

Effective Date: 2008-2009

Hamburg Area School District

Name of Course: Kindergarten Science

Department: Science

Grade Level: K

Instructional Time: 1 year

Length of Course:

Period Per Cycle:

Length of Period:

Texts and Resources:

Science Readers

Harcourt Science books

Assessments:

Projects

Teacher made quizzes/tests

**Hamburg Area School District
Course Plan
Elementary Science Curriculum**

Course Name: Kindergarten Science

Unit: Life Science- Plants

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What are some kinds of plants?	<ul style="list-style-type: none"> Identify tress, grass, vines, and flowers as plants. Observe and describe similarities and differences between plants. 	<ul style="list-style-type: none"> K. 3.1. C K. 3.2. A, B K. 3.3. A
What are the parts of a plant?	<ul style="list-style-type: none"> Recognize that roots, stems, leaves, and flowers are some parts of plants. Observe and record the parts of a plant. 	<ul style="list-style-type: none"> K. 3.1. A, C K. 3.2. A, B, C K. 3.3. F, G
How do plants grow?	<ul style="list-style-type: none"> Recognize that seeds sprout and grow into plants similar to the adult plant. Observe and record the growth of seeds. 	<ul style="list-style-type: none"> 3.1. D, F, J K. 3.2. A, B, C K. 3.3. B, J, K
Where are a plant's seeds?	<ul style="list-style-type: none"> Recognize that a plant's seeds are found in it's fruit or flowers. Gather and record data about plant seeds. 	<ul style="list-style-type: none"> K 3.1. B, C K. 3.2. A, B, C
How are leaves the same and different?	<ul style="list-style-type: none"> Recognize that leaves have similarities and differences. Observe and sort leaves using one attribute. 	<ul style="list-style-type: none"> K. 3.1. B, C K. 3.2. A, B, C K. 3.3. A, C

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Course Plan
Elementary Science Curriculum**

Course Name: Kindergarten Science

Unit: Life Science- Plants

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
How do people use plants?	<ul style="list-style-type: none">• Recognize that people use plants to make products such as food and clothing.• Classify products of plants.	<ul style="list-style-type: none">• K. 3.2. A, C

**Hamburg Area School District
Course Plan
Elementary Science Curriculum**

Course Name: Kindergarten Science

Unit: Earth Science- Weather

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
How can we keep track of weather?	<ul style="list-style-type: none"> Recognize kinds of weather and weather tools. Recognize how weather affects earth and it's inhabitants. Observe and record weather conditions. 	<ul style="list-style-type: none"> K. 3.2. A, B, C K. 3.5. C, D, E, F, G, H K. 3.6. A
What are the seasons?	<ul style="list-style-type: none"> Recognize that changes in weather occur over seasons, affecting Earth and it's inhabitants. Order the seasons. 	<ul style="list-style-type: none"> K. 3.1. J, K K. 3.2. A, C K. 3.5. C, D, H
What is spring?	<ul style="list-style-type: none"> Identify characteristics of spring. Tell how the weather in spring affects people, plants, and animals. Use tools to measure and record weather data. 	<ul style="list-style-type: none"> K. 3.1. J, K K. 3.2. A, B, C K. 3.5. C, D, F, H K. 3.7. C
What is summer?	<ul style="list-style-type: none"> Identify characteristics of summer. Tell how the weather in summer affects people, plants, and animals. Observe the sun's heating power. 	<ul style="list-style-type: none"> K. 3.1. J, K K. 3.2. A, B, C K. 3.5. C, D, H
What is fall?	<ul style="list-style-type: none"> Identify characteristics of fall. Tell how the weather in fall affects people, plants, and animals. Measure wind strength. 	<ul style="list-style-type: none"> K. 3.1. J, K K. 3.2. A, B, C K. 3.5. C, D, H K. 3.7. C

**Hamburg Area School District
Course Plan
Elementary Science Curriculum**

Course Name: Kindergarten Science
Unit: Earth Science- Weather

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What is winter?	<ul style="list-style-type: none">• Identify characteristics of winter.• Tell how the weather in winter affects people, plants, and animals.• Measure temperature.	<ul style="list-style-type: none">• K. 3.1. J, K• K. 3.2. A, B, C• K. 3.5. C, D, F, H• K. 3.7. C
How can I predict the weather?	<ul style="list-style-type: none">• Recognize seasonal changes throughout the year. (different types of precipitation, variations in wind and sky conditions, day/ night changes)	<ul style="list-style-type: none">• K. 3.1. J, K• K. 3.2. A, C• K. 3.5. C, D, E

