

Grade Level	Earth & Space Sciences	Life Sciences	Physical Sciences	Science & Technology	Scientific Inquiry	Scientific Ways of Knowing
Grade 7 Ohio's New Learning Standards SCIENCE		<b>Life Science (LS):</b> In any particular biome, the number, growth and survival of organisms and populations depend on biotic and abiotic factors.	<b>Physical Science (PS):</b> Energy can be transformed or transferred but is never lost.			Scientific Inquiry and Investigation: Identify questions that can be answered through scientific investigations; Use appropriate mathematics, tools and techniques to gather data and information; Analyze and interpret data; Develop descriptions, models, explanations and predictions; Think critically and logically to connect evidence and explanations; Recognize and analyze alternative explanations and predications; and Communicate scientific procedures and explanations.
Grade 8 Ohio's New Learning Standards SCIENCE			<b>Physical Science (PS): Forces and Motion;</b> Forces between objects act when the objects are in direct contact or when they are not touching. Forces have magnitude and direction. There are different types of potential energy.			Scientific Inquiry and Investigation: Identify questions that can be answered through scientific investigations; Use appropriate mathematics, tools and techniques to gather data and information; Analyze and interpret data; Develop descriptions, models, explanations and predictions; Think critically and logically to connect evidence and explanations; Recognize and analyze alternative explanations and predications; and Communicate scientific procedures and explanations.
HS Ohio's New Learning Standards SCIENCE	<b>Physical Science - THE UNIVERSE</b> <ul style="list-style-type: none"> <li>• History of the universe</li> <li>• Galaxy formation</li> <li>• Stars</li> <li>• Formation; stages of evolution</li> <li>• Fusion in stars</li> </ul>		<b>Physical Science (PS): Forces and Motion;</b> Forces <ul style="list-style-type: none"> <li>• Force diagrams</li> <li>• Types of forces (gravity, friction, normal, tension)</li> <li>• Field model for forces at a distance</li> <li>• Dynamics (how forces affect motion)</li> <li>• Objects at rest</li> <li>• Objects moving with constant velocity</li> <li>• Accelerating objects</li> </ul>			<b>Scientific Inquiry:</b> Identify questions and concepts that guide scientific investigations; <ul style="list-style-type: none"> <li>• Design and conduct scientific investigations;</li> <li>• Use technology and mathematics to improve investigations and communications;</li> <li>• Formulate and revise explanations and models using logic and evidence (critical thinking);</li> <li>• Recognize and analyze explanations and models; and</li> <li>• Communicate and support a scientific argument.</li> </ul>