

**Florida Project Learning Tree Sunshine State Standards linkages for grades 3-5, 6-8, and 9-12: SOIL STORIES (#70; pp. 252-257 in old edition *PreK-8 Activity Guide*; pp. 297-302 new edition)**

**Subject Area: Language Arts**

**Strand: Writing**

**Standard 2:** The student writes to communicate ideas and information effectively.

- **Grades 3-5** – Benchmark: writes notes, comments, and observations that reflect comprehension of content and experiences from a variety of media. [LA.B.2.2.1]
- **Grades 6-8** – Benchmark: writes text, notes, outlines, comments, and observations that demonstrate comprehension of content and experiences from a variety of media. [LA.B.2.3.1]
- **Grades 9-12** – Benchmark: writes text, notes, outlines, comments, and observations that demonstrate comprehension and synthesis of content, processes, and experiences from a variety of media. [LA.B.2.4.1]

**Strand: Listening, Viewing, and Speaking**

**Standard 3:** The student uses speaking strategies effectively.

- **Grades 3-5** – Benchmark: speaks for specific occasions, audiences, and purposes, including conversations, discussions, projects, and informational or imaginative presentations. [LA.C.3.2.3]
- **Grades 6-8** – Benchmark: speaks for various occasions, audiences, and purposes, including conversations, discussions, projects, and informational, persuasive, or technical presentations. [LA.C.3.3.3]
- **Grades 9-12** – Benchmark: uses details, illustrations, analogies, and visual aids to make oral presentations that inform, persuade, or entertain. [LA.C.3.4.3]

**Subject Area: Mathematics**

**Strand: Measurement**

**Standard 3:** The student estimates measurements in real-world problem situations.

- **Grades 3-5** – Benchmark: solves real-world problems involving estimates of measurements, including length, time, weight, temperature, money, perimeter, area, and volume. [MA.B.3.2.1]
- **Grades 6-8** – Benchmark: solves real-world and mathematical problems involving estimates of measurements including length, time, weight/mass, temperature, money, perimeter, area, and volume, in either customary or metric units. [MA.B.3.3.1]

- **Grades 9-12** – Benchmark: solves real-world and mathematical problems involving estimates of measurements, including length, time, weight/mass, temperature, money, perimeter, area, and volume, and estimates the effects of measurement errors on calculations. [MA.B.3.4.1]

**Standard 4:** The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations.

- **Grades 3-5** – Benchmark: selects and uses appropriate instruments and technology, including scales, rulers, thermometers, measuring cups, protractors, and gauges, to measure in real-world situations. [MA.B.4.2.2]
- **Grades 6-8** – Benchmark: selects and uses appropriate instruments, technology, and techniques to measure quantities in order to achieve specified degrees of accuracy in a problem situation. [MA.B.4.3.2]
- **Grades 9-12** – Benchmark: selects and uses appropriate instruments, technology, and techniques to measure quantities in order to achieve specified degrees of accuracy in a problem situation. [MA.B.4.4.2]

### **Strand: Data Analysis and Probability**

**Standard 3:** The student uses statistical methods to make inferences and valid arguments about real-world situations.

- **Grades 3-5** – Benchmark: designs experiments to answer class or personal questions, collects information, and interprets the results using statistics (range, mean, median, and mode) and pictographs, charts, bar graphs, circle graphs, and line graphs. [MA.E.3.2.1]
- **Grades 6-8** – Benchmark: formulates hypotheses, designs experiments, collects and interprets data, and evaluates hypotheses by making inferences and drawing conclusions based on statistics (range, mean, median, and mode) and tables, graphs, and charts. [MA.E.3.3.1]
- **Grades 9-12** – Benchmark: designs and performs real-world statistical experiments that involve more than one variable, then analyzes results and reports findings. [MA.E.3.4.1]

## **Subject Area: Science**

### **Strand: The Nature of Matter**

**Standard 1:** The student understands that all matter has observable, measurable properties.

- **Grades 3-5** – Benchmark: determines that the properties of materials (e.g., density and volume) can be compared and measured (e.g., using rulers, balances, and thermometers). [SC.A.1.2.1]
- **Grades 6-8** – Benchmark: identifies various ways in which substances differ (e.g., mass, volume, shape, density, texture, and reaction to temperature and light). [SC.A.1.3.1]
- **Grades 9-12:** No applicable benchmark

### **Strand: Processes that Shape the Earth**

**Standard 1:** The student recognizes that processes in the lithosphere, atmosphere, hydrosphere, and biosphere interact to shape the Earth.

- **Grades 3-5** – Benchmark: knows that larger rocks can be broken down into smaller rocks, which in turn can be broken down to combine with organic material to form soil. [SC.D.1.2.1]
- **Grades 3-5** – Benchmark: knows that the surface of the Earth is in a continuous state of change as waves, weather, and shifts of the land constantly change and produce many new features. [SC.D.1.2.4]
- **Grades 6-8** – Benchmark: knows that mechanical and chemical activities shape and reshape the Earth's land surface by eroding rock and soil in some areas and depositing them in other areas, sometimes in seasonal layers. [SC.D.1.3.1]
- **Grades 9-12:** No applicable benchmark

### **Strand: How Living Things Interact with Their Environment**

**Standard 1:** The student understands the competitive, interdependent, cyclic nature of living things in the environment.

- **Grades 3-5** – Benchmark: knows that variations in light, water, temperature, and soil content are largely responsible for the existence of different kinds of organisms and population densities in an ecosystem. [SC.G.1.2.7]
- **Grades 6-8 and Grades 9-12:** No applicable benchmarks

### **Strand: The Nature of Science**

**Standard 1:** The student uses the scientific processes and habits of mind to solve problems.

- **Grades 3-5** – Benchmark: knows that a successful method to explore the natural world is to observe and record, and then analyze and communicate the results. [SC.H.1.2.2]
- **Grades 3-5** – Benchmark: knows that to compare and contrast observations and results is an essential skill in science. [SC.H.1.2.4]
- **Grades 3-5** – Benchmark: knows that a model of something is different from the real thing, but can be used to learn something about the real thing. [SC.H.1.2.5]
- **Grades 6-8 and Grades 9-12:** No applicable benchmarks

## **Subject Area: Social Studies**

### **Strand: People, Places, and Environments (Geography)**

**Standard 2:** The student understands the interactions of people and the physical environment.

- **Grades 3-5** – Benchmark: understands how the physical environment supports and constrains human activities. [SS.B.2.2.2]
- **Grades 6-8 and Grades 9-12:** No applicable benchmarks