Effective Date: 2008-2009

Hamburg Area School District

Name of Course: Grade 3 Science
Department: Science

Grade Level: 3
Instructional Time: 135 minutes
Length of Course: school year
Period Per Cycle: 3
Length of Period: 45 minutes

Texts and Resources: Harcourt Science Textbook (3rd Grade), investigation kits that accompany the Harcourt Series

Assessments: chapter tests accompanying text

Hamburg Area School District
Course Plan
Third Grade Science Curriculum

Course Name: Grade 3 Science
Unit: Weather **Time Line: 3 cycles**

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
How does information from data charts and graphs of the data help identify weather patterns ?	Students will identify weather patterns using data charts and graphs showing temperatures, wind direction, wind speed, cloud types and precipitation.	S4.D.2.1.2
What are the most familiar instruments used to study weather and what do they measure ?	Students will identify the thermometer, rain guage, weather vane ,anemometer and barometer and tell what they measure.	S4.D.2.1.3

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Course Name: Grade 3 Science
Unit: Water **Time Line: 3 cycles**

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
Where is water found on earth ?	Students will describe the types of fresh water and salt water bodies. Students will compare lakes, ponds and bays with streams, creeks, and rivers.	S4.D.1.3.1 S4.D.1.3.3
What is the water cycle ?	Students will describe how water changes from one form to another and moves from place to place in the water cycle.	S4.D.1.3.2
How has technology affected the use of water in our environment ?	Students will describe how water is cleaned and prepared for humans using various technology. Students will explain the role and relationship of a watershed or a wetland on water sources.	S.4.D.1.3.4

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Course Name: Grade 3 Science
Unit: Earth, Moon, Solar System **Time Line: 3 cycles**

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What is the Earth's relationship to the sun and the moon?	Students will explain the motions of the sun as it relates to the earth and the moon system Students will use models to make observations to explain how the Sun-Earth-Moon system works.	S.4.D.3.1.1 S4.A.3.2.2 S4.A.3.2.3
How does the motion of the sun, earth, and moon result in our having days, months, years?	Students will explain how the motion of the sun, earth, and moon system relates to time resulting in days, months, and years	S.4.D.3.1.2
What makes the seasons of the year happen?	Students will describe the causes of seasonal change as they relate to the revolution of Earth and the tilt of the Earth's axis	S.4.D.3.1.3

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Course Name: Grade 3 Science
Unit: Matter **Time Line: 3 cycles**

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What are the observable physical properties of matter?	Students will use size, shape, volume, color, and texture to describe the physical properties of matter.	S.4.C.1.1.1
What physical characteristics are used to categorize objects?	Students will use physical characteristics to categorize objects.	S.4.C.1.1.2

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Course Name: Grade 3 Science
Unit: Ecosystems **Time Line: 5 cycles**

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What are the adaptations that organisms use to survive?	Identify characteristics for plant and animal survival in different environments.	S.4.B.2.1.1
What are the living and nonliving things in the environment?	Describe the living and nonliving components of a local ecosystem.	S.4.B.3.1.1
How do living and nonliving things in the environment interact?	Describe interactions between living and nonliving components of a local ecosystem.	S.4.B.3.1.2
Describe, explain, and predict change in natural or human-made systems and the possible effects of those changes on the environment.	Describe what happens to a living thing when its habitat has changed. Identify major land uses in the urban, suburban and rural communities and how they affect the habitat.	S.4.B.3.2.1 S4.B.3.3.4

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Course Name: Grade 3 Science
Unit: Ecosystems **Time Line: 5 cycles**

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
Describe, explain, and predict change in natural or human-made systems and the possible effects of those changes on the environment.	Describe and predict how changes in the environment can affect systems. Provide examples, predict, or describe how everyday human activities may change the environment. (e.g., solid waste production, food production and consumption, transportation, water consumption, energy production and use)	S.4.B.3.2.2 S4.A.1.3.5
Describe, explain, and predict change in natural or human-made systems and the possible effects of those changes on the environment.	Explain and predict how changes in seasons affect plants, animals, or daily human life.	S.4.B.3.2.3
Describe Earth's different sources of water or describe changes in the form of water.	Describe types of freshwater and saltwater bodies.	S.4.D.1.3.1 S.4.D.1.3.3
Identify the types and uses of Earth's resources?	Students will recognize ways that humans benefit from the use of water resources (e.g. agriculture, energy, recreation).	S4.D.1.2.3

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Course Plan
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Course Name: Grade 3 Science
Unit: Earth's Land and Resources **Time Line: 5 cycles**

Essential Content/ Essential Questions	Performance Objectives	Standards/Anchors
What are the basic landforms in Pennsylvania?	Students will describe how prominent Earth feature in Pennsylvania were formed. (mountains, valleys, caves, sinkholes, lakes, rivers) Students will identify Earth structures; mountains, watersheds, peninsulas, lakes rivers, valleys through the use of models. Students will describe the composition of soil as weathered rock and decomposed organic remains.	S4.D.1.1.1 S4.D.1.1.2 S4.D.1.1.3
What are the types and uses of Earth's resources?	Students will recognize ways that humans benefit from the use of water resources (e.g. agriculture, energy, recreation).	S4.D.1.2.3