.
- Write and perform skits on positive and negative work habits.
- Teach senior citizens or children how to use computers or the Internet.
- Design a service-learning project to provide services to the community (e.g., raking leaves, environmental clean-up). Establish acceptable work ethics and then evaluate individual students or each team’s performance after the task is completed.
PRACTICAL LIVING/VOCATIONAL STUDIES
Vocational Studies Subdomain
Academic Expectation 2.38

CORE CONTENT

<table>
<thead>
<tr>
<th>Special skills are needed as post-secondary opportunities are sought</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL-M-4.5.1</td>
</tr>
<tr>
<td>A resume' (a summary of a person’s educational background, job experiences, and qualifications) is an important component in a portfolio</td>
</tr>
<tr>
<td>PL-M-4.5.2</td>
</tr>
<tr>
<td>The following communication skills are important when seeking a job/career:</td>
</tr>
<tr>
<td>- business letter writing</td>
</tr>
<tr>
<td>- nonverbal communication skills (e.g., body language, facial expressions, posture, dress)</td>
</tr>
<tr>
<td>- verbal skills</td>
</tr>
<tr>
<td>- interview skills (e.g., friendly greeting, maintain eye contact, show enthusiasm about the job, respond positively and honestly, plan questions to ask, listen carefully, thank interviewer)</td>
</tr>
</tbody>
</table>

Middle School

<table>
<thead>
<tr>
<th>SERVICE-LEARNING IDEAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Use a resume’ format to reflect upon a job position observed during a service-learning project.</td>
</tr>
<tr>
<td>- Write business letters to community agencies asking them about their current needs. Conduct projects based on those needs.</td>
</tr>
<tr>
<td>- Write business letters to local businesses to request donations for community agencies.</td>
</tr>
<tr>
<td>- Set up a program to help elementary students transition to middle school:</td>
</tr>
<tr>
<td>a) Allow an elementary student to shadow a middle school student for one day.</td>
</tr>
<tr>
<td>b) Conduct a panel discussion about being in middle school for incoming elementary children.</td>
</tr>
<tr>
<td>- Conduct interviews of senior citizens as part of an oral history service-learning project.</td>
</tr>
<tr>
<td>- Teach younger children communication skills.</td>
</tr>
</tbody>
</table>
EDUCATION
GOALS
- To provide a connection for the students between historical events and present day
- To provide an opportunity for the students to interact with the senior citizens
- To help the students understand that they can learn valuable historical information from senior citizens

CORE CONTENT AREAS
- **Reading/Writing:** Students read information in their history textbook about WW2. After completing interviews with the senior citizens, students wrote a narrative of the information they had gathered to give back to the senior citizen they had interviewed. This was also a portfolio piece for some students.

- **Science:** 2.2
  Students learned about the chemical reactions created by an atom bomb.

- **Social Studies:** 2.16, 2.17, 2.20
  Students learned how the senior citizen center provides a means for older persons in the community to interact with each other. Students studied the complete history of WW2 and what led up to the war. Students took the information they learned to determine what questions they would ask senior citizens about their experiences in the war.

- **Arts and Humanities:** 2.22
  Once the students had completed their oral history, they designed decorative covers for their narrative which were given back to the senior citizen they had interviewed.

- **Practical Living:** 2.31
  As a preparation to their visit to the senior citizen center, students learned about common ailments faced by seniors such as cataracts, arthritis, and hearing loss. They did simulation exercises to help them better understand the seniors with which they would be working.

Information for this lesson plan was compiled by Jennifer Cofer, Franklin County Schools, KY.
STEP 1: PREPARATION

1) Students studied all aspects of WW2, as well as the incidents which led up to the war and how the U.S. became involved. They studied battles, weapons used, and the effects nuclear weapons had on both the people and the land.

2) As a way to help the students develop a more personal understanding of the war and its effects, the local senior citizen center was contacted about an oral history project. The Director of the center asked several seniors who frequented the facility if they would be interested in talking about their experiences in the war. Several showed interest in the project.

3) Using what they had learned about the war, students developed a list of questions they would like to ask the seniors. These questions were based on events they had studied, as well as how the war affected the lives of the seniors and their families.

4) To help them prepare for directly interacting with the seniors, students were engaged in an open discussion about their concerns or fears about the project. They were then taken through three simulation exercises which were intended to help students understand some of the health problems they may encounter:
   a) Cotton was placed in ears to represent hearing loss
   b) Students wore goggles with Vaseline on the lenses to represent cataracts
   c) Popsicle sticks were taped to fingers to represent arthritis

Each student was given an “ailment” and then asked to sit through a regular lesson, listening, looking at visuals, and taking notes as they normally would do. Afterward, they discussed how they felt. Many were frustrated that they could not function as they usually could. The teacher explained that some of the seniors may get equally as frustrated if they have any of these problems. This helped the students to better understand life from a senior citizen’s point of view.

STEP 2: ACTION

1) Students visited the senior citizen center to record the oral histories. Students conducted their interviews in pairs or groups of threes. This is recommended because it helps the students feel more comfortable.

2) Upon return to school, students transformed their interview into a narrative which explained what they had learned. They used a word processing program to provide a final, clean copy to the person they had interviewed.

3) Decorative covers were made for each of the narratives which were bound in a book form.

4) Some students opted to include this piece in their writing portfolio.

STEP 3: REFLECTION & CELEBRATION

1) The students presented their narratives to the seniors they had interviewed. This served as a gift of thanks from the students. It was hoped that the seniors would share this with their family and friends as a historical memoir.

2) Prompt (suggested):

   Explain why conducting this oral history helped you to better understand the events of World War II.
   What did you learn that you could not from a textbook?
   Has this project changed your opinion about senior citizens?
SHARING HOLIDAY TRADITIONS
FROM OTHER CULTURES

Contributed by
Julie Dicken
Bondurant Middle School

CORE CONTENT AREAS

- **Reading/Writing:** 1.2, 1.11
  Students spent considerable time researching the holiday traditions of the country they chose to highlight. They wrote skits as part of their presentations to the elementary students.

- **Social Studies:** 2.16, 2.17
  Students studied holiday traditions from another culture, helping them to understand and develop respect for others. They learned geography skills by identifying where the country was located. They learned history as they researched how these cultures had developed their holiday traditions.

- **Arts and Humanities:** 2.22, 2.23, 2.24
  As part of their presentations, students developed skits to help teach their holiday traditions to younger students. They created visual displays, designed costumes, and made crafts related to the culture they were studying.

- **Practical Living:** 2.33
  Students sought the help of local businesses to gather supplies for their projects.

Information for this lesson plan was compiled by
Jennifer Cofer, Franklin County Schools, KY
STEP BY STEP GUIDE

STEP 1: PREPARATION
1) Students were given a choice as to which countries they would like study and develop a presentation about their holiday traditions.
2) Once the students made their decision, they worked in groups of 3-5 to research the culture and begin thinking about how they wanted to convey this information to younger students.
3) They wrote and developed skits to help the elementary students better understand the culture.
4) They decided which props, costumes, and other supplies were needed for their project. Students were responsible for developing these on their own.
5) Each group was also responsible for develop an interactive activity to do with the elementary children to get them actively involved in the learning process.
6) In some instances, guest speakers from the country the students were studying came to the classroom to provide first-hand knowledge of their traditions.
7) Local elementary schools were contacted and given a list of the countries the students had chosen to highlight. Elementary teachers chose which country they would like presented to their students based on what they were currently studying.

STEP 2: ACTION
1) On one day, students visited two elementary schools to give their presentations and do an activity with the children.

STEP 3: REFLECTION & CELEBRATION
1) After the presentations, students discussed how they felt the elementary students had reacted to the information.
2) Open response prompt (suggested)

You are a foreign dignitary who is responsible for spreading the word about your country's traditions. List several unique aspects of your country's holiday traditions and discuss how these traditions developed. Compare your traditions with traditions in the United States.
UNIT OF STUDY
IS IT JUNK FOOD OR NOT?
YOU TOLD ME ONCE BUT I FORGOT

GRADE LEVEL: 7-8

UNIT OVERVIEW
This unit will provide students with information on the new food pyramid and the right foods to eat. Students will choose recipes and create booklets for elementary school students, sharing the importance of good food choices. They will also create healthy snacks for the students to eat and share recipe alternatives to junk food.

UNIT GOALS
To help students understand:
⇒ the importance of choosing good foods that are high in nutritional value
⇒ the importance of good nutrition to elementary students
⇒ how they can become role models to elementary students by promoting good nutrition and health
⇒ how to practice healthy eating habits

SERVICE-LEARNING PROJECT
Students design a snack cookbook and nutritional snacks for elementary students.

PORTFOLIO OPPORTUNITIES
Writing: (1) snack cookbook for elementary students, (2) script for snack presentations, (3) humorous writing
Math: (1) calculate how many ingredients are needed for recipes

ACADEMIC EXPECTATIONS ADDRESSED
Communication/Math Skills:
1.1, 1.2, 1.3, 1.11, 1.12, 1.13
Students conduct research on healthy snack recipes for their cookbook. They write information for their cookbook, as well as reflective narratives about the project. Students make oral presentations to elementary students.
Math: 2.8
Students calculate costs associated with preparing nutritious snacks for elementary children.
Science: 2.3
Students learn about fat calories and caloric values of foods.
Arts and Humanities: 2.22
Students make decorative covers for their cookbooks and posters conveying information about junk food vs. healthy snacks.
Practical Living: 2.29, 2.30, 2.31, 2.33
Through working on their cookbooks and presentations, students learn to work cooperatively in groups. They learn budgeting procedures as they calculate costs to make healthy snacks. They learn about the food pyramid and the importance of good nutrition for youth. Through the guest speakers, students learn about services provided to the community which relate to health and nutrition.

Vocational Studies: 2.36
Students learn about careers in nutrition and health related fields through guest speakers invited into the classroom.
Self-Sufficiency: 3.1, 3.2
This project provides students with information to promote healthy lifestyles and positive self-concepts through helping others.
Responsible Group Membership: 4.1, 4.2
Students work in cooperative learning groups to develop their cookbooks and presentations. They also learn interpersonal skills in working with peers and younger students.
Thinking and Problem-Solving: 5.1, 5.2, 5.3
This project provides students with opportunities to think creatively and critically.
Integration of Knowledge: 6.1, 6.2, 6.3
Students use their existing knowledge throughout the project and continually develop new knowledge about the subject matter they are studying.

CONTRIBUTED BY: Melissa Jennings
Conkwright Middle School, Clark County Schools
# Preparation

**KNOWS**

1) Statistics for nutritional value of junk food vs. healthy foods
2) Effects of unhealthy food on the diet
3) Why we eat junk food rather than healthy food
4) Types of healthy snacks

**DOs**

1) Identify
2) Discuss
3) Explain
4) List

**STEP ONE:**

1) Discuss the reasons why we often choose junk foods over healthy foods. Have students cut out pictures from magazines and make a collage identifying junk food or healthy food.
2) Using the pictures, have students create a small poster for the elementary students that identifies healthy foods and junk foods.

**STEP TWO:**

1) Invite guest speakers from the hospital, health department, extension office, etc. to the classroom. The guest speakers will convey the importance of the food pyramid, what junk food is and how it affects the body, and what snacks would be appropriate for younger and middle school students. The guest speakers, especially nutritionists, will be able to explain fat grams to the students and caloric intake needed for growing elementary and middle school students. Give students opportunities to ask questions about specific foods such as potato chips vs. pretzels and ice cream vs. frozen yogurt. The nutritionist will also be able to bring the students examples and recipes of healthy snacks which could be included in their cookbooks.

**STEP THREE:**

1) Set up library time for students to research recipes for healthy snacks suitable for children. While in the library, place students in 3-5 cooperative learning groups. Each group will be responsible for:
   - a) making a cover for the recipe booklet
   - b) finding at least 10 recipes that are considered healthy
   - c) finding at least one drink recipe that does not contain a soda product and that is healthy
2) Discuss the importance of including easy-to-find ingredients for their cookbooks.
3) Have each group compile grocery lists for their recipes, complete with prices, for all ingredients needed. Ask the students to find items that are duplicated to cut costs. Have them calculate the cost of purchasing the ingredients. This information will be used for their presentations.
4) Have each cooperative learning group contact the teacher of the elementary class they plan to visit and set a date for their presentation.
5) Prior to their visit, the groups will need to set completion and reproduction deadlines for their cookbooks.
6) Have students answer the following prompt:

   *You are a parent trying to convince your child to eat more healthy foods. Give two statistics you have learned about junk food. Explain why people tend to eat junk food rather than healthy food. List several types of healthy snacks that can be eaten instead of junk food.*

**RUBRIC**

<table>
<thead>
<tr>
<th>Good Work</th>
<th>Try Again</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Two statistics given, accurate</td>
<td>1) Less than two, inaccurate</td>
</tr>
<tr>
<td>2) Explanation clear, accurate</td>
<td>2) Unclear, inaccurate</td>
</tr>
<tr>
<td>3) Three or more snacks listed</td>
<td>3) Less than three</td>
</tr>
</tbody>
</table>
STEP FOUR: (Knows and Dos will be assessed through group activities/projects rather than a prompt)

KNOWS
1) Junk food vs. healthy food
2) How to fix healthy snacks
3) The food pyramid

DOS
1) Illustrations (posters)
2) Explain (cookbook)
3) Illustration (handout)

1) Have students create a checklist for their presentations.
2) Give students opportunities to practice their presentations. If needed, have them write scripts, with each student in the group playing a role.

