

Grade 7 Alternate K-PREP Aligned to KAS for Science

Grade Level/Content Area	Alternate K-PREP Aligned to KAS for Science	KAS Standard
Grade 7 Science	<p>(Sci. 7.1)</p> <p>Use or revise a model to describe the cycling of water (including changes in state of water) through Earth's systems (land, ocean and atmosphere) driven by energy from the sun and the force of gravity.</p> <p><a href="#">LINK TO EARTH SCIENCE PROGRESSION</a></p> <p>Earth Science</p>	<p>06-ESS2-4: Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity. [Clarification Statement: Emphasis is on the ways in which water changes its state as it moves through the multiple pathways of the hydrologic cycle. Examples of models can be conceptual or physical.]</p> <p>Earth Science</p>
	<p>(Sci. 7.2)</p> <p>Support a scientific explanation using evidence to describe how environmental factors (e.g., availability of food, light, space, water, drought) influence the growth of organisms (plants and animals).</p> <p><a href="#">LINK TO LIFE SCIENCE 1 PROGRESSION</a></p> <p>Life Science 1</p>	<p>07-LS1-5: Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms. [Clarification Statement: Examples of local environmental conditions could include availability of food, light, space, and water. Examples of genetic factors could include large breed cattle and species of grass affecting the growth of organisms. Examples of evidence could</p>

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		<p>include drought decreasing plant growth, fertilizer increasing plant growth, different varieties of plant seeds growing at different rates in different conditions, and fish growing larger in large ponds than in small ponds.]</p> <p><b>Life Science 1</b></p>
	<p><b>(Sci. 7.3)</b></p> <p><b>With peer or teacher support, plan an investigation and use evidence to determine how change in an object's motion depends on the net force on the object and the mass of the object.</b></p> <p><b><u><a href="#">LINK TO PHYSICAL SCIENCE 2 PROGRESSION</a></u></b></p> <p><b>Physical Science 2</b></p>	<p>06-PS2-2: Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object. [Clarification Statement: Emphasis is on balanced (Newton's First Law) and unbalanced forces in a system, qualitative comparisons of forces, mass and changes in motion (Newton's Second Law), frame of reference, and specification of units.]</p> <p><b>Physical Science 2</b></p>

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	<p><b>(Sci. 7.4)</b></p> <p><b>Make predictions based on patterns and explain interactions among organisms in different ecosystems (interactions include competitive, predatory and mutually beneficial).</b></p> <p><b><u><a href="#">LINK TO LIFE SCIENCE 2 PROGRESSION</a></u></b></p> <p><b>Life Science 2</b></p>	<p><b>06-LS2-2: Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. [Clarification Statement: Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory and mutually beneficial.]</b></p> <p><b>Life Science 2</b></p>
	<p><b>(Sci. 7.5)</b></p> <p><b>Define the criteria and constraints of a design problem to ensure a successful solution, and potential impacts on people and the environment that may limit possible solutions.</b></p> <p><b><u><a href="#">LINK TO ENGINEERING AND TECHNOLOGY PROGRESSION</a></u></b></p> <p><b>Engineering and Technology</b></p>	<p><b>MS-ETS1-1: Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</b></p> <p><b>Engineering and Technology</b></p>

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	<p><b>(Sci. 7.6)</b></p> <p><b>Interpret data on the characteristic physical and chemical properties of substances before and after the substances interact to determine if a chemical reaction has occurred.</b></p> <p><b><u><a href="#">LINK TO PHYSICAL SCIENCE 1 PROGRESSION</a></u></b></p> <p><b>Physical Science 1</b></p>	<p>07-PS1-2: Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. [Clarification Statement: Examples of reactions could include burning sugar or steel wool, fat reacting with sodium hydroxide, and mixing zinc with hydrogen chloride.]</p> <p><b>Physical Science 1</b></p>
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LINK TO SCIENCE PROGRESSIONS: <http://education.ky.gov/AA/Assessments/kprep/Pages/AltResources.aspx>

Blue: Standards 1 through 3 (TEST WINDOW 1)

Yellow: Standards 4 through 6 (TEST WINDOW 2)