

Science Learning Progressions

Content Area	High School	Grades			Biology	Chemistry
		K-2	3-5	6-8		
The Nature of Science: Inquiry and Practice of Science						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Science is a body of knowledge that is constantly changing and growing.</p> <p>2. Science is a way of knowing that uses evidence to build models and theories.</p> <p>3. Science is a process of asking questions and finding answers.</p> <p>4. Science is a way of thinking that uses logic and reasoning.</p> <p>5. Science is a way of communicating information.</p> <p>6. Science is a way of working together.</p> <p>7. Science is a way of solving problems.</p> <p>8. Science is a way of understanding the world.</p> <p>9. Science is a way of making decisions.</p> <p>10. Science is a way of improving the world.</p>						
The Nature of Science: Science, Technology, and Society						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Science and technology are interconnected.</p> <p>2. Science and technology have shaped human history.</p> <p>3. Science and technology have improved the quality of life.</p> <p>4. Science and technology have created new challenges.</p> <p>5. Science and technology have changed the way we think.</p> <p>6. Science and technology have changed the way we live.</p> <p>7. Science and technology have changed the way we work.</p> <p>8. Science and technology have changed the way we play.</p> <p>9. Science and technology have changed the way we learn.</p> <p>10. Science and technology have changed the way we communicate.</p>						
The Nature of Science: Foundations of Science and Technology						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Science is based on evidence.</p> <p>2. Science is based on models.</p> <p>3. Science is based on theories.</p> <p>4. Science is based on laws.</p> <p>5. Science is based on principles.</p> <p>6. Science is based on facts.</p> <p>7. Science is based on data.</p> <p>8. Science is based on experiments.</p> <p>9. Science is based on observations.</p> <p>10. Science is based on questions.</p>						

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Physical Sciences: Matter						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Matter is made of particles.</p> <p>2. Matter has mass and volume.</p> <p>3. Matter can change state.</p> <p>4. Matter can be broken down.</p> <p>5. Matter can be combined.</p> <p>6. Matter can be transformed.</p> <p>7. Matter can be recycled.</p> <p>8. Matter can be conserved.</p> <p>9. Matter can be created.</p> <p>10. Matter can be destroyed.</p>						
Physical Sciences: Energy						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Energy is the ability to do work.</p> <p>2. Energy can be transferred.</p> <p>3. Energy can be transformed.</p> <p>4. Energy is conserved.</p> <p>5. Energy is used to do work.</p> <p>6. Energy is stored in matter.</p> <p>7. Energy is used to move matter.</p> <p>8. Energy is used to change matter.</p> <p>9. Energy is used to create matter.</p> <p>10. Energy is used to destroy matter.</p>						
Physical Sciences: Force and Motion						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Force is a push or pull.</p> <p>2. Force can change motion.</p> <p>3. Force can change direction.</p> <p>4. Force can change speed.</p> <p>5. Force can change shape.</p> <p>6. Force can change position.</p> <p>7. Force can change mass.</p> <p>8. Force can change volume.</p> <p>9. Force can change temperature.</p> <p>10. Force can change color.</p>						

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Physical Sciences: Light						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Light is a form of energy.</p> <p>2. Light travels in waves.</p> <p>3. Light can be reflected.</p> <p>4. Light can be refracted.</p> <p>5. Light can be absorbed.</p> <p>6. Light can be emitted.</p> <p>7. Light can be polarized.</p> <p>8. Light can be diffracted.</p> <p>9. Light can be scattered.</p> <p>10. Light can be dispersed.</p>						
Physical Sciences: Sound						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Sound is a form of energy.</p> <p>2. Sound travels in waves.</p> <p>3. Sound can be reflected.</p> <p>4. Sound can be refracted.</p> <p>5. Sound can be absorbed.</p> <p>6. Sound can be emitted.</p> <p>7. Sound can be polarized.</p> <p>8. Sound can be diffracted.</p> <p>9. Sound can be scattered.</p> <p>10. Sound can be dispersed.</p>						

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Earth & Space Sciences: Earth						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. Earth is a planet.</p> <p>2. Earth has a crust.</p> <p>3. Earth has a mantle.</p> <p>4. Earth has a core.</p> <p>5. Earth has an atmosphere.</p> <p>6. Earth has a hydrosphere.</p> <p>7. Earth has a biosphere.</p> <p>8. Earth has a lithosphere.</p> <p>9. Earth has a geosphere.</p> <p>10. Earth has a cryosphere.</p>						
Earth & Space Sciences: The Universe						
The content described for the grade spans K-2, 3-5, or 6-8 may be taught in one or more grades within these grade spans in the order indicated by the progression.						
<p>1. The universe is everything.</p> <p>2. The universe is expanding.</p> <p>3. The universe is made of matter and energy.</p> <p>4. The universe is made of galaxies.</p> <p>5. The universe is made of stars.</p> <p>6. The universe is made of planets.</p> <p>7. The universe is made of moons.</p> <p>8. The universe is made of comets.</p> <p>9. The universe is made of asteroids.</p> <p>10. The universe is made of meteoroids.</p>						

■ Student is expected to demonstrate the knowledge, skills, and abilities associated with an **aligned content - HVC is currently available.**
■ Student is expected to demonstrate the knowledge, skills, and abilities associated with an **aligned content - HVC is currently available.**
■ Grade appropriate instruction pertaining to an **aligned content should begin.**
■ **Not included.**