STEP FIVE:
1) Give students ample time to complete their cookbooks. Stress that humor should be an integral part of the cookbook.

   Have students turn in their completed cookbooks. Use the rubric below as a grading scale:

   QUALITY
   1) easy to read format, humorous
   2) grocery list
   3) food pyramid hand-out
   4) good food snacks
   5) easy to find ingredients
   6) cover design in color/eye-appealing

   TRY AGAIN
   1) hard to read and understand/not humorous
   2) no grocery list
   3) no food pyramid
   4) inappropriate recipes
   5) ingredients hard to find
   6) no cover design/not in color

ACTION
1) Have each cooperative group present their information to elementary students. Make sure they (1) discuss junk food vs. healthy food, using the poster they have created, (2) explain the effects junk food has on the body, (3) explain the food pyramid, using their handout, and (4) prepare healthy snacks for the elementary students.
2) At the conclusion of the presentation, have students give a copy of their cookbook to each of the elementary students.

REFLECTION
1) As a reflection activity, have students write statements about how they worked in their groups. Questions may include:

   Did everyone contribute equally to the project?
   Do you believe that the children might change their eating habits because of your cookbook and presentation?

2) Give students opportunities to discuss what they learned from the project and how they would change/improve the project for the future.
Is it junk food or is it not?
You told me once but I forgot.
Does my drink contain too much sugar for me?
Or should it have vitamin B or C?

Is popcorn known as a healthy snack?
Or should I eat candy until I lose track?
Will apples really keep the doctor away?
Or should I just chew gum everyday?

Can I eat bread and rice and rolls with each meal?
Or can all the vitamins I need be found in a little pill?
Are all the vegetables only green?
Can nutrients in food really be seen?

Should I eat meat with my dinner?
And does that include chicken liver?
Will milk, eggs and cheese really make me grow?
Hurry up, please, I have to know.
Is it junk food or is it not?
You told me once, but I forgot.
HELPING THE LOCAL HUMANE SOCIETY
Contributed by
Margery Rigsby
Elkhorn Middle School

OVERVIEW
Students collected items needed by the local humane society while learning about responsible pet ownership. They visited the shelter to deliver the items and learn more about their facility.

GOALS
- To make the students aware of the Humane Society and their needs
- To make students aware of the pet overpopulation problem
- To teach responsible pet ownership
- To motivate students to do graphing in math

CORE CONTENT AREAS
- **Reading/Writing: 1.11**
  Students wrote to pizza companies in the community to request donations for the classroom which collected the most food for the Humane Society. The students made pop-up books explaining their project. They also wrote thank you letters to the Humane Society for the tour they received.
- **Math: 2.8, 2.11**
  Students classified, compared, counted and graphed the results of their collection drive. They learned to do different graphs (i.e., line, bar, pie) to convey this information. They made a large graph which was displayed for the entire school to see the results of their collection efforts.
- **Social Studies: 2.16**
  Students learned how certain human behaviors caused animals to be placed in shelters and characteristics of responsible pet ownership. They learned about euthanasia and how spaying and neutering pets can reduce this problem. They learned about the geography of their community as they mapped a route to the Humane Society.
- **Arts and Humanities: 2.22**
  Students made pop-up books about the project. They designed posters which were used as a way to publicize the collection drive. They made graphs to display in the hallways.
- **Practical Living: 2.33**
  Students were made aware of the services provided by the Humane Society and how they, as citizens in their community, can contribute to this organization.
- **Vocational Studies: 2.36, 2.37**
  Students studied careers related to animals.

Information for this lesson was compiled by
Jennifer Cofer, Franklin County Schools, KY
**KNOWS** (suggested)  
1) Needs of animals  
2) Role of the animal shelter in the community  
3) Steps of collection campaign

**DOS** (suggested)  
1) Describe  
2) Define  
3) Organize

## STEP BY STEP GUIDE

### STEP 1: PREPARATION
1) Students discussed the needs of animals and the role domestic animals play in our lives.  
2) They discussed the characteristics of responsible pet owners.  
3) The local Humane Society was contacted. They informed the students about their current supply needs.  
4) A guest speaker from the Humane Society was invited to speak about their facility and the collection project.  
5) A discussion was held on careers related to animals.

### STEP 2: ACTION
1) A school-wide collection campaign was organized. Students publicized with posters and PA announcements. This helped the entire school understand the needs of the local Humane Society. The collection period lasted approximately 3 weeks.  
2) Students wrote to local pizza companies requesting donations of pizza for the classrooms which collected the most items for the Humane Society.  
3) Students graphed and categorized items as they were collected for the Humane Society and displayed the results in a large graph for the entire school to see.  
4) All students visited the Humane Society to deliver collected items and to receive a tour of their facility. (NOTE: Each animal shelter is operated differently. Discuss on-site projects that may be done with your animal shelter such as cleaning cages or walking dogs, which can add another dimension to your service-learning project.)

### STEP 3: REFLECTION & CELEBRATION
1) The classrooms which collected the most items were rewarded with a pizza party.  
2) Students wrote about how they felt toward the project. They wrote thank you letters to the pizza companies who donated as well as the Humane Society for their tour.  
2) They made pop-up books about how they felt about the project and what they had learned.  
3) A speaker from the Louisville Humane Society was invited to speak about the topic of euthanasia. They watched a movie called “The Dog Nobody Wanted.”  
4) The students answered the following prompt:

> How would you feel if you were the dog in the movie? What would you do to survive? As this dog, explain to humans why it is important to be a responsible pet owner and what may happen if you are not responsible.
8TH GRADE

OVERVIEW

While studying a unit on patriotism, students became involved in a three service projects: (1) flag books for elementary students, (2) planting a flag garden, and (3) cleaning up gravesites of veterans.

GOALS

- To teach the concept of patriotism by directly involving the students in hands-on projects.
- To help students develop pride and respect for their country and community.

PATRIOTISM: LEARNING BY DOING

Contributed by Sandra Bush and Kay Scott Elkhorn Middle School

CORE CONTENT AREAS

- **Reading/Writing: 1.11**
  Students researched and wrote a book on the importance of respecting the flag for elementary students. They read the books to the children before giving the book to them.

- **Math: 2.11**
  Students designed a floral garden in the shape and color of a flag. They used math skills to design the garden and to determine the number of bulbs needed.

- **Science: 2.2, 2.3**
  Students learned about plants and gardening through the flag garden project. They determined which flowers to plant, how deep to plant the bulbs, and how much space was needed for proper growth. They also studied soil properties, erosion, and weathering.

- **Social Studies: 2.14, 2.15, 2.20**
  Students studied democratic principles and applied them directly through their service projects. They studied the U.S. flag and designed books on its importance for children. They discussed veterans and their importance to this country.

- **Arts and Humanities: 2.22**
  Students designed flag books for elementary students, made chalk rubbings of veteran gravesites, and constructed a "Hallway of Unknown Heroes" using the chalk drawings.

- **Vocational Studies:**
  Students learned teamwork skills as they conducted their three service projects.

Information for this lesson plan was compiled by Jennifer Cofer, Franklin County Schools, KY
**KNOWS** (suggested) | **DOS** (suggested)
---|---
1) Importance of Patriotism | 1) Identify
2) Importance of the American Flag | 2) Illustrate
3) Services veterans provide | 3) Explain
4) Gardening procedures | 4) Summarize

**STEP BY STEP GUIDE**

**STEP 1: PREPARATION**
1) Students studied patriotism as part of their social studies curriculum.
2) All 8th grade students were involved in one of three projects aimed at developing awareness of what it means to be patriotic:
   a) **Floral Garden** — Students designed a floral garden to show their patriotism. They brainstormed ideas and decided to plant a garden in the shape and color of the U.S. flag. They studied gardening techniques, chose flowers (tulips) appropriate for the floral garden, placed the order for the bulbs, and designed the garden based on the needs of the tulips.
   b) **Flag Books** — Students studied the history of the U.S. flag and designed an age-appropriate book about it for elementary students. They brainstormed what information the book should contain, then the students broke into groups with each working on a different section of the book. Using teamwork the students collated and bound each book which contained activities such as word searches and coloring pages.
   c) **Cemetery/Veteran Project** — Students obtained a list from the local VFW which showed local veterans that were buried in the Frankfort Cemetery. Each student drew a name of a veteran from a hat and researched the major historical events that occurred during the life of their veteran.

**STEP 2: ACTION**
1) **Floral Garden** — Students spent one day planting the garden using the design they had prepared and the planting techniques they had studied.
2) **Flag Books** — Students attended two elementary schools where each 8th grader was assigned one child to read the flag book and to discuss respect for the American flag. Each child was allowed to keep the flag book, as well as an American flag pencil, bookmark, and eraser.
3) **Cemetery/Veteran Project** — Students went to the cemetery and located their veteran’s gravesite. They cleaned the gravestone using a mild cleaning solution, removed debris from the area, and placed an American flag on each the gravesite. They also made a chalk rubbing of their veteran’s gravestone. Upon returning to school, they displayed these rubbings as a “Hallway of Unknown Heroes.”

**STEP 3: REFLECTION & CELEBRATION**
1) All students spent time talking and writing about how they felt toward their projects, what they learned, and what they would do differently next time.
2) The local newspaper and cable access channel covered this project, recognizing the important contributions the students had made to their community.
3) Many students who were involved in the project took their families to visit the veteran’s grave on Veteran’s Day.
**UNIT OF STUDY**
**FIRING UP INTEREST IN HISTORY**

**GRADE LEVEL:** 7-8

**UNIT OVERVIEW**
Students will be exposed to historical perspectives on the subject of pottery. They will make their own pottery pieces, which will be displayed around the community and given to senior citizens in a nursing home.

**CONTRIBUTED BY:** Debby Jones & Jamie Carroll
Estill County Middle School, Estill County Schools

**UNIT GOALS**
To help students understand:
- basic pottery techniques of coil, slab, and throw
- basic history of pottery in their community
- how to operate a home-based business
- an appreciation for the fine arts
- how to raise money from the sale of the pottery in order to continue the project in the future

**SERVICE-LEARNING PROJECT**
Students make pottery, display their pieces, sell them to raise money to continue the project, and share their pottery with senior citizens in the community.

**PORTFOLIO OPPORTUNITIES**
- Writing: (1) Promotional writing, (2) Product information sheets
- Math: (1) Cost and profit margins

**ACADEMIC EXPECTATIONS ADDRESSED**

**Communication/Math Skills:** 1.1, 1.11, 1.13
Student research the history of pottery in different cultures. They write about their experiences with the project. They learn to communicate through visual arts.

**Math:** 2.8, 2.9
Students learn how to calculate profit and loss based on the sale of their pottery items.

**Science:** 2.2
Students learn about the properties of clay.

**Social Studies:** 2.17, 2.18, 2.20
This project provides many opportunities for the students to learn about different cultures and their history. They learn about the economics of operating a home-based business.

**Arts and Humanities:** 2.22, 2.23, 2.24, 2.25, 2.26
This project provides many ways for the students to develop an appreciation for art from other cultures and time periods. They learn the art of working with clay to create sellable products.

**Practical Living:** 2.30, 2.33
Students learn about product quality and how to price their pottery for sale. They learn about various services in their community related to the arts.

**Vocational Studies:** 2.36
Students learn about careers in the arts, as well as how to start their own home-based business.

**Self-Sufficiency:** 3.1, 3.3, 3.4, 3.5, 3.7
This project helps students learn independently. As they produce and sell their pottery, they develop better self-concepts. They exhibit resourcefulness and creativity through this project.

**Responsible Group Membership:** 4.2, 4.3, 4.4, 4.6
Students work cooperatively to set up booths to sell their products. They learn about responsibility as they work on the project.

**Thinking and Problem-Solving:** 5.4
Students learn to solve problems related to their project.

**Integration of Knowledge:** 6.2, 6.3
Students use their existing knowledge throughout the project and continually develop new knowledge about the subject matter they are studying.
KNOWS
1) Basic pottery techniques of coil, slab, and throw
2) Basics of operating a home-based business
3) Pottery styles of different cultures

DOS
1) Describe
2) Explain
3) Illustrate, describe

STEP ONE:
1) Set meetings between the social studies and art departments to collaborate on this unit.
2) In art class, have students learn basic pottery skills such as coil, slab, and throwing techniques.
3) Have each student produce pottery pieces throughout the unit as they study different cultures.
4) For each piece of pottery, have students write a product information sheet that will be included with the sale of each item.

STEP TWO:
1) Invite a person in the community knowledgeable about home-based businesses to speak to the classes. Provide opportunities for the students to ask questions about how to establish home-based businesses.
2) On field trips, expose students to in-home studios and art careers of people within the county.
3) Take a field trip to a craft fair or a college with an arts program.

STEP THREE:
1) Study ancient Mesopotamia in social studies class. Have each student make and bake a clay tablet with cuneiform writing on it. Insert leather thongs through holes the tablets in order to make a hanging ornament to sell at various functions.
2) Construct a ziggurat (a tall Mesopotamian religious structure shaped like a pyramid) from clay bricks and bake in the kiln.
3) Invite a guest speaker to talk about colors and mosaics.

