

Elizabethtown Area School District

Grade 1 Science

Course Number:N/A

Length of Course: School year

Grade Level:First

Total Clock Hours: 1 year

Length of Period: 30 minutes

Date Written: October 2006

Periods per Week/Cycle: 2 per week (30 min./day)

Written By: Science Committee

Credits (if app):N/A

Course Description:

Science is taught as a combination of science units, themes and integrated units. Units in the first grade science curriculum include; soil, pebbles, sand and silt, basic needs and Earth resources, basic needs and diversity of living things, and properties of matter.

I. Overall Course/Grade Level Standards

Students will KNOW and be able TO DO the following as a result of taking this course.

- A) Group and identify similarities and differences of different types of soil.
- B) Identify and compare the different types of soil in Pennsylvania.
- C) Identify and compare different characteristics/properties of soil.
- D) Identify a variety of earth's resources.
- E) List available types of resources.
- F) Explain how living things use air and water resources.
- G) Describe how people affect the environment in positive and negative ways.
- H) Explain how living things affect the environment in positive and negative ways.
- I) List how living things use plants and trees.
- J) Explain how living things use rocks and minerals.
- K) List the basic needs of living things.
- L) Identify how living things are dependent on nonliving things.
- M) Explain the habitat that is necessary to the survival and reproduction of living things.
- N) Describe why is it important to learn the dependence of living things on nonliving things.
- O) Discuss the external similarities and differences that exist between living things.
- P) Identify the influences that the environment has on the basic needs of living things.
- Q) Describe types of environments that support the life of living things.
- R) List the physical properties that are observable about matter.
- S) List the tools you need to measure physical property of matter.
- T) Explain how to use tools to measure physical properties of matter.
- U) Explain the physical characteristics that help us to group matter.
- V) Identify a solid, liquid and gas.

II. Content

Major Areas of Study

List all units of study below:

Unit	Estimated Time	Materials
1. Soil: Pebbles, Sand and Silt	5 weeks	Soil/rocks Resources Trade books
2. Basic Needs and Earth Resources	7 weeks	Trade books Samples of recyclables Observational tools
3. Basic Needs and Diversity of Living Things	10 weeks	Nonfiction books Observational Tools Samples of living things
4. Properties of Matter	6 weeks	Trade books Observational tools Samples of solids liquids and gases

III. Course Assessments

Check types of assessments to be used in the teaching of the course and provide examples of each type.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Objective Tests/Quizzes | <input checked="" type="checkbox"/> Response Journals |
| <input type="checkbox"/> Constructed Responses | <input checked="" type="checkbox"/> Logs |
| <input type="checkbox"/> Essays | <input type="checkbox"/> Computer Simulations |
| <input type="checkbox"/> Reports | <input type="checkbox"/> Research Papers |
| <input checked="" type="checkbox"/> Projects | <input checked="" type="checkbox"/> Class Participation |
| <input type="checkbox"/> Portfolios | <input type="checkbox"/> Note Taking |
| <input type="checkbox"/> Presentations | <input checked="" type="checkbox"/> Daily Assignments |
| <input checked="" type="checkbox"/> Performance Tasks | <input type="checkbox"/> Writing Samples |

Provide copies of common assessments that will be utilized for all students taking this course. Overall course/grade level standards will be measured by a common course assessment. Unit objectives will be measured on an ongoing basis as needed by the classroom teacher to assess learning and plan for instruction. List common assessments below and recommend date/time frame for administration (at least quarterly). **To be determined**

Name of Common Assessment	When given?
1. Common assessments will be created at a later date.	
2.	
3.	

Expected Levels of Achievement

Current grading scale

90%-100% Advanced
80%-89% Proficient
70%-79% Basic

PA Proficiency Levels
Advanced Proficient
Basic Below Basic

Name of Unit: Soil: Pebbles, Sand, and Silt

Essential Question: What can we learn from soil?

Unit Objectives/Key Question	Priority	Aligned to Course Standard	Aligned to PA Standard
1. How can soils be grouped?	E	A	3.5.4B 3.5.4A
2. What are the similarities and differences of different types of soil?	E	C	3.5.4B 3.5.4A
3. What are the different types of soil?	I	A, B, C	3.5.4B 3.2.4B
4. What types of soil are found in Pennsylvania?	I	B	3.5.4B 3.2.4B
5. What are the different characteristics/properties of soil?	E	C	3.2.4B 3.5.4A
6. How can soil types be grouped?	E	A	3.2.4B 3.5.4A

Name of Unit: Basic Needs and Earth Resources

Essential Question: What basic needs of living things are met through the Earth's resources?

Unit Objectives/Key Question	Priority	Aligned to Course Standard	Aligned to PA Standard
1. What is an Earth resource?	E	D, F	3.5.4B 4.3.4A 4.8.4D
2. What types of resources are available?	E	D, F	3.5.4B 4.3.4A 4.8.4D
3. How do living things use air and water resources?	E	F	3.5.4B 4.3.4A 4.6.4A 4.8.4C 4.8.4D
4. How do living things use plants and trees?	E	I	3.5.4B 4.3.4A 4.6.4A 4.8.4C 4.8.4D
5. How do living things use rocks and minerals?	I	J	3.5.4B 4.3.4A 4.6.4A 4.8.4C 4.8.4D
6. How do people affect the environment in positive and negative ways?	E	G	4.5.4A 4.8.4C
7. How do other living things affect the environment in positive and negative ways?	I	H	4.5.4A 4.8.4C

Name of Unit: Basic Needs and Diversity of Living Things

Essential Question: What are the basic needs of living things?

Unit Objectives/Key Question	Priority	Aligned to Course Standard	Aligned to PA Standard
1. What are the basic needs of living things?	E	K	3.3.4A 4.1.4C 4.1.4D 4.2.4A 4.3.4A 4.3.4C 4.6.4A 4.8.4D
2. How are living things dependent on nonliving things?	E	L	3.3.4A 4.1.4C 4.1.4D 4.2.4A 4.3.4A 4.3.4C 4.6.4A 4.8.4D
3. How is habitat necessary to the survival and reproduction of living things?	E	M	3.3.4A 4.1.4C 4.1.4D 4.2.4A 4.3.4A 4.3.4C 4.6.4A 4.8.4D
4. Why is it important to learn the dependence of living things on nonliving things?	E	N	3.3.4A 4.1.4C 4.1.4D 4.2.4A 4.3.4A 4.3.4C

			4.6.4A 4.8.4D
5. What are the external similarities and differences that exist between living things?	I	O	3.3.4A 3.3.4B 3.3.4C 3.3.4D 4.1.4C 4.1.4D 4.7.4A 4.7.4B
6. What influence does the environment have on the basic needs of living things?	E	P	3.3.4A 3.3.4B 3.3.4C 3.3.4D 4.1.4C 4.1.4D 4.7.4A 4.7.4B
7. What types of environments support the life of living things?	E	Q	3.3.4A 3.3.4B 3.3.4C 3.3.4D 4.1.4C 4.1.4D 4.7.4A 4.7.4B

Name of Unit: Properties of Matter

Essential Question: How is matter grouped?

Unit Objectives/Key Question	Priority	Aligned to Course Standard	Aligned to PA Standard
1. What physical properties can you observe about matter?	E	R	3.4.4A
2. What tools do you need to measure physical properties of matter?	E	S	3.7.4B
3. How do we use tools to measure physical properties of matter?	E	T	3.7.4B
4. How can physical characteristics help us to group matter?	E	U	3.7.4B
5. What is a solid, liquid or gas?	E	V	3.4.4A