

Science 6 (1) - DRAFT

STRAND	SUBSTRAND	STANDARD	BENCHMARK	ESSENTIAL ELEMENTS	MATERIALS / RESOURCES	ASSESSMENTS
Physical Science	Matter	Pure substances can be identified by properties which are independent of the sample of the substance and can be explained by a model of matter that is composed of small particles.	<p>Compare the motion and arrangement of particles in solids, liquids and gases; explain melting, freezing, boiling and evaporation, in terms of particle motion and heat.</p> <p>Distinguish between a mixture and a pure substance and use physical properties including color, solubility, density, melting point and boiling point to separate mixtures and identify pure substances.</p>	<p>1-10, 12, 13, 14, 15, 18-21</p> <p>See attached essential elements document for reference.</p>	<u>PS</u> Chp1, p. 21 - 25	<p>Ch. 1 test</p> <p>Vocabulary quizzes</p>
Physical Science	Matter	Substances can undergo physical and/or chemical changes which may change the properties of the substance but do not change the total mass in a closed system.	<p>Identify evidence of physical changes, including changes in phase, shape, crystalline structure and dissolving in other materials.</p> <p>Describe how matter is conserved during a physical change in a closed system.</p>	<p>6, 17, 12-16, 22, 23</p> <p>See attached essential elements document for reference.</p>	<p><u>PS</u> Chp 2, p. 41 - 48</p> <p><u>PS</u> Chp 2, p. 50 - 57</p> <p><u>PS</u> Chp1, p. 21 - 25</p>	<p>Ch 1 Test</p> <p>Ch. 2 Test</p> <p>Vocabulary quizzes</p>
Physical Science	Motion	The motion of an object can be described in terms of position, direction and speed.	<p>Measure and calculate the speed of an object that is traveling in a straight line.</p> <p>Graph an object's position as a function of time and an object's speed as a function of time for an object traveling in a straight line; use the graphs to describe the object's motion.</p>	<p>52-59</p> <p>See attached essential elements document for reference.</p>	<p><u>PS</u> Chp 10, p. 313 - 327</p> <p><u>PS</u> Chp 10, p. 329 - 335</p> <hr/> <p><u>PS</u> Chp 10, p. 313 - 324</p>	<p>Ch. 10 test</p> <p>Vocabulary quizzes</p>
Physical Science	Motion	Forces have magnitude and direction and govern the motion of objects.	Recognize that some forces between objects act when the objects are in direct contact and others, such as magnetic, electrical, and gravitational forces can act from a distance.	<p>52-59, 78-82, 1,2</p> <p>See attached essential elements</p>	<p><u>PS</u> Chp1, p. 9 - 11</p> <p><u>PS</u> Chp 19, p. 642 - 649</p> <p><u>PS</u> Chp 19, p. 652 - 6658</p> <p><u>PS</u> Chp 21, p. 712 - 708</p> <p><u>PS</u> Chp 21, p. 703 - 716</p>	<p>Ch. 1 Test</p> <p>Ch. 19 test</p> <p>Ch. 21 test</p>

Science 6 (2) - DRAFT

			<p>Identify the forces acting on an object and describe how the sum of the forces affects the motion of the object.</p> <p>Distinguish between mass and weight.</p>	document for reference.		Vocab quizzes
Physical Science	Energy	Waves involve the transfer of energy without the transfer of matter.	<p>Describe properties of waves, including speed, wavelength, frequency and amplitude.</p> <p>Explain how the vibration of particles in air and other materials results in the transfer of information and energy through sound waves.</p> <p>Use wave properties of light to explain reflection, refraction and the color spectrum.</p>	<p>83-87, 89, 90</p> <p>See attached essential elements document for reference.</p>	PS Chp, 15 p. 489 - 501	<p>Ch. 15 test</p> <p>Vocab quizzes</p>
Physical Science	Energy	Energy appears in different forms and can be transformed within a system or transferred to other systems or the environment.	<p>Recognize that objects and substances in motion have kinetic energy.</p> <p>Recognize that potential energy is stored energy that can be in the form of gravitational, elastic and chemical energy.</p> <p>Differentiate between kinetic and potential energy and identify situations where kinetic energy is converted to potential energy and vice versa.</p> <p>Trace the changes of energy forms, including thermal, electrical, mechanical, or others as energy is used for transportation, lighting or other purposes.</p> <p>Describe how energy is transferred in conduction, convection and radiation.</p>	<p>66-76,</p> <p>See attached essential elements document for reference.</p>	<p><u>PS</u> Chp 3, p. 71 - 82.</p> <p><u>PS</u> Chp 4, p. 104 - 124</p>	<p>Ch. 3 test</p> <p>Ch. 4 test</p> <p>Vocab quizzes</p>