STEP FOUR:
1) Study and research colonial American pottery.
2) Have students make samples and display them at the local library around Thanksgiving. From the display, people can order pottery pieces from the students.
3) Make Christmas gifts, ornaments, and trinkets for personal use and to sell.
4) Display and sell products at a student-run Christmas bazaar.

STEP FIVE:
1) In social studies, spend time learning about Ancient Greece and Greek pottery styles.
2) Teach glazing techniques.
3) Have students make Greek vases.
4) Invite a guest speaker to talk about advertising and self-promotion of products to the public.

STEP SIX:
1) Prepare products to be sold at local festivals.
2) Have students set up a booth to sell and exhibit their products. These products will be signed and include a product information sheet.
**ACTION**

STEP ONE:
Arrange a visit to a local nursing home. During their visit, students will present pieces of pottery to the senior citizens as gifts.

STEP TWO:
Develop a campaign against drugs using the students’ pottery. Use the slogan “Make a Pot. Don’t Smoke it.”

**REFLECTION**

1) Have students write about what they learned about history through the project.
2) Have students write about the reactions of the senior citizens to their pottery gifts.
3) Have students elaborate on whether they would like to begin a home-based business based on making and selling pottery.
4) Have students answer the following prompt:
   
   You own a small pottery business in your community. Describe the basic pottery techniques of coiling, throwing, and slabbing. Explain the basics of operating your home-based business. Illustrate and describe one pottery style from a different culture that you make and sell as part of your business.

**RUBRIC**

**Good Work**
1) All three techniques listed, described
2) Basics of home-based businesses explained
3) At least one pottery style illustrated and described

**Try Again**
1) All three techniques not described. Incorrect information
2) Explanation unclear, vague
3) No illustration, no description
STUDENTS TEACHING STUDENTS ABOUT THE DANGERS OF DRUGS

Contributed by
Mary Ann Overturf
Elkhorn Middle School

CORE CONTENT AREAS

- **Reading/Writing: 1.2, 1.11**
  Students read short plays and skits in their required reading books to get ideas of how to write a play with character development and stage directions. Students took the information they learned in DARE and wrote plays or skits to convey this information to others. Students wrote handouts which they distributed to the elementary children who watched their skits and puppet shows.

- **Science: 2.3**
  Through the DARE program students learned how drugs affect the body in negative ways.

- **Social Studies: 2.16**
  Through DARE students learned about services provided by the community which help people with drug problems.

- **Arts and Humanities: 2.22**
  Students designed and made the puppets for each of their skits. They also designed and constructed the sets and costumes needed for their production. They studied theatrical techniques such as voice projection, and speaking clearly and slowly.

- **Practical Living: 2.31, 2.32**
  Students learned how peer pressure can lead some people to turn to drugs. They learned how drugs can affect their emotional and physical health.

- **Vocational Studies: 2.36**
  Within some of the skits and puppet shows, students developed characters with careers, such as teachers and police officers, and incorporated information as to how that person would react to drug use by students.

*Information for this lesson plan was compiled by Jennifer Cofer, Franklin County Schools, KY*
**STEP 1: PREPARATION**

1) Students spent 17 weeks in the DARE program which provided the knowledge base on which they developed their anti-drug skits and puppet shows. They learned about the different drugs available to youth, their effects both physically and emotionally, and how to avoid using drugs.

2) Once students graduated from the DARE program, they were prepared to begin thinking about how to convey the information they learned to their peers and younger students.

3) Students read skits and puppet shows from their required reading text. They discussed the components of each and how to go about writing one of their own.

4) Students broke into groups of five. Each group decided whether they wanted to write and perform a puppet show or skit. Within each group, students decided which aspect of their production they would like to assist based on their interests and abilities. The students interested in writing took the lead in developing the scripts. Those who were more artistic, created the costumes, puppets, or scenery.

5) Students studied theatrical techniques such as voice projection and speaking clearly and slowly which helped make their production more understandable to the audience. Groups critiqued each other to ensure clarity.

6) For several weeks the students perfected their skits and puppet shows. The classes voted on the best puppet show and the best skit to present to peers and younger students. A total of five skits and five puppet shows were chosen.

7) Final preparations were made for each production. Three elementary schools were contacted and a performance was scheduled at each of the three schools.

**STEP 2: ACTION**

1) The students performed the skits and puppet shows for their peers.

2) The performances were taken to three local elementary schools to help spread the message of “Don’t Do Drugs.” Each performance, which included all puppet shows and skits, lasted approximately 45-50 minutes.

3) Informational handouts were distributed to the audience.

4) Initial performances were videotaped. Upon return to school, students reviewed and critiqued the tape to make appropriate changes to improve their presentation.

**STEP 3: REFLECTION & CELEBRATION**

1) The local newspaper and community access channel were contacted. They each did a story on the project, recognizing the students for their hard work.

2) A cast party was held at a local restaurant after the final performance.

3) Culminating prompt (suggested):

   You have a friend who is interested in doing drugs. Give examples of at least three drugs that are currently available to students your age. For each of these drugs, list two negative effects they have on the body (one physical and one emotional). Express how you would convince your friend not to become involved in drugs.
OVERVIEW

Students created a quilt of their city's historical buildings and donated it to the local library.

GOALS

- To help students learn about the history of their community
- To help students learn quilting techniques
- To educate others about the history of their community

ACADEMIC EXPECTATIONS ADDRESSED

- **Communication and Math Skills**: 1.2, 1.13
  Students read about historical buildings in their community. They expressed what they learned through their quilt project.

- **Math**: 2.8, 2.11
  Using mathematical reasoning and patterning skills, students designed their quilt within certain size specifications. Using photographs of the buildings, they scaled the pictures to the appropriate size for the quilt square.

- **Social Studies**: 2.19, 2.20
  Students took a tour of the historical buildings in their community and learned about the significance of each. Students learned about the history of quilting. This project helped students develop a better understanding of the history of their community.

- **Arts and Humanities**: 2.22, 2.23
  A local artist spoke to the students about the quilting process and the art of stitchery. Students used the techniques shown to them to develop their historical quilt. They also used design techniques when they transferred the pictures of the buildings onto the quilt pieces.

- **Practical Living**: 2.33
  Through this project, students understood why certain buildings are of historical significance and the importance of preserving them for the local community.

- **Vocational Studies**: 2.36
  Students learned about careers related to the arts and history.

- **Self-Sufficiency**: 3.1, 3.3, 3.4, 3.7
  Students expressed their creativity through development of the quilt pieces. Helping teach others about history helped to improve each students' self-concept.

- **Responsible Group Membership**: 4.1, 4.2, 4.3, 4.4
  Students learned to work cooperatively in groups and accept individual responsibility as they worked on their quilt pieces.

- **Thinking and Problem-Solving**: 5.1, 5.2, 5.3, 5.4, 5.5
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.

- **Integration of Knowledge**: 6.1, 6.2, 6.3
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
**STEP ONE: PREPARATION**

1) Students spent time learning about local history through their regular social studies curriculum.

2) As a way to help the community, and to convey what they were learning, students decided they wanted to construct a quilt of local historical buildings and donate it to the library to help educate others about their community.

3) Students went on a field trip where they toured several historical buildings in their community. This provided them with a wealth of information about the significance of these buildings and why they were preserved. From this information, students decided which buildings they wanted to include on their quilt.

4) A local artist spoke to the students about the art of quilt-making. Students learned techniques that they would use in the making of their quilt and they were provided an opportunity to practice this skill.

**STEP TWO: ACTION**

1) Pictures were obtained of each of the buildings the students had chosen. Using the pictures, students designed their quilt pieces to be representative of the picture. Students worked in small groups, with each group designing their own quilt piece.

2) Students learned the technique of stitchery to complete the project.

3) The completed quilt was donated to the local library to beautify their facility and to help others better understand the significance of these historic buildings.

**STEP THREE: REFLECTION/CELEBRATION**

1) The students had a group discussion about how they felt about their project and how it made them feel. They brainstormed other ways that they could help educate the people of Covington about its history.

2) The students received a formal thank you from the library for their donation.

3) Students placed a series of photographs about their project in a well viewed area of the school so that others could recognize their achievements.
OVERVIEW

Using puppetry, students taught elementary children about the dangers of drug use.

GOALS

- To teach students about the dangers of drugs
- To teach students about alternatives to drug use
- To help students discourage drug use among younger students

ACADEMIC EXPECTATIONS ADDRESSED

- **Communication and Math Skills**: 1.1, 1.2, 1.11, 1.12, 1.13
  Through the Drug and Alcohol Curriculum, students read about various drugs and their dangers, including prescription and over-the-counter medications. Using this information, they wrote skits and puppet shows for elementary children to teach them what they had learned in a fun and active way.

- **Science**: 2.1
  Students learned about the dangers of drugs (both legal and illegal) and their effects on the body.

- **Social Studies**: 2.16, 2.17
  Through the Drug and Alcohol Curriculum, students learned about services provided by the community which help people with drug problems.

- **Arts and Humanities**: 2.22, 2.23
  Students designed props for their puppet shows. They also sang songs as part of their presentations. They studied theatrical techniques such as voice projection and speaking clearly and slowly. Students analyzed each other's performance to ensure continual improvement.

- **Practical Living**: 2.29, 2.31, 2.32, 2.33
  Students learned to work cooperatively in groups, with each person responsible for a different aspect of the puppet production. Students learned how drugs can affect the body and the overall health of individuals. They learned about the consequences of drug use and how to seek positive alternatives to drugs. Students learned about agencies in their community who assist people with drug problems and how to seek help if needed.

- **Self-Sufficiency**: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7
  This project helped students understand how to maintain a healthy lifestyle, how to be creative and adaptable, and how to make ethical decisions as they relate to drug use. Each student learned independently while working in groups on this project. They also developed more positive self-concepts through their participation.

- **Responsible Group Membership**: 4.1, 4.2, 4.3, 4.4, 4.6
  Students learned to work in groups as they developed their presentations. They learned to work with and be responsible toward younger students.

- **Thinking and Problem-Solving**: 5.1, 5.2, 5.3, 5.4, 5.5
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.

- **Integration of Knowledge**: 6.1, 6.2, 6.3
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
**STEP ONE: PREPARATION**

1) Students participated in the school district’s *Drug and Alcohol Curriculum for Middle and High Schools*, which infused drug and alcohol education through all the content areas. Special focus was placed on “gateway” drugs such as nicotine, alcohol, and marijuana.

2) Through their language arts classes, students used the information they had learned to develop educational drug prevention skits to be presented to younger audiences.

3) The students learned about techniques for puppet presentations such as voice projection and speaking clearly and slowly to the audience. In addition, they learned how to ask open-ended questions which would enable them to conduct meaningful discussions after each of their performances.

4) They discussed the developmental level of primary students and how to gear their presentations and discussions for this age group.

5) Students were organized into four-person teams: two students to operate the puppets, one to manage props, and one to manage music. The puppets *G. Whiz* and *G. Willikers* from the Dramatic ACTION Against Drugs Program were used. Students developed their own props and music for their presentations.

6) Students practiced their puppet shows and critiqued each others’ performances.

7) A logo contest was held for the project. The winning logo was printed on t-shirts that the students wore during their performances.

8) Elementary schools were contacted and performances were scheduled.

**STEP TWO: ACTION**

1) Divided into their teams, the students visited individual primary classrooms. Each presentation lasted approximately 45 minutes, and the six 4-member teams were able to visit all primary classrooms during one visit to each school.

2) After each performance, students conducted a reflective question and answer period with the audience.

3) Follow-up activities were given to each of the elementary teachers whose class received a presentation.

**STEP THREE: REFLECTION/CELEBRATION**

1) Project students met briefly after each school visitation to discuss their performance. They reviewed and critiqued videotapes of their performances. They also reviewed the elementary teachers’ comments about their performances and revised the puppet presentations when necessary.

2) Students kept journals of their experiences and completed written evaluations indicating their opinions on the effectiveness of the program and what they had learned from it.

3) Individual schools that participated held assemblies where the students were given certificates.

4) A district-wide luncheon was held for all project students and teachers/sponsors. Various community leaders spoke to the students about the project and its accomplishments.

5) An evaluation form was completed by the PALS teachers and sponsors. The form included evaluations of student improvement in (1) behavior, (2) academics, and (3) attendance. These evaluations revealed improvements in academic performance and in conduct of the students involved in the program. The surveys also indicated an increase in confidence and self-esteem of the student participants.
OVERVIEW

Students studied holiday traditions from other cultures. They visited with senior citizens to share this information.

GOALS

- To provide a way for the middle school students to interact with senior citizens
- To help students develop a respect for another culture’s holiday traditions

ACADEMIC EXPECTATIONS ADDRESSED

- **Communication and Math Skills:** 1.1, 1.2, 1.11, 1.12, 1.13
  Students spent considerable time researching the holiday traditions of the country they chose to highlight. Students interviewed seniors about their holiday traditions. They wrote stories about their own holiday traditions and presented this information to other students. They wrote reflective papers about what they had learned and how they felt about working with senior citizens.

- **Social Studies:** 2.16, 2.17, 2.19
  Students studied holiday traditions from another culture, helping them to understand and develop respect for others. They learned geography skills by identifying where the country was located. They learned history as they researched how these cultures had developed their holiday traditions. Students learned how to interact effectively with senior citizens in their community.

- **Arts and Humanities:** 2.22
  Students chose to create ornaments to symbolize their own Christmas traditions.

