URBANDALE COMMUNITY SCHOOL DISTRICT CURRICULUM FRAMEWORK OUTLINE

SUBJECT: Science

COURSE TITLE: Kindergarten Science

GRADE LEVEL: Kindergarten

PREREQUISITES: None

COURSE DESCRIPTION: In Kindergarten science students will describe characteristics of living things, identify basic features of the earth and sky, observe changes in weather and seasons, recognize similarities and differences in individuals, identify healthy habits, and explore the method of scientific inquiry to learn about the world around them.

CONTENT STANDARDS:

In order that our students may achieve the maximum benefit from their talents and abilities, the students of Urbandale Community School District's Kindergarten science should be able to . . .

Content Standard I. Understand and apply the concepts of life science.

Benchmarks: Compare the characteristics of living things and non-living things.

Content Standard II. Understand and apply the concepts of earth and space science.

Benchmarks: Identify basic features of the earth and sky.

Describe changing weather conditions and its effects.

Content Standard III. Understand and apply the concepts of physical science.

Benchmarks: Name properties of objects and materials.

Recognize that objects can move in many different ways.

Content Standard IV. Understand and apply the concepts of health science.

Benchmarks: Recognize similarities and differences in individuals and their growth.

Identify healthy habits.

Recognize and practice basic safety in daily activities.

Content Standard V. Understand and apply scientific method.

Benchmarks: Use the scientific method to conduct experiments and research.

URBANDALE COMMUNITY SCHOOL DISTRICT CURRICULUM FRAMEWORK OUTLINE

SUBJECT: Science

COURSE TITLE: Kindergarten Science

GRADE LEVEL: Kindergarten

PREREQUISITES: None

CONTENT STANDARDS AND COURSE BENCHMARKS WITH INDICATORS FOR KINDERGARTEN SCIENCE

Standard I: Understand and apply the concepts of life science. The students in

Kindergarten Science should be able to...

Benchmark: Compare the characteristics of living things and non-living things.

Indicators: Define terms "alike" and "different." (D)

Compare living and non living things. (D)

Describe the basic needs of living things (food, water, light, and air). (D) Identify uses of plants and animals (source of food, products such as paper,

lumber, etc.). (I)

Categorize living and non-living things . (A)

Assessments: District Assessment

Standard II: Understand and apply the concepts of earth and space science. The students

in Kindergarten Science should be able to...

Benchmark: Identify basic features of the earth and sky.

Indicators: Recognize that the earth is a sphere composed of land, water, and sky. (A)

Recognize that the earth experiences day and night. (D)

Recognize that the sun gives us light and heat. (I)

Recognize that a shadow occurs when an object blocks a portion of light. (I) Develop vocabulary associated with earth and space (e.g., sun, star, moon, sky,

land, space, light, shadow, day, night). (D)

Assessments: District Assessment

Benchmark: Describe changing weather conditions and its effects.

Indicators: Observe and discuss daily weather conditions and its effects. (A)

Observe and discuss how weather changes with the seasons. (D)

Develop vocabulary associated with weather and seasons (e.g., clouds, sun, rain,

snow, hail, spring, summer, winter, fall). (D)

Explore patterns in time (days, seasons, routines, etc.). (D)

Assessments: District Assessment

Standard III: Understand and apply the concepts of physical science. The students in Kindergarten Science should be able to...

Benchmark: Name properties of objects and materials.

Indicators: Experience and name an assortment of tactile materials (e.g., wood, cloth, metal,

paper) that have a variety of properties (e.g., color, weight, size, shape). (I) Develop and use a vocabulary of descriptive words (e.g., hard, soft, shiny,

smooth, rough etc.). (D)

Recognize similarities and differences between a variety of materials. (A)

Assessments: District Assessment

Benchmark: Recognize that objects can move in many different ways.

Indicators: Experience a variety of physical bodily movements. (D)

Observe motion in animals and objects. (I) Explore motion with sand, water, and air. (A)

Explore movement with magnets. (I)

Assessments: District Assessment

Standard IV: Understand and apply the concepts of health science. The students in Kindergarten Science should be able to...

Benchmark: Recognize similarities and differences in individuals and their growth.

Indicators: Observe and discuss individual differences. (D)

Identify self as unique. (A)

Identify strengths in other people. (D)

Assessments: District Assessment

Benchmark: Identify healthy habits.

Indicators: Recognize that healthy eating habits and regular exercise contribute to good

health. (D)

Observe and practice good personal hygiene (e.g., brushing teeth and washing

hands). (A)

Assessments: District Assessment

Benchmark: Recognize and practice basic safety in daily activities.

Indicators: Recognize and apply basic playground safety rules. (I)

Recognize and practice fire and tornado safety rules. (I)

State name, address, phone number. (A)

Recognize basic traffic signs (e.g., stop, yield, railroad, traffic light, etc.). (I)

Identify appropriate touches. (I)

Assessments: District Assessment

Standard V: Understand and Apply Scientific Method. The students in Kindergarten

Science should be able to...

Benchmark: Use the scientific method to conduct experiments and research.

Indicators: Recognize that learning can come from observation, questioning, and simple

experiments. (I)

Recognize the value and use of tools to gather information (e.g., magnifying

glass, balance scale). (I)

Practice observation techniques to observe changes over time. (D)

Predict, represent (e.g., graph, draw), and describe observations (verbally or in

writing). (A)

Assessments: District Assessment