ACTIVITY AND STANDARDS MATCH

ACTIVITY: Initiate a school or community recycling and/or clean-up program.

Standards Match – Math:

Number Sense (NS)

1.2 Interpret percents as a part of a hundred. Find decimal and percent equivalents for common fractions and explain why they represent the same value. Compute a given percent of a whole number.

2.1 Add, subtract, multiply, and divide with decimals. Add with negative integers. Subtract positive integers from negative integers. Verify the reasonableness of the results.

2.5 Compute and perform simple multiplication and division of fractions and apply these procedures to solving problems.

SDAP

1.1 Know the concepts of mean, median, and mode; compute and compare simple examples to show that they may differ.

1.2 Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets.

1.3 Use fractions and percentages to compare data sets of different sizes.

Mathematical Reasoning (MR)

1.0 Students make decisions about how to approach problems. Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.

2.0 Students use strategies, skills, and concepts in finding solutions:
2.1 Use estimation to verify the reasonableness of calculated results.

2.3 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models to explain mathematical reasoning.
2.6 Make precise calculations and check the validity of the results from the context of the problem.
3.3 Develop generalizations of the results obtained and apply them in other circumstances.

Standards Match – English Language Arts

Writing Application (WA)

2.3 Write research reports about important ideas, issues, or events by using the following guidelines:

a. Frame questions that direct the investigation.

b. Establish a controlling idea or topic.

c. Develop the topic with simple facts, details, examples, and explanations.

2.4 Write persuasive letters or compositions:
- a. State a clear position in support of a proposal.
- b. Support a position with relevant evidence.
- c. Follow a simple organizational pattern.
- d. Address reader concerns.

Speaking Applications (SA)

Students deliver well organized, formal presentations employing traditional rhetorical strategies (e.g., narration, exposition, persuasion, description). Student speaking demonstrates a command of standard American English and the organizations and delivery strategies outlined in Listening and Speaking Standard 1.0

Using the speaking strategies of grade 5 outlined in Listening and speaking Standards, students:

2.1 Deliver narrative presentations:
- a. Establish a situation, plot, point of view, and setting with descriptive words and phrases.
- b. Show, rather than tell, the listener what happens.

2.2 Deliver informative presentations about an important idea, issue, or event by the following means:
- a. Frame questions to direct the investigation.
- b. Establish a controlling idea or topic.
- c. Develop the topic with simple facts, details, examples, and explanations.

2.3 Deliver oral responses to literature:
- a. Summarize significant events and details.
- b. Articulate an understanding of several ideas or images communicated by the literary work.
- c. Use examples or textual evidence from the work to support conclusions.

Listening and Speaking (LS)

1.0 Listening and Speaking Strategies

Students deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. They evaluate the content of oral communication.

Comprehension

1.1 Ask questions that seek information not already discussed.

Organization and Delivery of Oral Communication

1.4 Select a focus, organizational structure, and point of view for an oral presentation.
1.5 Clarify and support spoken ideas with evidence and examples.
1.6 Engage the audience with appropriate verbal cues, facial expressions, and gestures.

Research and Technology

1.3 Use organizational features of printed text (e.g., citations, end notes, bibliographic references) to locate relevant information.
1.4 Create simple documents by using electronic media and employing organizational features (e.g., passwords, entry and pull-down menus, word searches, the thesaurus, spell checks).
1.5 Use a thesaurus to identify alternative word choices and meanings.

Evaluation and Revision

1.6 Edit and revise manuscripts to improve the meaning and focus of writing by adding, deleting, consolidating, clarifying, and rearranging words and sentences.

Standards Match – Science

Physical Science

1. Elements and their combinations account for all the varied types of matter in the world. As a basis for understanding this concept:

c. *Students know* metals have properties in common such as high electrical and thermal conductivity. Some metals, such as aluminum (Al), iron (Fe), nickel (Ni), copper (Cu), silver (Ag), and gold (Au), are pure elements; others, such as steel and brass, are composed of a combination of elemental metals

Earth Science

3. Water on Earth moves between the oceans and land through the processes of evaporation and condensation. As a basis for understanding this concept:

a. *Students know* that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.
b. *Students know* the origin of the water used by their local communities.

Investigation and Experimentation

6. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:

a. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.
b. Develop a testable question.
c. Plan and conduct a simple investigation based on student-developed questions and write instructions others can follow to carry out the procedure.
d. Identify the dependent and controlled variables in an investigation.
e. Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.

f. Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.
g. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.
h. Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.
i. Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.