- **Practical Living:** 2.33
  Students learned about the services the local nursing home provides to the community.

- **Self-Sufficiency:** 3.1, 3.3, 3.4, 3.7
  This project provided a way for students to learn independently, express their creativity, and exhibit flexibility as the project unfolded.

- **Responsible Group Membership:** 4.1, 4.3, 4.4, 4.5, 4.6
  This project provided a meaningful way for students to develop interpersonal skills while working with the seniors, a caring attitude toward the elderly, and an appreciation for the diversity of Christmas traditions.

- **Thinking and Problem-Solving:** 5.1, 5.2, 5.3, 5.4, 5.5
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.

- **Integration of Knowledge:** 6.2, 6.3
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.


**STEP BY STEP GUIDE**

**STEP 1: PREPARATION**

1) Students were given a choice of which country’s holiday traditions they would like to study.

2) The students spent time researching the culture and gaining information about the holiday traditions. This included looking into how these traditions began. They shared this information with other students through presentations so that everyone could better understand the diversity of traditions in the world.

3) As an arts and craft project, students made ornaments reflecting their own family’s traditions. They also wrote a narrative about the traditions of their families.

4) A local nursing home was contacted and arrangements were made for the students to visit during the Christmas holidays. The teacher informed the activity director that students were interested in discussing holiday traditions. This allowed the nursing home staff to find interested people to match with the students during their visit.

5) The teacher had a discussion about working with senior citizens and what to expect to see at the nursing home. The students brainstormed a list of interview questions to ask the seniors about their holiday traditions. They discussed appropriate and inappropriate questions and practiced interviewing techniques.

**STEP 2: ACTION**

1) Students visited the nursing home where they were paired with a senior who expressed an interest in being interviewed.

2) In their pairs, students read their holiday tradition narrative to the senior. Then they interviewed the senior to find out about their traditions. They also shared information on what they had learned about traditions from other cultures.

3) The students used the ornaments they had made to decorate the Christmas tree at the nursing home.

**STEP 3: REFLECTION & CELEBRATION**

1) Students discussed how they felt about working with the seniors and what they learned from their interviews. They wrote a reflective paper on their feelings.

2) The students received a thank you from the nursing home.
OVERVIEW

Eighth grade students provided trail maintenance and construction for their local state park.

GOALS

- To provide maintenance to a state park facility
- To help students develop an appreciation for their natural environment

ACADEMIC EXPECTATIONS ADDRESSED

- **Communication and Math Skills: 1.2, 1.3, 1.4, 1.11**
  Students read several books to help them develop an appreciation of nature and the effects society has on animal habitat. Students wrote about the importance of having a well-maintained state park.

- **Science: 2.1, 2.3, 2.5, 2.6**
  A unit entitled *Animals and Their Natural Habitat* was taught by the science teacher. Students learned about problems caused by erosion and how such problems could be reduced through their trail maintenance project. Students learned to recognize animal habitat.

- **Social Studies: 2.19**
  Students learned how to read maps in relation to their trail project. They learned how geography can affect erosion problems in an area.

- **Practical Living: 2.29, 2.31, 2.33**
  Students learned about the importance of preserving natural resources. They learned about the resources provided to the community through their state parks. They discussed safety precautions when preparing for their trail project such as how to use appropriate tools, what clothing to wear, and techniques to be used.

- **Vocational Studies: 2.36**
  Students learned about careers available within state parks.

- **Self-Sufficiency: 3.1, 3.3, 3.4, 3.7**
  Students used creativity and resourcefulness in planning their trail project. Each student learned independently while participating in the whole group project.

- **Responsible Group Membership: 4.2, 4.3, 4.4**
  Students learned to work cooperatively in groups to successfully complete the trail project. Students were responsible for completing tasks assigned to them.

- **Thinking and Problem-Solving: 5.1, 5.2, 5.3, 5.4, 5.5**
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.

- **Integration of Knowledge: 6.2, 6.3**
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
**STEP BY STEP GUIDE**

**STEP ONE: PREPARATION**

1) The teachers learned about the need for trail maintenance at their local state park and decided to involve their students in the project.

2) The Naturalist at the state park was invited into the classroom to show a slide presentation highlighting the existing nature trails. Students were given opportunities to ask questions about the project and to discuss the benefits of having trails in the state park. Students learned and studied new terms related to trail reconstruction.

3) Students wrote an essay on the importance of having a well-maintained state park.

4) Students learned about the tools which would be used during the project and safety procedures on their use was discussed. They also learned what clothing students needed to wear for the project.

5) Through science class, students learned to identify wildlife habitat. They learned about the importance of preserving habitat and how to avoid disturbing wildlife during the trail project. They also discussed problems that erosion causes to trails and how to identify erosion-prone areas.

**STEP TWO: ACTION**

1) Once the students arrived at the site, the naturalist gave a demonstration of the many tools and techniques to be used for the project.

2) The students walked the trails and reconstructed erosion-prone areas.

3) Some students cleared the undergrowth on the trail to provide easier passage. Others spread gravel at the base of the trail. One group was responsible for cleaning all litter along the trails.

4) Throughout the project, students identified and discussed the wildlife habitat along the trail.

**STEP THREE: REFLECTION/CELEBRATION**

1) Following the trip, students engaged in an open discussion about their feelings toward the project. Some of the comments centered around the difficulty of the labor, the use of the new tools, the destruction of land by erosion, and the beauty of the wildlife and the natural habitat.

2) Each student was asked to write an essay on the project to be included in their writing portfolio.

3) Students were treated to a buffet dinner when the project was completed. During the dinner, students were congratulated by the service-learning coordinator, teachers, and the park superintendent.

4) A sign was placed near the trail which stated that Allen Elementary School had adopted the trail as a service-learning project.
In order to learn firsthand what a rainforest is, students constructed a rainforest in their school and used it as a way to teach others about its importance to the world’s ecosystems.

**GOALS**

- To develop a teaching tool to help students better understand the uniqueness of rainforests and other forest communities
- To promote recycling by using recycled materials in the rainforest.
- To teach the concepts of biomes, habitats, and endangered species.

**CORE CONTENT AREAS**

- **Reading/Writing: 1.2, 1.11**
  Students read a variety of materials as they conducted research projects on the rainforest. Once the rainforest was completed, student wrote scripts and puppet shows for the tour groups who were invited to visit.

- **Science: 2.2, 2.3, 2.4, 2.5, 2.6**
  The rainforest project provided many opportunities to teach concepts in life science: Structure and Function of Living Systems, Diversity and Adaptations of Organisms, Populations and Ecosystems; and Earth Science: Earth’s Subsystems. Students conducted research and directly applied what they had learned in science to their own rainforest.

- **Social Studies: 2.18, 2.19**
  Students studied where rainforests are located in the world through geography. In economics, students learned about products that come from the rainforest and their impacts on both the U.S. and indigenous economies.

- **Arts and Humanities: 2.22, 2.23**
  Students constructed paper mache animals and plants that were representative of the rainforest community and designed their own puppets to use during tours. Students designed an advertising brochure to promote tours.

- **Practical Living: 2.30, 2.33**
  Students learned how their choices as consumers can impact the rainforest, both positively and negatively. They learned about manufacturers who negatively impact the rainforests. Students learned about resources available in the community through organizations that donated products to the rainforest project.

- **Vocational Studies: 2.36**
  Students learned about careers in biology and pharmaceuticals.

*Information for this lesson plan was compiled by Jennifer Cofer, Franklin County Schools, KY*
<table>
<thead>
<tr>
<th>KNOWS (suggested)</th>
<th>DOS (suggested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Rainforest ecology</td>
<td>1) Describe</td>
</tr>
<tr>
<td>2) Consumer impact on rainforests</td>
<td>2) Explain</td>
</tr>
<tr>
<td>3) Importance of the rainforest</td>
<td>3) Summarize</td>
</tr>
</tbody>
</table>

**STEP BY STEP GUIDE**

**STEP 1: PREPARATION**
1) Students began by spending a considerable amount of time researching rainforests of the world, where they are located, how they impact the environment, their importance globally, products that originate from them, and how this affects the economy.
2) The gifted and talented teacher learned of a book room that was available and requested to use it to construct a mini-rainforest as a teaching tool.
3) Local businesses were contacted to request donations such as paint, carpet and carpet tubes (which became the trees).
4) Students cleaned out the room and painted in colors representative of the rainforest.
5) Using donated and recycled materials, students constructed the rainforest, focusing on the characteristics of each layer.
6) Students constructed paper mache animals representative of the rainforest layers.
7) Once the rainforest was completed, students wrote and designed a promotional brochure to encourage groups to take a tour.
8) Students wrote puppet shows and scripts designed for different age groups who toured the rainforest.

**STEP 2: ACTION**
1) Students invited elementary schools, preschools, senior citizens, and other groups to tour the rainforest and learn about this unique ecosystem.
2) All students within the school were also given a tour.

**STEP 3: REFLECTION & CELEBRATION**
1) Students continually reviewed and updated their scripts, making them better for tour groups.
2) The rainforest was shown on Kentucky Afield for Kids, providing recognition of the efforts put forth by the students and teachers.
3) Prompt (suggested):

You have been put in charge of the Rainforest Action Network and you have to give a speech about the rainforest. Describe several unique characteristics of the rainforest and summarize its importance. Explain how consumerism can impact the rainforest in both positive and negative ways.
UNIT OF STUDY

HELPING YOUR LOCAL FOREST

GRADE LEVEL: 8

UNIT OVERVIEW

This unit will provide students with an overview of the major forest biomes and will help them understand the importance of trees in our environment.

CONTRIBUTED BY: Statia Dodge
Bullitt Lick Middle School, Bullitt County Schools

UNIT GOALS

To help students understand:

⇒ the importance of forest biomes to ecological balance
⇒ the importance of the conservation of forests for future generations
⇒ the importance of forests as both an ecological and economic asset
⇒ their responsibility as citizens to their environment

SERVICE-LEARNING PROJECT

Students conduct a trail clean-up project at their local forest and plant trees at the school.

PORTFOLIO OPPORTUNITIES

Writing: (1) Reflective analysis of the project through poetry, a narrative, or a play, (2) brochures about the forest, (3) letters to the newspaper

ACADEMIC EXPECTATIONS ADDRESSED

Communication/Math Skills: 1.1, 1.2, 1.11
Students conduct research into the forest biomes of the world. They read a variety of materials on forests. They write reflections and portfolio pieces on their feelings toward the project.

Science: 2.2, 2.3, 2.5, 2.6
This project teaches students about the various forest biomes in the world. They learn about the structure and function of living systems, diversity and adaptation of organisms, and the interrelationship between populations and ecosystems.

Social Studies: 2.14, 2.19
Students learn to become responsible citizens by caring for a forest area in their community. They learn about geography by studying the location and distribution of the Earth's forest resources.

Arts and Humanities: 2.22
Students make posters representing the forest biome they research and study.

Practical Living: 2.33
Students learn about preserving natural resources, especially forests, and the services provided by their local forest.

Self-Sufficiency: 3.6, 3.7
Students learn independently and learn about ethical behavior as it relates to the preservation of forest resources.

Responsible Group Membership: 4.2, 4.3, 4.5
Students work in groups to conduct their research and make presentations. They learn to be more caring toward their environment.

Thinking and Problem-Solving: 5.1
Students learn to think critically about the preservation of the environment.

Integration of Knowledge: 6.1, 6.2, 6.3
Students use their existing knowledge throughout the project and continually develop new knowledge about the subject matter they are studying.
**PREPARATION**

**KNOWS**
1) Three major forest biomes
2) Locations of forest biomes
3) Importance of trees to the environment
4) How people can help improve their environment

**DOS**
1) Describe
2) Identify
3) Explain
4) List

**STEP ONE:**
1) Introduce the terms (1) coniferous forest, (2) tropical rain forest, (3) deciduous forest, (4) canopy, (5) taiga, and (6) boreal forest.
2) Divide the class into six groups of 4-5 students. Assign two groups to research each of the following topics:
   a) coniferous forests
   b) deciduous forests
   c) tropical rain forests

As the students conduct their research, make sure they describe each forest type, locate them on a map, and list what is found there (e.g., plants, animals, humans, non-living natural resources).
3) Have one group from each of the forest groups make a handout of the information they found. This will be made into a transparency to be used in class.
4) Have the other group from each of the forest groups make a poster depicting the Who, What and Where of their forest type.
5) Combine the two groups to present an oral report to the whole class.

**STEP TWO:**
1) Discuss the trip to the local forest.
2) Distribute plant pocket field guides to the students. These will help the students identify plants around their school.

**STEP THREE:**
1) Take students outside in the same groups as the oral presentations. Have them attempt to identify the plants around the school. Students will make lists of the plants they can identify.
2) Plan the trip to the local forest. Let students make their own guidelines for the trip, put together a schedule, make plans for lunch, and design a permission slip.
3) Discuss the service project — clearing trails — that they will be doing at the forest.

**ACTION**

**STEP ONE:**
1) Arrange a trip to the local forest, where students will clear paths and take part in an education program.
2) While they are clearing the paths, provide opportunities for the students to use their plant pocket guides.

**STEP TWO:**
1) Have students research native tree species that would thrive on their school grounds.
2) Arrange for students to plant trees around the school.
1) Divide the students into two groups. Have one group prepare a report to the principal about the service-learning project and the other group prepare a report to the SBDM Council about the project.

