### Kansas Science Education Standards Scope and Sequence

<table>
<thead>
<tr>
<th></th>
<th>K - 2</th>
<th>3 - 4</th>
<th>5 - 7</th>
<th>8 - 12</th>
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</thead>
<tbody>
<tr>
<td><strong>Science as Inquiry</strong></td>
<td>Identify properties of objects.</td>
<td>▲ Ask questions that he/she can answer by investigating.</td>
<td>▲ Identify questions that can be answered through scientific investigations.</td>
<td>Develop and evaluate research questions.</td>
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<td>Classify and arrange groups of objects by a variety of properties, one property at a time.</td>
<td>▲ Plan and conduct a simple investigation.</td>
<td>▲ Design and conduct scientific investigations safely using appropriate tools, mathematics, technology, and techniques to gather, analyze, and interpret data.</td>
<td>▲ Design investigations, including developing questions, gathering and analyzing data, and designing and conducting research.</td>
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<td>Use appropriate materials, tools, and safety procedures to collect information.</td>
<td>▲ Employ appropriate equipment, tools, and safety procedures to gather data.</td>
<td>▲ Identify the relationship between evidence and logical conclusions.</td>
<td>▲ Correctly use the appropriate technological tools and mathematics in their own scientific investigations.</td>
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<td>Ask and answer questions about objects, organisms, and events in their environment.</td>
<td>▲ Demonstrate the ability to communicate critique, analyze his/her own investigations, and interpret the work of other students.</td>
<td>▲ Communicate scientific procedures, results and explanations.</td>
<td>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.</td>
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<td>Describe an observation orally or pictorially.</td>
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<td>Communicate (reports) and defend the design, results, and conclusion of his/her investigation.</td>
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**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
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