

*Elizabethtown Area School District*

**Kindergarten Science**

Course Number:

Length of Course: School Year

Grade Level: Kindergarten

Total Clock Hours:

Length of Period: 20 minutes / per week

Date Written: October 2006

Periods per Week/Cycle: on going

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Course Description:

Science is taught as themes that are integrated into other curricula areas with the use of literature books and science materials. Units in the Kindergarten science curriculum include; patterns of nature, food from the farm, observing physical characteristics of living and non-living things, and how things move.

## **I. Overall Course/Grade Level Standards**

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

- A) Describe the patterns in nature by observing weather, seasons and objects in the sky.
- B) Identify types of farms and the food that is produced from farms.
- C) Describe the purpose of farms and the role that they have in our daily lives.
- D) Identify the five senses and the body part that is used for each sense.
- E) Identify characteristics of living things.
- F) Describe a life cycle of living things.
- G) Recognize that changes develop over time.
- H) Identify characteristics of non-living things.
- I) Identify types of movement.
- J) Observe and experience different types of motion.
- K) Explore the use of basic tools, simple materials and techniques to solve problems.

## II. Content

### Major Areas of Study

List all units of study below:

Unit	Estimated Time	Materials
1. Patterns in Nature	6 days	
2. Food from the Farm	8 days	
3. Observing Physical Characteristics of Living Things	11 days	
4. Observing Physical Characteristics of Non-living Things	10 days	
5. How Things Move	5 days	

### 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 type="checkbox"/> Response Journals               |
| <input checked="" type="checkbox"/> Constructed Responses   | <input type="checkbox"/> Logs                            |
| <input type="checkbox"/> Essays                             | <input checked="" 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 checked="" type="checkbox"/> Presentations           | <input checked="" type="checkbox"/> Daily Assignments    |
| <input type="checkbox"/> Performance Tasks                  | <input checked="" type="checkbox"/> Writing Samples      |
| <input checked="" type="checkbox"/> Small Group Work        |  |

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).

Name of Common Assessment	When given?
1. Illustrate different types of farms.	Summarizing Strategy
2. Design a pattern in nature with computer software.	Summarizing Strategy
3. Grow a plant and record plant observations.	Activating Strategy and throughout unit
4. Sort non-living objects based on characteristics.	Summarizing Strategy
5. Act out forces of motion.	Summarizing Strategy

## IV. Expected levels of achievement

### Current grading scale

8 Advanced  
6-7 Proficient  
2-5 Basic level

PA Proficiency Levels
Advanced Proficient
Basic Below Basic

The following scoring documents have been developed for this course:

## Types of Farms

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Student Name: \_\_\_\_\_

CATEGORY	4 Advanced	3 Proficient	2 Basic	1 Basic
Content - Accuracy	4-5 accurate farms are evident.	3 accurate farms are evident.	1 - 2 accurate farms are evident.	No accurate farms are evident.
Adds details for each farm	1 - 2 details shown for each farm that were drawn.	1 - 2 details shown for 3 to 4 of the farms that were drawn.	1 - 2 details shown for 1 to 2 of the farms that were drawn.	No details were drawn for any of the farms.

### Current grading scale

8 Advanced  
6-7 Proficient  
2-5 Basic level

## Grow a plant and record plant observations.

Student Name: \_\_\_\_\_

CATEGORY	4 Advanced	3 Proficient	2 Basic	1 Basic
Seed Planting	Student follows all 4 steps accurately to plant the seed (soil, hole, seed, water).	Student follows 3 steps accurately to plant the seed (soil, hole, seed, water).	Student follows 2 steps accurately to plant the seed (soil, hole, seed, water).	Student follows 0 or 1 steps accurately to plant the seed (soil, hole, seed, water).
Observation Recording	Student draws 4 accurate observations of plant growth throughout the unit.	Student draws 3 accurate observations of plant growth throughout the unit.	Student draws 2 accurate observations of plant growth throughout the unit.	Student draws 0-1 accurate observations of plant growth throughout the unit.

### Current grading scale

8 Advanced  
6-7 Proficient  
2-5 Basic level

## Illustrate a Pattern in Nature

Student Name: \_\_\_\_\_

CATEGORY	4 Advanced	3 Proficient	2 Basic	1 Basic
Content	The student illustrated a complete pattern in nature.	The student illustrated a complete pattern, but not from nature.	The student illustrated an incomplete pattern.	The student did not illustrate a pattern.
Technology	The student uses 3 or more tools in Kid Pix software.	The student uses 2 tools in Kid Pix software.	The student uses 1 tool in Kid Pix software.	The student does not use any tools in Kid Pix software.

### Current grading scale

8 Advanced  
6-7 Proficient  
2-5 Basic level



## Sorting of Non-living Objects

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Student Name: \_\_\_\_\_

CATEGORY	4 Advanced	3 Proficient	2 Basic	1 Basic
Sorting of non-living objects based on similar characteristics (color, size, shape, name identification)	Students will sort non-living objects into 4 categories.	Students will sort non-living objects into 3 categories.	Students will sort non-living objects into 2 categories.	Students will sort non-living objects into 1 category.
Oral presentation	Students will accurately describe reasoning for all 4 sorted groups.	Students will accurately describe reasoning for 3 sorted groups.	Students will accurately describe reasoning for 2 sorted groups.	Students will accurately describe reasoning for 1 sorted group.

### Current grading scale

8 Advanced  
6-7 Proficient  
2-5 Basic level

## Acting out Forces of Motion

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Student Name: \_\_\_\_\_

CATEGORY	4 Advanced	3 Proficient	2 Basic	1 Basic
Content	The student accurately acts out 5 forces (push, pull, gravity, swing and spin).	The student accurately acts out 3-4 forces.	The student accurately acts out 1-2 forces.	The student does not accurately act out any forces.
Comprehension	The student explained one way each of the 5 forces can be used in an everyday life situation.	The student explained one way 3-4 forces can be used in an everyday life situation.	The student explained one way 2-1 forces can be used in an everyday life situation.	The student did not explain how any of the 5 forces could be used in an everyday life situation.

### Current grading scale

8 Advanced = Above Level  
 6-7 Proficient = On-Level  
 2-5 Basic level = Below Level