2) Have students make posters to share experiences with the student body.

3) Have students answer the following prompt:

You are a local forester who is helping elementary children understand the importance of trees. Begin by describing the three major forest biomes of the world. Identify where these forest biomes are located in the world. Explain why trees are important to the environment and list several ways that people can help their environment.

RUBRIC

Good Work
1) All three forest biomes described accurately
2) All three forest biomes correctly located
3) Explanation clear on why trees are important
4) At least three ways listed

Try Again
1) Less than three, incorrect information
2) Incorrect information
3) Explanation unclear
4) Less than three
OVERVIEW

As part of their science and math curriculum, students landscaped and beautified the media center at their school.

GOALS

- To provide a meaningful way for students to use skills in math and science
- To beautify the media center at the middle school

ACADEMIC EXPECTATIONS ADDRESSED

- **Communication and Math Skills: 1.2, 1.4, 1.8, 1.11**
  Students read and studied several different landscaping magazines to learn about techniques pertinent to their project. Several students chose to write about the project for an English portfolio piece.

- **Math: 2.7, 2.9, 2.10**
  Using information such as the available space and growth requirements of the selected plants, students used math skills to design their landscaping project. They used measurements to ensure that all plants were situated appropriately to ensure maximum growth potential.

- **Science: 2.1, 2.4, 2.5, 2.6**
  Students learned about the different plant possibilities that could be used for the landscaping project based on the available sunlight, soil conditions, and water needed for each. They learned how to conduct simple soil testing. They studied the requirements of each plant and made appropriate choices based on what plants would work best for their particular site.

- **Practical Living: 2.29, 2.30**
  Students learned how to work cooperatively in groups to accomplish the task. They learned valuable consumer skills as they researched prices of plants and made decisions on what to purchase based on prices and quality.

- **Vocational Studies: 2.36**
  A landscaping professional spoke to the students about how to plan projects and careers in the profession.

- **Self-Sufficiency: 3.1, 3.3, 3.4, 3.7**
  The students learned to be flexible and creative in planning their landscaping plan. This project helped the students develop positive self-concepts as they beautified the media center.

- **Responsible Group Membership: 4.1, 4.2, 4.3, 4.4**
  Students learned to work together to complete the project. They learned to be responsible and work safely around others. They learned to care about and take pride in the school grounds.

- **Thinking and Problem-Solving: 5.1, 5.2, 5.3, 5.4, 5.5**
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.

- **Integration of Knowledge: 6.2, 6.3**
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
STEP BY STEP GUIDE

STEP ONE: PREPARATION
1) Students decided they wanted to beautify the outside of the new Media Center that had been built on their school campus.
2) Students reviewed and studied several landscaping magazines to gather information about plant possibilities based on their particular site. They conducted soil testing to determine the current conditions, what plants would grow best, and what nutrients needed to be added.
3) A landscaper was invited into the classroom to discuss their project, provide ideas and suggestions, and answer questions the students had about their project. The speaker also spoke about careers in landscaping.
4) With the information from the speaker and the magazines, students developed a preliminary plan for their landscaping project. This included a blueprint of the general vicinity, where the plants would be placed, and how far apart based on how big the plants would grow.
5) Students took measurements of the area. They used math skills to draw a scaled map of the area.
6) Students did fundraising activities (car wash and selling candy at school) to raise money to purchase the plants. Students investigated prices for the plants they would like to purchase. Using the funds they had raised, students developed a budget for the project. Using this information, students decided exactly what they could purchase.
7) The plants and other materials were purchased and taken to the school.

STEP TWO: ACTION
1) Using their written plan, each group of students were assigned a different task.
2) The ground was prepared for planting.
3) The area was landscaped as planned.
4) The project was videotaped for later review.

STEP THREE: REFLECTION/CELEBRATION
1) Students wrote reflective papers about what they had accomplished and how they felt about the project. Some students used this as an English portfolio piece.
2) They reviewed the videotape of the project.
3) The class was recognized by the school’s radio talk show and the principal for a job well done.
UNIT OF STUDY
TRASH INTO CASH

GRADE LEVEL: 6-8

UNIT OVERVIEW
In this project, students will be developing an appropriate method by which they can recycle the city's leaves and sewage sludge into a valuable commodity — compost — which will then be marketed for sale in the local community. The money from the sale of the compost will be used to make continued improvements in the city park.

SERVICE-LEARNING PROJECT
Students use the city's leaves to create useable compost and sell it to create funds for renovating the city park.

CONTRIBUTED BY: Wanda VanLandingham Pendleton Co. Middle School, Pendleton County Schools

UNIT GOALS:
To help students understand:
⇒ how to use research tools to locate sources of information on composting
⇒ how to address and request permission from the local governing board to carry out the planned activity
⇒ how to set up controlled experimentation to determine the best method for producing quality compost
⇒ how to use a computer to record information

PORTFOLIO OPPORTUNITIES
Writing: (1) Newspaper articles to inform the public of the project
Math: (1) A timeline for projected completion of the project, (2) cost analysis of compost sales

ACADEMIC EXPECTATIONS ADDRESSED

Communication/Math Skills: 1.1, 1.12, 1.13
Students conduct research into the technology of composting. They read a variety of materials to learn about the composting process. They use visual arts to design a package for their compost.

Math: 2.8, 2.10
Students learn mathematical calculations as they monitor their compost test samples. They also learn about profit and loss through the sale of the compost.

Science: 2.1, 2.2, 2.6
This project provides students with excellent knowledge about the process of natural decomposition. It teaches them how to build and monitor a successful compost pile.

Social Studies: 2.14, 2.15, 2.18,
Through their presentations to city councils, students gain a better understanding of the governmental process. They learn economics through the sale of the compost.

Arts and Humanities: 2.22, 2.23
Students study design and marketing techniques used to sell items and use this information to create a package for the compost.

Practical Living: 2.30, 2.33
Students study advertisements and how they affect purchasing decisions. They learn how composting is a way to conserve natural resources.

Self-Sufficiency: 3.3, 3.4, 3.7
This project allows students to be resourceful and creative. They all learn independently from this project.

Responsible Group Membership: 4.2, 4.3
Students learn to work cooperatively in teams on this project. They learn how to be more caring toward the environment through composting.

Thinking and Problem-Solving: 5.2, 5.3, 5.4, 5.5
As this project develops, students are required to solve problems, think creatively, and make decisions.

Integration of Knowledge: 6.1, 6.2, 6.3
Students learn to look at resource conservation from multiple perspectives. They use their existing knowledge throughout the project and continually develop new knowledge about the subject matter they are studying.
PREPARATION

(The following Knows and Dos will be assessed through action rather than a written prompt)

KNOWS
1) Research tools
2) Scientific Method
3) Patterns
4) Computer graphing
5) Newspaper writing

DOS
1) Use Reader's Guide to Periodicals
2) Observe successful composting in nature
3) Recognize viable patterns
4) Generate appropriate records and graphs to use in reporting and analyzing
5) Write journalistic articles for the newspaper

Have students keep journals for the duration of the project.

STEP ONE:
1) Discuss the overall plan to recycle the city's waste leaves as a service-learning project. Other sources of materials that may be considered include sludge and organic kitchen waste from the school cafeteria.
2) Brainstorm as a group to determine what the students already know about composting and recycling natural waste and what steps will be needed to complete the project.

STEP TWO:
1) Discuss the methods of information-gathering: Reader's Guide, Internet, resource people, observations of natural composting. Break students into groups, with each group using a different method to gather the needed information.
2) Guide students through their research to ensure that they are accessing the appropriate information.
3) Have students share with the whole group the information they found most useful.
4) Compile all information gathered into a format which enables everyone to use it as a resource.

STEP THREE:
1) Have students write a narrative explaining their project. Also have them develop a timeline of events.
2) Have students plan a presentation to the city council. The purpose of their presentation will be to request permission to use materials for recycling (i.e. leaves or sludge) and to request that city employees move large quantities of these materials to a selected location.
3) Have students write a press release to the local newspaper, announcing and explaining their project.

STEP FOUR (ongoing):
1) Research and design some experimental tests which can be conducted to determine the most effective process to use with their recycling/composting project. Variables may include: amount of water used, number of times the compost is turned, using different combinations of organic materials, etc. Break the students into groups, with each group responsible for recording data on one experimental test.
2) Have students spend time working with the compost. Have them run tests and record results regularly.
3) After a set period of time, determine which test provided the best compost. This is the process the students will use throughout the rest of the project.
STEP FIVE:
1) Have students develop packages for their compost. Spend time examining and evaluating advertising patterns, colors, concepts, and technology. With this information, students can design their own package.
2) Students should conduct one final testing before packaging the compost.
3) When ready, have students package and store the compost for sale.
4) Assign a few students to be sales personnel. They will keep track of inventory and revenue.
5) Assign a few students to write and send a press release to the local newspaper advertising the compost.

ACTION

1) Throughout the year, have students continue to generate and sell the compost.
2) Have students use this opportunity to learn how businesses operate.
3) With the profits generated by the compost, students can purchase perennials and plant them in the city park.
4) Have the students apply the compost to the perennials.

REFLECTION

1) Have students write a reflective paper on the park experience, using journal entries that were kept throughout the project.
2) In whole group discussions, have students discuss their feelings about the project and make recommendations for future projects.
OVERVIEW

Students renovated a city park, helping to provide additional recreational opportunities for youth in the community.

GOALS

- To renovate a city park
- To provide recreational opportunities for youth in the community
- To provide a meaningful project for the students

ACADEMIC EXPECTATIONS ADDRESSED

- **Communication and Math Skills: 1.11**
  Students transformed a list of rules containing the word “no” and, using grammar skills, reworded them to promote positive action rather than negative. Students wrote reflective papers about how they felt toward the project.

- **Social Studies: 2.14, 2.15, 2.18**
  This project provided a meaningful way for students to understand how they, as citizens, could positively contribute to their community. Through economics, students learned how to make informed consumer choices as they priced and purchased equipment for their project.

- **Arts and Humanities: 2.22**
  Students created signs which were used to raise funds for the project. They used their creativity to develop eye-catching symbols and phrases to urge people to donate and to help them understand where the money would be spent.

- **Practical Living: 2.29, 2.30**
  Students developed a list of positive rules which were posted at the park. Students developed a budget with the money they had raised, along with a grant they had received, and made decisions on what to purchase for their project.

- **Self-Sufficiency: 3.1, 3.3, 3.4, 3.7**
  This project provided a way for students to learn independently, express their creativity, and exhibit flexibility as the project unfolded.

- **Responsible Group Membership: 4.1, 4.2, 4.3, 4.4**
  This project provided an opportunity for students to work together as a team to plan and conduct the renovations. They learned to be responsible to get the task completed efficiently.

- **Thinking and Problem-Solving: 5.1, 5.2, 5.3, 5.4, 5.5**
  This project provided an excellent way for students to use critical, creative, and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.

- **Integration of Knowledge: 6.2, 6.3**
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
**STEP BY STEP GUIDE**

**STEP ONE: PREPARATION**
1) Students decided that additional forms of positive recreation were needed in their community. Their goal for this project was to reduce undesirable behavior (caused by boredom or lack of recreational opportunities) and provide quality alternatives for youth. As a result, students decided to renovate a local city park by installing four basketball goals on a paved area and putting fencing around it.

2) The students received a $3600 mini-grant for this project. They also did some of their own fundraising. Students in an art class made colorful and informative signs about their project indicating what they needed the money for and urging people to donate. They organized a road-block in their community and collected money on one day.

3) Once the money was secured, the students brainstormed materials they needed for their project. They developed a budget and obtained prices from a variety of sources. Once they had this information, they purchased the equipment needed based on price and product quality.

4) Students received a list of rules to be posted at the park. After noticing that they all began with the word “No” they decided to reword the rules in a more positive fashion.

**STEP TWO: ACTION**
1) Students put up the basketball courts and installed the fence around the area.

2) They posted their new rules in the park.

**STEP THREE: REFLECTION/CELEBRATION**
1) Students wrote reflective papers about their accomplishments and how they felt about being involved in the project.

2) After the park was opened to the public, students continually maintained the park and the equipment.
OVERVIEW
Fifth grade students collected eyeglasses from the community and, through the help of the Lion's Club, provided them to needy individuals.

GOALS
- To provide eyeglasses for people in the community
- To provide a meaningful project for the students

ACADEMIC EXPECTATIONS ADDRESSED
- **Communication and Math Skills: 1.11**
  Students wrote letters indicating the need for used eyeglasses and requesting community support for the project.
- **Math: 2.10**
  Using eye charts, students calculated the distance where they could see most clearly.
- **Science: 2.3, 2.4**
  Students learned about microscopes, lenses, and eyepieces and how they aid peoples' vision. They built refracting telescopes using cardboard tubing. They learned good health practices in the care of the eyes.
- **Arts and Humanities: 2.22**
  Students made decorative boxes which were used to collect the eyeglasses. They also made posters to promote the project within the school.
- **Practical Living: 2.31, 2.33**
  Good health practices, as they related to care of the eyes, were discussed. Students learned about the services provided to the community through the Lions Club.
- **Vocational Studies: 2.36**
  Students learned about the careers of optician, ophthalmologist, and optometrist.
- **Self-Sufficiency: 3.1, 3.2, 3.3, 3.4, 3.7**
  As the project unfolded, students learned to be adaptable and flexible to make their project most productive; they used creativity in determining how to publicize their project. They learned about maintaining healthy eyes throughout their lifetime.
- **Responsible Group Membership: 4.2, 4.3, 4.4**
  Students learned to work cooperatively to have a successful collection project. They learned to be more caring toward people who have problems with their eyesight.
- **Thinking and Problem-Solving: 5.1, 5.2, 5.3, 5.4, 5.5**
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.
- **Integration of Knowledge: 6.2, 6.3**
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
**STEP BY STEP GUIDE**

**STEP ONE: PREPARATION**

1) The students decided they wanted to do something worthwhile for the community. They called on the local Lion’s Club to help them choose an appropriate project. A representative came to the school to tell the students about the need for used eyeglasses, which could be recycled and given to people who cannot afford new glasses. The representative explained how the fifth grade classes could get involved in this project.