**Hamburg Area School District
Course Plan
Elementary Science Curriculum**

Course Name: Kindergarten Science

Unit: Physical Science- Water

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
How does water move?	<ul style="list-style-type: none"> Recognize the ways water flows and takes the shape of it's container. Observe how water moves. 	<ul style="list-style-type: none"> K. 3.1. C K. 3.2. A, B, C K. 3.4. I
What is water like?	<ul style="list-style-type: none"> Recognize and describe the surface tension of water as it reacts to other objects. 	<ul style="list-style-type: none"> K. 3.2. A, C
Which objects sink and which objects float?	<ul style="list-style-type: none"> Recognize that when placed in water, some objects sink and some objects float. Plan and conduct a simple investigation to find out what sinks and what floats. 	<ul style="list-style-type: none"> K. 3.1. C K. 3.2. A, B, C
How does water change?	<ul style="list-style-type: none"> Recognize that water can be a liquid or solid and can be made to change back and forth. Communicate observations of water in liquid and solid forms. 	<ul style="list-style-type: none"> K. 3.1. J, M K. 3.2. A, B, C K. 3.4. B, C K. 3.5. K

Hamburg Area School District
Course Plan
Kindergarten Science

Course Name: Kindergarten Science

Unit: Life Science-Animals

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What are some kinds of animals?	<ul style="list-style-type: none"> Recognize that animals have various kinds of similarities and differences. Observe and sort animals by one attribute at a time. 	K.3.3.A K.3.3.C K.3.3.F K.3.3.G K.3.3.M
How do animals grow?	<ul style="list-style-type: none"> Recognize that animals grow, change and have basic needs. Observe and describe how animals grow and change. Sequence stages of growth. 	K.3.3.B K.3.3.I K.3.3.J K.3.3.K K.3.3.L
How can animals move?	<ul style="list-style-type: none"> Recognize ways in which animals move. Describe, compare and classify animals by the ways they move. 	K.3.3.A K.3.3.C K.3.3.F K.3.3.G K.3.3.M
How do body coverings help animals?	<ul style="list-style-type: none"> Recognize the various kinds of body coverings of animals and how each helps the animal. Observe and compare animals' body coverings. 	K.3.3.C K.3.3.D K.3.3.F K.3.3.G K.3.3.I K.3.3.M
What body parts help animals eat?	<ul style="list-style-type: none"> Recognize body parts that help animals get food. Describe and sort animals by body structures that help them eat, such as teeth and claws. 	K.3.3.C K.3.3.F K.3.3.G K.3.3.I

**Hamburg Area School District
Course Plan
Kindergarten Science**

Course Name: Kindergarten Science

Unit: Earth Science-Earth's Resources

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What makes up the Earth's land?	<ul style="list-style-type: none"> Recognize that mountains, valleys, hills and plains are different types of land. Compare the characteristics of landforms. 	K.3.2.D K.3.5.A
What can we observe about soil, sand and rocks?	<ul style="list-style-type: none"> Identify the physical properties of soil, sand and rocks. Observe and classify substances found in soil. 	K.3.2.C K.3.5.B
Where do we find water?	<ul style="list-style-type: none"> Recognize that water is found in lakes, rivers, streams and oceans. Observe how water flows among landforms. 	K.3.2.D K.3.5.I
Which of Earth's resources do we use to live?	<ul style="list-style-type: none"> Identify the resources of Earth that people use every day. Communicate how people, animals and plants use those resources in daily life. 	K.3.5.L K.3.5.H
How does the sky change?	<ul style="list-style-type: none"> Recognize differences in the sky during the day and night. Observe, record and describe day and night. 	K.3.1.D K.3.5.C

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Unit: Earth Science-Earth's Resources

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
How can we care for Earth's resources?	<ul style="list-style-type: none">• Recognize that people can care for Earth's resources.• Identify ways people can conserve and care for natural resources.	K.3.2.B K.3.2.C

**Hamburg Area School District
Course Plan
Kindergarten Science**

Course Name: Kindergarten Science

Unit: Physical Science- Matter and Energy

Time Line:

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What can we find out about objects?	<ul style="list-style-type: none"> Observe and describe common objects and their properties by using the five senses. Describe and compare objects in terms of properties such as shape and texture. 	K.3.2.C K.3.2.D K.3.4.E
How can we sort objects?	<ul style="list-style-type: none"> Recognize the properties or attributes of common objects. Sort common objects by one attribute. 	K.3.2.C K.3.4.E
How do we move objects?	<ul style="list-style-type: none"> Recognize that objects can be moved by a push or a pull. Sort objects by how they can be moved. 	K.3.4.E K.3.4.F K.3.4.I
Which objects do magnets move?	<ul style="list-style-type: none"> Recognize that magnets attract objects that contain iron or steel. Predict which objects magnets will and will not attract. 	K.3.2.E K.3.4.F
How can we use tools to make something?	<ul style="list-style-type: none"> Recognize that tools are useful to people and make work easier. Compare not using and using tools to make something. 	K.3.1.B K.3.2.E