Kansas Science Education Standards Scope and Sequence

	K – 2	3 – 4	5 – 7	8 – 12
Science as Inquiry	Identify properties of objects. Classify and arrange groups of objects by a variety of properties, one property at a time. Use appropriate materials, tools, and safety procedures to collect information. Ask and answer questions about objects, organisms, and events in his/her environment. Describe an observation orally or pictorially.	▲ Ask questions that he/she can answer by investigating. ▲ Plan and conduct a simple investigation. ▲ Employ appropriate equipment, *tools*, and safety procedures to gather data. ▲ Demonstrate the ability to communicate critique, analyze his/her own investigations, and interpret the work of other students.	▲ Identify questions that can be answered through scientific investigations. ▲ Design and conduct scientific investigations safely using appropriate tools, mathematics, technology, and techniques to gather, analyze, and interpret data. ▲ Identify the relationship between evidence and logical conclusions. ▲ Communicate scientific procedures, results and explanations. Develop questions and adapt (frames) the inquiry process to guide the appropriate type of investigation. Differentiate between qualitative and quantitative data in an investigation. After completing an investigation, generate alternative methods of investigation and/or further questions for inquiry. ▲ Evaluate the work of others to determine evidence which scientifically supports or contradicts the results, identifying faulty reasoning or conclusions that go beyond evidence and/or are not supported by data.	Develop and evaluate research questions. ▲ Design investigations, including developing questions, gathering and analyzing data, and designing and conducting research. ▲ Correctly use the appropriate technological tools and mathematics in their own scientific investigations. Actively engage in conducting an inquiry, formulating and revising his or her scientific explanations and models (physical, conceptual, or mathematical) using logic and evidence, and recognizing that potential alternative explanations and models should be considered. Communicate (reports) and defend the design, results, and conclusion of his/her investigation. ▲ Understand methods used to test hypotheses about the cause of a remote past event (historical hypothesis) that cannot be confirmed by experiment and/or direct observation by formulating competing hypotheses and then collecting the kinds of data (evidence) that would support one and refute the other

Module 3: Science

1. How many sections are there in the scope and sequence?
    a. 7
    b. 8
    c. 9
    d. 10

2. The indicators for each grade span are separate entities and should be taught in an isolated manner.

    True or False

3. How many grade spans are there in the Kansas Science Education Standards?
    a. 3
    b. 4
    c. 5
    d. 6

4. All the boxes in the scope and sequence should contain at least one indicator for each grade span and topic.

    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