2) In language arts, all students wrote letters to the community asking for support of the project. Eight letters were chosen for publication in the local newspaper during the month of October.

3) In science, students learned about devices that help the eye see better such as microscopes, lenses, and eyepieces. They also built a refracting telescope from cardboard tubes.

4) In math, students learned how to use eye charts. Each student calculated the distance between the chart and their eye to determine their eyesight. They compared their eyesight to others in their class.

5) Students learned a great deal about the proper care of the eyes and how to ensure healthy eyes throughout their lifetime. They also discussed careers that help people maintain healthy eyesight.

**STEP TWO: ACTION**

1) The letters the students submitted to the paper were published to help elicit community support for the project.

2) Students designed collection containers and placed them throughout the school. They also designed posters which were distributed through the school to encourage involvement.

3) The students collected eyeglasses for one month.

**STEP THREE: REFLECTION/CELEBRATION**

1) Teachers facilitated discussions on how the students felt about this project.

2) An awards ceremony was held to recognize the students and homeroom which collected the most eyeglasses.

3) The Lion’s Club sent a formal thank you letter to the students.
Human Needs

MIDDLE SCHOOL

OVERVIEW

Students developed a telephone directory of community information important to middle school students.

GOALS

- To make relevant community information available to middle school students
- To provide a meaningful project for the students

ACADEMIC EXPECTATIONS Addressed

- **Communication and Math Skills:** 1.1, 1.2, 1.11, 1.16
  Students reviewed a variety of materials to determine what information they would like to include in their directory and wrote text to be included in the directory. They used computer skills to enter information into a database and produce a final copy of the directory. Students wrote reflective pieces about their feelings toward the project.

- **Math:** 2.7, 2.8,
  After the directory was completed, students used accounting skills to keep financial reports of the number of directories sold.

- **Social Studies:** 2.18
  Students learned economic lessons as they produced and sold their directories.

- **Arts and Humanities:** 2.22
  Students designed decorative covers for the directory.

- **Practical Living:** 2.33
  This project provided a valuable way for the students to learn about the resources available in their community. Through their research, students gathered information about various community agencies and how they might be able to assist middle school students.

- **Vocational Studies:** 2.36
  Students learned valuable skills in product production. They also learned good work ethics as they worked in teams to produce and sell the directory.

- **Self-Sufficiency:** 3.1, 3.3, 3.4
  Students used creativity in developing their directory. They used resourcefulness in finding the relevant information. Their self-concept improved through the development of a useful product for their peers.

- **Responsible Group Membership:** 4.2, 4.4
  Students learned to work cooperatively to successfully complete their directory. Students were responsible for completing tasks assigned to them.

- **Thinking and Problem-Solving:** 5.1, 5.2, 5.3, 5.4, 5.5
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.

- **Integration of Knowledge:** 6.1, 6.2, 6.3
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
STEP BY STEP GUIDE

STEP ONE: PREPARATION
1) This project was conceived by students who were looking for an easier avenue of communication and to provide needed information to the student body. Groups of students were assigned different tasks to complete the project.
2) Students were assigned to collect information for the directory. They used a variety of sources to find the information relevant to their needs. Primarily, they focused on community agencies that would be of interest or assistance to teenagers.
3) Students entered the information into a database directory.
4) One group of students wrote and submitted information about the school, which was included in the directory.
5) Art students designed the cover for the directory.
6) Students learned desktop publishing skills to make the final product.

STEP TWO: ACTION
1) Copies of the directory were made and bound by the students.
2) The directory was made available for sale to students in the school.
3) An accounting committee was established to keep track of sales.

STEP THREE: REFLECTION/CELEBRATION
1) Students wrote reflective pieces about how they felt toward the project and their accomplishments. They also engaged in discussions about the project.
2) Opinions were gathered about the usefulness of the directory and appropriate changes were made for future printings.
OPERATING A BUSINESS TO HELP HUNGER ORGANIZATIONS

Contributed by
Karen Davidson
Elkhorn Middle School

CORE CONTENT AREAS

- **Reading/Writing: 1.2, 1.11**
  Students learned how to read and follow basic recipes. They read and analyzed advertisements. They wrote evaluations of the project after its completion.

- **Math: 2.8, 2.12, 2.11**
  Students learned how to handle money while selling their items, calculate the cost of items they needed to purchase to make their food items, utilize their profits to reinvest in their business, and alter recipes to accommodate their needs.

- **Social Studies: 2.16, 2.17, 2.18**
  Students learned about the issue of hunger in their community and agencies that work to solve this problem. They discussed the items which would sell best at school based on the supply and demand theory of economics.

- **Arts and Humanities: 2.22**
  Students designed posters to publicize their products and to make others aware of their product’s availability.

- **Practical Living: 2.29, 2.30, 2.33**
  Students decided on the products to sell, determined selling prices, and discussed how best to advertise and market their product. They learned conflict resolution skills while working in their small business groups.

- **Vocational Studies: 2.37**
  As students worked in their small groups, they learned how to analyze both positive and negative work habits — in themselves as well as their co-workers. They learned how both individuals and teams contribute to the success or failure of a business.

---

Information for this lesson was compiled by
Jennifer Cofer, Franklin County Schools, KY
KNOWS (suggested) | DOS (suggested)
---|---
1) Basic business operations | 1) Summarize
2) Positive and negative work habits | 2) Explain
3) Hunger Issues | 3) Identify

STEP BY STEP GUIDE

**STEP 1: PREPARATION**
1) The Service-Learning Coordinator spoke to the students about hunger and organizations in the community that deal with hunger issues. Students were given a description of each organization and they voted on the one to which they would like to contribute their profits. Two classes of students were involved — one chose Meals on Wheels, and the other a local respite center for parents and their children.
2) Once they chose their organization a guest speaker from that organization was invited into the classroom to discuss their mission and to answer students’ questions.
3) Student in each class were broken into small groups of 4-5. Each small group operated their own business, made their own product, and developed their own advertising and marketing campaign. The students decided which products they would like to make based on their budget, and supply and demand of the people to whom they would be selling the items. Each group chose to make cookies, candy or snack mix.
4) Students studied advertisements and designed an ad for their product.
5) Students determined prices for their items based on the cost needed to make each item as well as the profit desired.

**STEP 2: ACTION**
1) Students prepared items on a daily basis for approximately two weeks. They spent their class time making the items and sold them after school hours. They also took orders from teachers and students and filled those orders accordingly.
2) After the project was completed, profits were calculated and checks were written and sent to the two organizations the students had chosen.

**STEP 3: REFLECTION & CELEBRATION**
1) Students were required to complete an evaluation of the project (see attached). The evaluation focused heavily on positive/negative work habits and how best to operate a business.
2) The group in each class which made the most profit were given a certificate of appreciation and were recognized throughout the school during morning announcements.
3) The two community agencies sent thank you notes to the teacher and classes.
8TH GRADE

OVERVIEW

Students created personalized placemats for senior citizens who regularly lunched at the local senior citizen center.

GOALS

- To teach design techniques
- To teach lettering techniques
- To provide a way for the students to interact with the senior citizens in their community
- To break down stereotypes students may have had about senior citizens

CORE CONTENT AREAS

- **Reading/Writing: 1.11**
  Students answered writing open-response prompts as a way to reflect on their interactions with the senior citizens.

- **Social Studies: 2.14, 2.16, 2.17**
  This project provided opportunities for the students to interact with people from another generation, helping them to better understand and respect senior citizens. They also gained a perspective of their responsibilities to senior citizens in their community. They learned about the services provided to the community through the senior citizen center. Through personal interviews, students learned a little about history, with the seniors providing information on what life was like when they were children.

- **Arts and Humanities: 2.22**
  Students created placemats for seniors who regularly lunch at the local senior citizen center. They learned lettering techniques (each placemat was personalized), how to make a collage, the importance of focal point and balance, and basic design techniques.

- **Practical Living: 2.29**
  Students learned how to interact with and develop respect for senior citizens in their community

Information for this lesson plan was compiled by Jennifer Cofer, Franklin County Schools, KY
STEP 1: PREPARATION

1) Students began this unit by studying the art techniques of lettering and collage. They practiced lettering techniques and designed one collage to prepare for this activity. Balance and focal point were emphasized to make the collages attractive and interesting to the eye.

2) Students brainstormed things that they thought might be important to senior citizens such as events from their past, their hobbies, and family. Afterward, students looked in magazines to find pictures to clip and add to their collage. (NOTE: It is best if students can visit with their senior citizen prior to beginning their collage to determine exact interests of the person to whom they would be giving the placemat. Due to time and budget constraints, this class visited the Center after the collages were completed).

3) Students completed their collages with pictures they thought seniors would like. They left enough room to put the name of their senior on their placemat which was completed after their visit.

4) Students brainstormed questions to ask the senior citizens during their visit.

5) Students were prepared for their visit by discussing their views on senior citizens. Students were asked to openly share their concerns/fears about going to the Center. They were also prepared for what they might see and how to handle uncomfortable situations during their interview.

6) The students and teacher developed the following rubric for their visit:

YES! YES!
1) Open, pleasant
2) Good listener
3) Ask as many questions as feels comfortable
4) Being polite if you have questions about something
5) Realize these seniors are doing us favor, allowing us to survey them

NO! NO!
1) Rude in any way
2) Act distracted, inattentive
3) Rushing through questions
4) Wandering into other areas uninvited
5) Showing lack of respect to anyone

STEP 2: ACTION

1) Students visited the senior citizen center one time for two purposes: (1) to interview and interact with one senior each, and (2) to obtain a name to personalize their placemat.

2) The following questions were asked during the interview:

a) Name, birthday, married/single, number of sons/daughters
b) Where are you from?
c) What did you do for fun as a teenager (before you were old enough to drive)?
d) What was school like when you were in 8th grade?
e) Do you think life has gotten easier or harder for young people?
f) Do you think the world is a better place now or when you were a teenager?
g) Do you think the leaders of today are as good as we used to have?
h) If you were granted a wish to pick any age to be, what would you choose and why?

3) Students conducted their interviews and returned to school with a name to put on their placemat. They completed the placemats during the regular art class using letter techniques they had learned.

4) The placemats were laminated and given to the center director to distribute.

STEP 3: REFLECTION & CELEBRATION

1) Students answered one of the following open response prompts after the project:

a) You have met a person from another generation. How are the ideas of this person or persons different from your ideas about certain life issues?

b) You have met a person from another generation. How has going to the Senior Citizen Center changed the way you feel toward our older generation? (Before you walked in the Center: After hearing some of their life-long contributions and/or opinions?)
BOOKS FOR
HOMELESS CHILDREN
First District School
Covington Independent School District

OVERVIEW
Using the writing process, students created books and donated them to a local housing shelter.

GOALS
- To provide meaningful ways for students to use their language arts skills
- To help students understand needs of the local housing shelter
- To encourage reading among the shelter residents

ACADEMIC EXPECTATIONS ADDRESSED
- Communication and Math Skills: 1.2, 1.4, 1.11, 1.16
  Through their regular curriculum, students read stories and spent time learning about the writing process. Using the writing skills they had learned and practiced, along with ideas from information they had read, they developed their own stories which were made into books for a local housing shelter. Students used computers to produce their stories.
- Social Studies: 2.14, 2.16
  Students learned about the causes of homelessness and how agencies help to reduce this problem in their community. They learned how they, as citizens in their community, could help meet the needs of the local housing shelter.
- Arts and Humanities: 2.22, 2.23
  Students created artwork to supplement the written information in their books. Students critiqued each other's work to ensure quality.
- Practical Living: 2.29, 2.33
  This project helped students understand how families are affected by homelessness. Students learned how the local housing shelters help people in their community.
- Vocational Studies: 2.36
  Students learned about careers at the local housing shelter.
- Self-Sufficiency: 3.1, 3.3, 3.4, 3.7
  Students expressed their creativity through the writing of the books. Helping children at the housing shelter improved their self concept.
- Responsible Group Membership: 4.1, 4.3, 4.4
  Students learned to care about other people and to accept the responsibility of helping others in their community.
- Thinking and Problem-Solving: 5.1, 5.2, 5.3, 5.4, 5.5
  This project provided an excellent way for students to use critical, creative and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.
- Integration of Knowledge: 6.1, 6.2, 6.3
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
STEP BY STEP GUIDE

STEP ONE: PREPARATION
1) Through their regular curriculum, students learned about the writing process, as well as using correct spelling and grammar.
2) The students decided they wanted to help the local housing shelter using the language arts skills they had learned.
3) A representative from the local shelter was invited to speak to the students about their facility. Students learned about the homeless problem, how the facility helps families, careers in the social service field, and ways they could help the shelter. It was suggested that students make books and donate them to the children who reside at the shelter to encourage reading. The books would be kept in a lending library so that all children who live at the shelter could enjoy them.
4) Students spent time reading and reviewing children’s books which helped them generate ideas for their books.

