

### **Organization of the Kansas Science Education Standards**

Each standard in the main body of the document contains a series of benchmarks, which describe what students should know and be able to do at the end of a certain point in their education (i.e., grades 2, 4, 7, and 12). Each benchmark contains a series of indicators, which identify what it means for students to meet a benchmark. Indicators are frequently followed by examples, which are specific, concrete ideas or illustrations of the standards writers' intent.

### **Standards**

There are seven standards for science. These standards are general statements of what students should know, understand, and be able to do in the natural sciences over the course of their K-12 education. The seven standards are interwoven ideas, not separate entities; thus, they should be taught as interwoven ideas, not as separate entities. These standards are clustered for grade levels K-2, 3-4, 5-7, and 8-12.

1. Science as Inquiry
2. Physical Science (Physics and Chemistry)
3. Life Science
4. Earth and Space Science
5. Science and Technology
6. Science in Personal and Environmental Perspectives
7. History and Nature of Science

### **Benchmarks**

Benchmarks are specific statements of what students should know and be able to do at a specified point in their schooling. Benchmarks are used to measure students' progress toward meeting a standard. In these standards, benchmarks are defined for grades 2, 4, 7, and 12.

### **Indicators**

Indicators are statements of the knowledge or skills which students demonstrate in order to meet a benchmark. Indicators are critical to understanding the standards and benchmarks and are to be met by all students. The indicators listed under each benchmark are not listed in priority order, nor do the indicators include all potential topics related to the benchmarks. Moreover, the list of examples with each indicator should be considered as representative but not as comprehensive or all-inclusive.

### **Instructional Examples, Teacher Notes, and Additional Specificity**

To assist in the implementation of the standards, additional information is added to indicators in the form of Instructional Examples, Teacher Notes, and Additional Specificity. Instructional Examples offer an activity or a specific concrete instance of an idea of what is called for by an indicator. Teacher Notes clarify vocabulary. Information labeled Additional Specificity provide an illustration of the meaning or intent of an indicator. Like the indicators themselves, these forms of information are considered to be representative but not comprehensive or all-inclusive. Italicized words are defined in the Glossary or Teacher Notes.

Kansas Science Education Standards approved by the Kansas State Board of Education on November 8, 2005 and February 14, 2006



**STANDARD 1: SCIENCE AS INQUIRY**

**Grades K-2**

**SCIENCE AS INQUIRY** – The student will experience science as *full inquiry*. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

**STANDARD 1: SCIENCE AS INQUIRY**

**Grades 3-4**

**SCIENCE AS INQUIRY** – The student will experience science as *full inquiry*. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

**STANDARD 1: SCIENCE AS INQUIRY**

**Grades 5-7**

**SCIENCE AS INQUIRY** – The student will develop the abilities to do *scientific inquiry*, be able to demonstrate how *scientific inquiry* is applied, and develop understandings about *scientific inquiry*.

**STANDARD 1: SCIENCE AS INQUIRY**

**Grades 8-12**

**SCIENCE AS INQUIRY** – The student will develop the abilities necessary to do scientific inquiry and develop an understanding of scientific inquiry.



## Module 1: Science

1. The Kansas Science Educational Standards are the same at each grade level but the depth of standard is different at each grade level.

True or False

2. The Physical Science Standard does not include Chemistry and Physics concepts.

True or False

3. There are seven total standards in the Kansas Science Education Standards.

True or False

**KSDE Online Standards Staff Development Training Program Self Tests  
Science Answer Key**

**Module 1:**

1. True
2. False
3. True

**Module 2:**

1. False
2. True
3. False
4. False

**Module 3:**

1. D. 10
2. False
3. B. 4
4. False