Springfield Public Schools
K-5 SCIENCE

COURSE DESCRIPTION

Science in kindergarten is taught for 30-40 minutes three to four times weekly within a regular self-contained classroom. The program emphasizes a hands-on approach to learning using the scientific process. Curriculum integration with other content areas is highly encouraged.

KINDERGARTEN
MAJOR INSTRUCTIONAL GOALS

The intent of the Springfield R-12 Science Program is:

1. **The student will communicate scientific ideas through questioning and observation**.
   a. Work with a group to solve a problem giving due credit to the ideas and contributions of each group member. (SC 7; 2.3; 3.6; 4.6)
   b. Ask questions and make observations relating objects, organisms, and events in the environment. (SC 7, 1.1)
   c. Measure objects or conditions using appropriate tools. (SC 7; **1.3)**

2. **The student will recognize that science is one way people answer and explain questions about the natural world.**
   a. Investigate the effects of past scientific contributions on current human populations. (SC 8; 4.3)
   b. Predict possible consequences new ideas and inventions might have on human populations. (SC 8; 3.6; 3.7; 3.8; 4.7)
   c. Demonstrate recognition of how people use observations and predictions in their jobs. (SC 8; 3.4; 4.8)
   d. Classify objects into two groups; objects that occur in nature and objects designed and made by human-kind. (SC 8; **1.6;** 1.8)
   e. Use simple tools and construction materials. (SC 8; **1.3**)

3. **The student will develop an interest in exploring the needs and characteristics of living organisms**.
   a. Sort living organisms by types, and by characteristics. (SC 3; 1.1; **1.8)**
   b. Identify characteristics that determine whether an object or material is living or nonliving and apply that knowledge to unknown samples. (SC 3; 1.2; 1.3; **1.6**)
   c. Demonstrate an understanding that all living things require water for survival. (SC 1; SC 3; 1.4; **1.8**)
   d. Identify and discuss the similarities and differences between parents and their offspring. (SC 3; **1.3; 1.6**)

4. **The student will explore the basic elements of land, air, water, and weather.**
   a. Classify rocks using their physical properties. (SC 1; **1.3; 1.6; 1.8**)
   b. Investigate and compare the composition of soil in different locations.
   c. Identify the differences between bodies of water. (SC 1; 1.1; 1.2)

d. Collect and record weather data and describe how daily activities are affected by weather. (SC 5; 1.3; **1.6**; 3.3)

5. **The student will explore the basic elements of the universe.**
   a. Identify the sun, earth, and moon and recognize patterns of movement through observation of objects in the sky. (SC 6; **1.6**; **3.5**)
   b. Understand the basic concepts of night and day. (SC 6; 3.3; **4.1**)
   c. Explain that the sun lights and heats up the earth. (SC 6; 1.6; 3.1)

6. **The student will investigate the properties of matter by describing objects, their characteristics and their behavior.**
   a. Identify physical properties of objects according to specific properties using the senses and simple tools (e.g. size, shape, color and texture). (SC 1; 1.4; **1.6**; **4.1**)
   b. Describe the position of one object relative to another object or the background. (SC 2; 1.4; **1.6**)
   c. Demonstrate the effect a magnet has on another magnet and on other objects. (SC 2; 1.2; **3.5**)
   d. Recognize that materials exist in different states and can be grouped into categories of solids and liquids. (SC 1; **1.6**; **1.8**; **4.1**)

*Processing skills in **bold print** are assessed by the Missouri Assessment Program at this grade level.