STEP TWO: ACTION
1) Using all the information they had received, each of the students, with the assistance of the teacher, created a book to be donated to the shelter. Drafts of the books were critiqued by other students to ensure quality and to check grammar and spelling.
2) Students created artwork to include with their stories to make the books more colorful and interesting.
3) The completed books were donated to the shelter. (NOTE: If time and resources permit, students could be taken to the shelter to read their stories to children and to personally give the books to the shelter.)

STEP THREE: REFLECTION/CELEBRATION
1) Students had a group discussion about how their project made a difference, how it made them feel, and what they had learned. They brainstormed other projects that could be done at the shelter in the future.
2) The housing shelter sent the students a formal thank you for their book donations.
3) Students placed a series of photographs about their project in a well viewed area of the school so that others could recognize their hard work.
UNIT OF STUDY
BICENTENNIAL MURAL

GRADE LEVEL: 7-8

UNIT OVERVIEW
This unit will include sharing the complete process of making an historical mural design for the community. The unit will also help students recognize the historical values and cultural heritage of their county.

UNIT GOALS
To help students understand:

⇒ the historical values and heritage of their county
⇒ that clean areas will improve the visual quality of the city
⇒ how their work will contribute to the revitalization and historical restoration of the downtown area
⇒ how revitalization of the area will improve the economy of the county

SERVICE-LEARNING PROJECT
Students paint a mural in the city, which will be of historical reference and visually appealing.

PORTFOLIO OPPORTUNITIES
Writing: (1) narrative of what life was like 200 years ago. (2) comparison of life now to then
Math: (1) calculating the number of gallons of paint needed, (2) calculating the height and width of the mural by learning to use a grid

ACADEMIC EXPECTATIONS ADDRESSED

Communication/Math Skills: 1.1, 1.2, 1.11, 1.13
Students research and read about the history of their community. They write about their feelings toward the mural project.

Math: 2.9, 2.10
Students learn to use math to convert small designs to a grid, which is then transferred onto a larger surface.

Social Studies: 2.14, 2.15, 2.16, 2.20
This project provides many opportunities for the students to learn about the government, history, and culture of their community.

Arts and Humanities: 2.22
Students learn a variety of design techniques as they develop the final design for their mural.

Vocational Studies: 2.36
Students learn about the career of a historian.

Self-Sufficiency: 3.1, 3.3, 3.4, 3.5, 3.7
Students learn resourcefulness as they look for information regarding the history of their community. They use creativity in the design of their mural.

Responsible Group Membership: 4.2
Working on the mural requires all the students to use teamwork and cooperation to complete the project successfully.

Thinking and Problem-Solving: 5.2, 5.4, 5.5
Students make decisions and solve problems as it relates to the mural project.

Integration of Knowledge: 6.1, 6.2, 6.3
Students use their existing knowledge throughout the project and continually develop new knowledge about the subject matter they are studying.
PREPARATION

KNOWS
1) Historical milestones of the county/timeline
2) Research techniques
3) Comparisons between life now and 200 years ago

DOS
1) Describe/Illustrate
2) Explain
3) Compare

STEP ONE:
1) Explain to the group that they will be involved in painting a mural portraying the history of their county on a building downtown.
2) As a large group, brainstorm what students already know about their county.
3) Invite the local historian to be a guest speaker.

STEP TWO:
1) Divide students into groups, with each group assigned a different area to research for local history information. Have students spend time in the library conducting their research.
2) Encourage students to interview their grandparents to get additional information about the history of the town.
3) Spend time allowing students to share the information they have obtained.
4) Using productive thinking, sift through images that could be used in the mural. Through a democratic process, let students vote on the images they would like to use. From this, have one of the students (or the teacher) develop a master design of all the images.
5) Have students answer the following prompt:

You have learned about the historical significance of your county. Explain the research techniques you used to find this information. Describe two historically significant events that occurred in your community and draw a timeline of the history of your community with at least four events featured. Make comparisons between what life was like 200 years ago and what life is like now.

RUBRIC

Good Work
1) At least two techniques given, explanation clear
2) At least two events described
3) Timeline drawn/accurate/four events in correct order
4) At least two comparisons given

Try Again
1) Less than two, no explanation
2) Less than two
3) No timeline/inaccurate/incorrect order
4) Less than two, explanation only

STEP THREE:

KNOWS
1) Definition of a mural
2) Composition process
3) Design transfer

DOS
1) Define
2) Explain
3) Describe

1) Discuss the composition process through drawings of the master design.
2) Cut the design into exact squares.
3) Have students render an enlarged version of their square on a large square of watercolor paper. Explain that dividing the picture into a grid provides students with an easier way to transfer the small painting into a large mural.
**ACTION**

Paint the mural on the designated building. This may take several trips to complete.

**REFLECTION**

1) Have students make presentations to civic groups about the project and the knowledge they gained.
2) During the work on the mural, continually reflect on what the students have learned about the history of the county.
3) Have students write an overall reflection narrative about their feelings toward the project.
4) Have students answer the following prompt:

   You are a designer of murals who is teaching a group of students your techniques. Begin by giving a definition of a mural. Explain the composition process and describe the steps of how designs are transferred onto a larger scale for painting.

**RUBRIC**

**Good Work**
1) Definition clear, accurate
2) Process explained in detail
3) Transfer process described, steps given in correct order

**Try Again**
1) Inaccurate
2) No detail, unclear
3) No description, steps left out, improper order
UNIT OF STUDY
EMPTY BOWLS

GRADE LEVEL: 8

UNIT OVERVIEW
This unit will help students understand the issue of hunger in their community by working at the local Salvation Army to prepare a meal. They will also sponsor a soup and bread dinner to raise money for the organization.

SERVICE-LEARNING PROJECT
Students help prepare a meal at the local Salvation Army as well as sponsor a family dinner to raise funds for the agency.

UNIT GOALS
To help students understand:
- the needs of people in the community
- stereotyping
- how to gain respect for themselves and others
- the steps involved in creating a soup bowl from clay
- how the Salvation Army operates
- the steps involved in preparing and cooking a meal for the Salvation Army

PORTFOLIO OPPORTUNITIES
Writing: (1) Reflective narrative about the project
(2) Paper about the issue of hunger

ACADEMIC EXPECTATIONS ADDRESSED

Communication/Math Skills: 1.2, 1.3, 1.11
Students read literature about the issue of hunger. They write about their experience working at the Salvation Army and with the project as a whole.

Social Studies: 2.14, 2.15, 2.16, 2.17
Students learn how their government attempts to help hungry people. Through their work at the Salvation Army, they learn to interact with people different from themselves. They learn how they, as citizens, can take responsibility for feeding hungry people in their community.

Arts and Humanities: 2.22, 2.23
This project provides students with the opportunity to learn the art of ceramics and working with clay.

Practical Living: 2.33
Students learn about the services provided by the Salvation Army.

Self-Sufficiency: 3.1, 3.3, 3.4, 3.7
Working at the Salvation Army and helping to raise money for hunger in their community helps students improve their self-concepts. They use resourcefulness and creativity in developing their project.

Responsible Group Membership: 4.1, 4.2, 4.3
Students work cooperatively in preparing and serving the meal at the soup kitchen, as well as at the soup and bread dinner. They learn to be more caring and responsible toward people less fortunate than themselves.

Thinking and Problem-Solving: 5.2, 5.3, 5.4, 5.5
Students use creativity and develop decision-making and problem-solving skills through this project.

Integration of Knowledge: 6.1, 6.2, 6.3
Students learn to look at the issue of hunger from multiple perspectives. They use their existing knowledge throughout the project and continually develop new knowledge about the subject matter they are studying.
PREPARATION

KNOWS
1) Causes of hunger
2) Effects of hunger — emotional and physical
3) Agencies that address hunger issues

DOS
1) List
2) Explain
3) List/describe

STEP ONE:
1) In language arts, discuss the issues of hunger in the community. Identify private and governmental agencies that help people who cannot afford food.
2) Begin reading the book December Stillness.
3) In art class, distribute the clay and discuss techniques used in creating a bowl.

STEP TWO:
1) In language arts, brainstorm local agencies in the area that deal with hunger. Have students write a paper on the causes, effects, and other issues dealing with hunger. Discuss how the Salvation Army helps feed hungry people in the community. Make arrangements for the students to visit the Salvation Army to serve a meal.
2) Talk about other ways to help the Salvation Army. Discuss the idea of sponsoring a dinner where students can raise money to give to the Salvation Army. Set a date for the dinner and make invitations for students, parents, and friends. The dinner will be cooked at the completion of this project.
3) Continue reading and discussing December Stillness and how it relates to people today. Discuss the issue of stereotyping hungry people.
4) In art, have students finish the bowls. Also fire and glaze the bowls.

ACTION

STEP ONE:
1) Take the students on a trip to the Salvation Army. Involve the students in preparing and cooking the food for the meal, serving the clients, and cleaning up afterward.

STEP TWO:
1) Have students organize their soup and bread dinner. Distribute the invitations and purchase the food to be prepared.
2) Prepare the soup and bread dinner for family and friends, with everyone encouraged to give donations to the Salvation Army. Students will be given this opportunity to eat out of the clay bowls they made.

REFLECTION

1) After the trip to the Salvation Army, have students discuss what they learned and how they felt about serving the meal to the hungry people in their community.
2) Discuss the differences in preparing the meal for family and friends compared to preparing food for the Salvation Army.
3) Have students write a narrative about their feelings toward the entire project.
4) Have students answer the following prompt:

You are an advocate for hungry people in your community. You are making a speech to the community to increase awareness of this issue. Begin by listing the causes of hunger. Explain how hunger affects people, both emotionally and physically. List and describe agencies in your community which address hunger issues.

**RUBRIC**

**Good Work**
1) At least three causes listed, accurate
2) Explanation for both emotional and physical effects
3) Agencies listed and described clearly

**Try Again**
1) Less than three, inaccurate
2) Vague explanation, only one explained
3) Agencies not listed, listed only
# UNIT OF STUDY

## READ TO ME!

### GRADE LEVEL: 8

### UNIT OVERVIEW

This unit will involve students in the process of creating and publishing a book. Students will write and design a book and make glove puppets of their characters. These books will be donated to a local Head Start facility.

### SERVICE-LEARNING PROJECT

Students write a book suitable for preschool children and donate the books to a local Head Start facility.

### UNIT GOALS

To help students understand:

- how to interact with younger children
- the process involved in writing a book
- the art of making a puppet
- the importance of developing a love of reading

### PORTFOLIO OPPORTUNITIES

Writing:
1. narrative about how students felt toward the project and working with younger children.
2. the book made for the children

### ACADEMIC EXPECTATIONS ADDRESSED

**Communication/Math Skills:**
1.2, 1.3, 1.4, 1.11, 1.12, 1.13
Students read children's literature to gather ideas before writing their own children's book. Students read the books they have written to preschool children.

**Social Studies:** 2.17
Working with the preschool children provides opportunities for the students to interact with people of various ethnic and cultural backgrounds.

**Arts and Humanities:** 2.22
Students make pictures and glove puppets to accompany their books.

**Practical Living:** 2.33
Students learn about the services provided by a Head Start facility.

**Self-Sufficiency:** 3.1, 3.4, 3.7
This project helps students develop better self-concepts as they create a book for younger children. They learn to be creative and work independently on the project.

**Responsible Group Membership:** 4.1, 4.3
Working one-on-one with the preschool children helps the middle school students develop interpersonal skills. They learn to be more caring and responsible toward children in their community.

**Thinking and Problem-Solving:** 5.1, 5.2, 5.3
Students think critically and creatively as they design their books. They conceptualize an idea and follow it through to a completed book.

**Integration of Knowledge:** 6.1, 6.2, 6.3
Students use their existing knowledge throughout the project and continually develop new knowledge about the subject matter they are studying.
PREPARATION

KNOWS
1) Importance of reading
2) How to encourage reading in preschool children
3) Steps involved in writing a book

DOS
1) Explain
2) Describe
3) List

STEP ONE:
In advance of the unit, ask the Head Start teachers to have their students draw pictures representing themselves and things that are of interest to them. These drawings will make good subjects and provide illustrations for the stories to be written. The Head Start students' names and other personal information should be added to their pictures.

STEP TWO:
1) Have students brainstorm what they already know about 3-5 year olds, especially their vocabulary, interests, and attention span.
2) Visit the local Head Start program to provide time for the middle school students to interact with the children and to collect the pictures they have drawn, which will serve as illustrations for the book.
3) Pair up one Head Start student with one middle school student. Have the middle school students make notes about the child for whom they will make the book.

STEP THREE:
Take students to the local library to review current children's literature. This will provide the students with an excellent background into what children like to read.

ACTION

STEP ONE:
1) Have students put together ideas for their books and develop rough drafts.
2) In partners, have students critique each others' books.
3) Using the suggestions of their partners, have students finish writing and assembling their books.

STEP TWO:
Make glove puppets, with each finger representing a different character in the story.

