

Physical Science	
2010 Standards	2016 Standards
<b>5.1.1</b> Describe and measure the volume and weight of a sample of a given material.	<b>5.PS.1</b> Describe and measure the volume and mass of a sample of a given material.
<b>5.1.2</b> Describe the difference between weight and mass. Understand that weight is dependent on gravity and mass is the amount of matter in a given substance or material.	<b>5.PS.4</b> Describe the difference between weight being dependent on gravity and mass comprised of the amount of matter in a given substance or material.
<b>5.1.3</b> Demonstrate that regardless of how parts of an object are assembled the weight of the whole object is identical to the sum of the weight of the parts; however, the volume can differ from the sum of the volumes.	<b>5.PS.2</b> Demonstrate that regardless of how parts of an object are assembled the mass of the whole object is identical to the sum of the mass of the parts; however, the volume can differ from the sum of the volumes. (Law of Conservation of Mass)
<b>5.1.4</b> Determine if matter has been added or lost by comparing weights when melting, freezing or dissolving a sample of a substance.	<b>5.PS.3</b> Determine if matter has been added or lost by comparing mass when melting, freezing, or dissolving a sample of a substance. (Law of Conservation of Mass)

Earth and Space Science	
2010 Standards	2016 Standards
<b>5.2.1</b> Recognize that our earth is part of the solar system in which the sun, an average star, is the central and largest body. Observe that our solar system includes the sun, moon, seven other planets and their moons, and many other smaller objects like asteroids and comets.	<b>5.ESS.1</b> Analyze the scale of our solar system and its components: our solar system includes the sun, moon, seven other planets and their moons, and many other objects like asteroids and comets.
<b>5.2.2</b> Observe and use pictures to record how the sun appears to move across the sky in the same general way every day but rises and sets in different places as the seasons change.	<b>5.ESS.2</b> Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

<p>5.2.3 In monthly intervals, observe and draw the length and direction of shadows cast by the sun at several chosen times during the day. Use the recorded data as evidence to explain how those shadows were affected by the relative position of the earth and sun.</p>	<p><b>5.ESS.2</b> Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.</p>
<p><b>5.2.4</b> Use a calendar to record observations of the shape of the moon and the rising and setting times over the course of a month. Based on the observations, describe patterns in the moon cycle.</p>	<p><b>4.ESS.1</b> Investigate how the moon appears to move through the sky and it changes day to day, emphasizing the importance of how the moon impacts the Earth, the rising and setting times, and solar and lunar eclipses.</p>
	<p><b>5.ESS.3</b> Investigate ways individual communities within the United States protect the Earth’s resources and environment.</p>
	<p><b>5.ESS.4</b> Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</p>

<p style="text-align: center;"><b>Life Science</b></p>	
<p style="text-align: center;"><b>2010 Standards</b></p>	<p style="text-align: center;"><b>2016 Standards</b></p>
<p><b>5.3.1</b> Observe and classify common Indiana organisms as producers, consumers, decomposers, predator and prey based on their relationships and interactions with other organisms in their ecosystem.</p>	<p><b>5.LS.2</b> Observe and classify common Indiana organisms as producers, consumers, decomposers, or predator and prey based on their relationships and interactions with other organisms in their ecosystem.</p>
<p><b>5.3.2</b> Investigate the action of different decomposers and compare their role in an ecosystem with that of producers and consumers.</p>	<p><b>5.LS.2</b> Observe and classify common Indiana organisms as producers, consumers, decomposers, or predator and prey based on their relationships and interactions with other organisms in their ecosystem.</p>
	<p><b>5.LS.1</b> Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.</p>
	<p><b>5.LS.3</b> Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.</p>

<b>Science, Engineering, and Technology</b>	
<b>2010 Standards</b>	<b>2016 Standards</b>
<b>5.4.1</b> Investigate technologies that mimic human or animal musculoskeletal systems in order to meet a need.	
<b>5.4.2</b> Investigate the purpose of prototypes and models when designing a solution to a problem and how limitations in cost and design features might affect their construction.	
<b>5.4.3</b> Design solutions to problems in the context of musculoskeletal body systems. Using suitable tools, techniques and materials, draw or build a prototype or model of a proposed design.	

<b>Engineering</b>	
<b>2010 Standards</b>	<b>2016 Standards</b>
	<b>3-5.E.1</b> Identify a simple problem with the design of an object that reflects a need or a want. Include criteria for success and constraints on materials, time, or cost.
	<b>3-5.E.2</b> Construct and compare multiple plausible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
	<b>3-5.E.3</b> Construct and perform fair investigations in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.