STEP THREE:
1) Visit the Head Start facility again. Have students meet with their preschool partners and read their stories to them. Make sure they keep the books at eye level. Let the children operate the finger puppets.
2) Donate the books and serve refreshments.
3) Videotape the actual reading of the books and the reactions of the students involved for reference on future projects.
**REFLECTION**

1) View the videotape and discuss the feelings of the middle school students about the project. Have them write a narrative about their feelings toward the project.
2) Discuss the steps involved in writing a book.
3) Discuss ideas for future projects with the Head Start students.
4) Have students answer the following prompt:

*You have just completed a project designed to help preschool children develop a love of reading. Explain the importance of being able to read. List the steps you used to create your book. Describe how others can encourage preschool children to learn to read.*

**RUBRIC**

**Good Work**

1) Explanation clear, accurate
2) All steps listed in correct order
3) Description clear

**Try Again**

1) Vague explanation, inaccurate
2) Steps left out, not in order
3) Description unclear
Three-Level Human Services Project

Kammerer Middle School
Jefferson County School District

Overview
Sixth grade students chose to develop partnerships and conduct monthly projects with three agencies (kindergarten class, homeless center day care, and nursing home) to complement their science and language arts curriculum.

Goals
- To provide interactions with children and older adults in the community
- To enhance the science and language arts curriculum with meaningful community projects

Academic Expectations Addressed
- Communication and Math Skills: 1.2, 1.3, 1.11, 1.12
  Students regularly read stories with their partners at their service sites. Students read the novel *Tuck Everlasting* by Natalie Babbitt, which dealt with issues concerning growing old in society. Students wrote and illustrated their own books with themselves and their partner as main characters. Students wrote letters to 7th grade teachers requesting that this project continue in 7th grade. Students learned to adapt their visits based on observations they made while at the service sites.
- Science: 2.1, 2.3, 2.6
  Students learned about the aging process and how the body changes from infancy to old age.
- Social Studies: 2.16, 2.17
  Through work at their three service sites, students learned to interact effectively with people of different ages and cultural backgrounds.
- Arts and Humanities: 2.22
  Students illustrated the books they made for their partners. During regular interactions at the service sites, students engaged in craft activities with their partners.
- Practical Living: 2.29, 2.31, 2.33, 2.35
  This project provided opportunities for students to work cooperatively in groups. They also learned about personal responsibility and agencies that help people in their community. They studied how exercise and healthy habits can lead to a more active lifestyle as they get older.
- Self-Sufficiency: 3.1, 3.3, 3.4, 3.7
  This project helped students develop positive self-concepts as they worked with people at the service sites. They learned to be flexible and creative in planning their activities as they became better acquainted with their partners.
- Responsible Group Membership: 4.1, 4.2, 4.3, 4.4
  Students learned to work in a variety of group settings at their service site. They learned to be caring toward children and the elderly in their community.
- Thinking and Problem-Solving: 5.1, 5.2, 5.3, 5.4, 5.5
  This project provided an excellent way for students to use critical, creative, and conceptual thinking skills. It also allowed them to make decisions and solve problems relevant to the project.
- Integration of Knowledge: 6.1, 6.2, 6.3
  Students used their existing knowledge to plan the project and developed new knowledge as the project progressed.
STEP BY STEP GUIDE

STEP ONE: PREPARATION

1) Through the science and language arts curriculum, students became involved in a service-learning project. Teachers presented students with a list of three projects from which to choose. From this list, students chose to participate in the project of greatest interest and concern to them. The projects included partnerships with (1) students in a kindergarten class, (2) homeless children at a day care center, and (3) residents of a nursing home.

2) Throughout the course of the school year, aspects of human growth and development were taught in science. Students studied systems of the body and linked what they were learning about the aging process — from infancy to old age — to the service they were doing.

3) In language arts, students developed skills in speaking, interviewing, and creative writing. The students’ reading comprehension skills were improved through reading stories related to intergenerational relationships. One such story was Tuck Everlasting by Natalie Babbitt which discussed many issues of growing old in society, as told from an adolescent’s perspective.

4) Students discussed what they knew and did not know about the group of people with whom they would be working. They determined what questions, if any, they had about their partners.

5) Students from the previous year’s projects were asked to speak about their experiences. Speakers from the nursing home and day care center were invited to discuss the interests and needs of the senior citizens and small children.

6) The students in each of the groups worked together to plan activities for the outreach sites. As they became more familiar with their sites and their partners, they developed more creative and insightful activities.

STEP TWO: ACTION

1) Students visited their service site on the same day each month throughout the school year. Students either walked or rode the bus to their site, depending on its location. Teachers served as facilitators at the service sites.

2) Students planned different activities to do with their partners each month such as reading and making crafts. (NOTE: The teachers reported that students who had not previously shown leadership skills became leaders when planning and implementing activities at the outreach sites.)

3) After several visits the students decided to write and illustrate a book, with the partners as main characters. Students spent considerable time drafting, revising, and finishing their books which were presented to their partners at the final visit. (NOTE: The language arts teacher reported that a significant aspect of this book project is that it motivated students who had not completed written pieces all year to write the stories for their partners.)

STEP THREE: REFLECTION/CELEBRATION

1) After each visit, the teachers led a reflection session in which students answered three questions about their experiences: (1) What happened? (2) What can we infer from our experience? and (3) Now what/what should we do the next time we visit?

2) The teachers and administrators at each of the sites continually praised the students for their work. When appropriate, suggestions were made for improvement. The administrative staff at all three outreach sites requested a similar partnership during the next school year.

3) Students celebrated their last visit with their partners as follows: The nursing home hosted a pizza party, the kindergarten students had a picnic, and the daycare children went to the middle school for an ice cream party. The books the students had made were presented to their partners during this final visit.

4) The students decided to write letters to their upcoming seventh grade teachers requesting that their service-learning projects be continued in seventh grade.
While structured reflection is a vital form of project assessment, other evaluative measures should be used in assessing a project.

Certainly, since student learning is the critical element in any service project, data related to what students have learned must be compiled. Such data can include the results of pretests and post tests; the examination of classroom academic, conduct, and attendance reports during the period of the service activity; and teacher observations and comments. In addition, journal writings and other reflection materials can provide insight to student learnings. Other evaluative instruments can measure demographic and other numerical data: hours of service, number of recipients served, and site records of student activity.

The following is a pre and post survey instrument developed by the Jefferson County Public Schools Volunteer Talent Center.
Service-Learning Survey
Grades Seven Through Twelve

Please circle the response that best describes your thought or feeling about each statement. Circle only one choice for each.

General Questions

1. I can make contributions to my community that will help make it a better place in which to live.
2. Helping people in need is important to me.
3. My participation in service learning makes a difference in the world.
4. I learn about community problems by participating in service-learning projects.
5. My work in service-learning projects helps increase my knowledge about my community and those who live in it.
6. Participation in community-service projects gives me a good feeling about myself.
7. I have a responsibility to my community.
8. I am interested in learning about the people, places, and needs in my community.
9. I like to volunteer for different types of community-service experiences.
10. Community-service projects allow me to use what I learn in school in meaningful and creative ways.
11. Adults value what people my age have to offer.
12. Schools should include service-learning opportunities as part of their curriculum offerings.

Name: ____________________________________________
I.D. Number: ______________________________________
Kentucky's Learning Goals and Academic Expectations

The centerpiece of Kentucky's education and reform effort is its vision of what students should know and be able to do as a result of their school experience. Every aspect of the reform movement is designed to promote student attainment of these goals and to measure our progress in helping them do so.

Assumption underlying KERA

*All students are capable of learning.*

The expectations for students are set forth as the six Learning Goals of KERA. These goals led to the development of 57 Academic Expectations that characterize student achievement of the goals. All Kentucky students are expected to achieve the goals and outcomes.

GOAL 1:
Students are able to use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives.

1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.

1.2 Students make sense of the variety of materials they read.

1.3 Students make sense of the various things they observe.

1.4 Students make sense of the various messages to which they listen.

1.5-1.9 Students use mathematical ideas and procedures to communicate, reason, and solve problems.

1.10 Students organize information through development and use of classification rules and systems.

1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.

1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.

1.13 Students make sense of ideas and communicate ideas with the visual arts.

1.14 Students make sense of ideas and communicate ideas with music.

1.15 Students make sense of ideas and communicate ideas with movement.

1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.

GOAL 2:
Students shall develop their abilities to apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, practical living studies, and vocational studies to what they will encounter throughout their lives.

SCIENCE

2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems.

2.2 Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events.
Students identify and analyze systems and the ways their components work together or affect each other.

Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed.

Students understand that under certain conditions nature tends to remain the same or move toward a balance.

Students understand how living and nonliving things change over time and the factors that influence the changes.

MATHEMATICS

Students understand number concepts and use numbers appropriately and accurately.

Students understand various mathematical procedures and use them appropriately and accurately.

Students understand space and dimensionality concepts and use them appropriately and accurately.

Students understand measurement concepts and use measurements appropriately and accurately.

Students understand mathematical change concepts and use them appropriately and accurately.

Students understand mathematical structure concepts, including the properties and logic of various mathematical systems.

Students understand and appropriately use statistics and probability.

SOCIAL STUDIES

Students understand the democratic principles of justice, equality, responsibility, and freedom and apply them to real-life situations.

Students can accurately describe various forms of government and analyze issues that relate to the rights and responsibilities of citizens in a democracy.

Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.

Students interact effectively and work cooperatively with the many ethnic and cultural groups of our nation and world.

Students understand economic principles and are able to make economic decisions that have consequences in daily living.

Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.

Students understand, analyze, and interpret historical events, conditions, trends, and issues to develop historical perspective.

(Incorporated into 2.16)

ARTS AND HUMANITIES

Students create works of art and make presentations to convey a point of view.

Students analyze their own and others' artistic products and performances using accepted standards.

Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.
2.25 In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.

2.26 Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.

2.27 Students recognize and understand the similarities and differences among languages.

2.28 Students understand and communicate in a second language.

PRACTICAL LIVING

2.29 Students demonstrate skills that promote individual well-being and healthy family relationships.

2.30 Students evaluate consumer products and services and make effective consumer decisions.

2.31 Students demonstrate the knowledge and skills they need to remain physically healthy and to accept responsibility for their own physical well-being.

2.32 Students demonstrate strategies for becoming and remaining mentally and emotionally healthy.

2.33 Students demonstrate the skills to evaluate and use services and resources available in their community.

2.34 Students perform physical movement skills effectively in a variety of settings.

2.35 Students demonstrate knowledge and skills that promote physical activity and involvement in physical activity throughout their lives.

VOCATIONAL STUDIES

2.36 Students use strategies for choosing and preparing for a career.

2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.

2.38 Students demonstrate skills such as interviewing, writing resumes, and completing applications that are needed to be accepted into college or other postsecondary training or to get a job.

GOAL 3:
Students shall develop their ability to become self-sufficient individuals.

GOAL 4:
Students shall develop their abilities to become responsible members of a family, work group, or community, including demonstrating effectiveness in a community service.

*Note: Goals 3 and 4 are included in Kentucky statute as learning goals, but they are not included in the state's academic assessment program.

GOAL 5:
Students shall develop their abilities to think and solve problems in school situations and in a variety of situations they will encounter in life.

5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.

5.2 Students use creative thinking skills to develop or invent novel, constructive ideas or products.

5.3 Students organize information to develop or change their understanding of a concept.

5.4 Students use a decision-making process to make informed decisions among options.
5.5 Students use problem-solving processes to develop solutions to relatively complex problems.

GOAL 6:
Students shall develop their abilities to connect and integrate experiences and new knowledge from all subject matter fields with what they have previously learned and build on past learning experiences to acquire new information through various media sources.

6.1 Students connect knowledge and experiences from different subject areas.
6.2 Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.
6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.
SERVICE-LEARNING WEB SITES

The following are but a few of the web sites available that contain service-learning information:

- National Youth Leadership Council; [www.nylc.org](http://www.nylc.org)
- National Service-Learning Cooperative Clearinghouse; [www.clark.net/pub/pwalker/home.html](http://www.clark.net/pub/pwalker/home.html)
- Learn and Serve America; [www.cns.gov/learn.html](http://www.cns.gov/learn.html)
- The Council of Chief State School Officers; [www.cess.org](http://www.cess.org)
- Education Commission of the States; [www.ess.org](http://www.ess.org)
- National Youth Development Information Center; [www.nydic.org](http://www.nydic.org)
- SERVnet; [www.servnet.org](http://www.servnet.org)
- Nonprofit Prophets; [www.kn.pachell.com/wired/prophets](http://www.kn.pachell.com/wired/prophets)
- National 4-H Council; [www.4h council.edu](http://www.4h council.edu)
- Youth Link; [www.youthlink.org](http://www.youthlink.org)
- Citizenship and Service Education; [www.scils.rutgers.edu/case/case/html](http://www.scils.rutgers.edu/case/case/html)
- The Big Dummy's Guide to Service-Learning; [www.fiu.edu/~time4chg/Library/bigdummy.html](http://www.fiu.edu/~time4chg/Library/bigdummy.html)

SERVICE-LEARNING TRAINING OPPORTUNITIES

In addition to an annual Service-Learning Summer Institute held in a state park each July, the department has available 3 hour and 6 hour in-service training workshops for local districts on the implementation of service-learning as an instructional strategy. For more information or to schedule a workshop, contact the Division of Student, Family, and Community Support Services, 502/564-3678.