

Topic: Energy, Energy Transfer and Transformations	
Included Standards: SC.5.10.1 (SC.3.P.10.1 SC.3.P.10.3 SC.3.10.4 SC.3.P.11.1 SC.3.P.11.2 SC.4.P.10.1 SC.4.P.10.3) SC.5.P.10.2 SC.5.P.10.3 SC.5.P.10.4 SC.5.P.11.1 SC.5.P.11.2	
Grade: 5th	
Score 4.0	In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught. <ul style="list-style-type: none"> Investigate that waves involve a transfer of energy without a transfer of matter. Investigate water and sound waves transfer energy through a material. Investigate light waves can travel through a vacuum and through matter.
Score 3.0	The student will understand types of energy and be able to identify and investigate forms of energy. <ul style="list-style-type: none"> Performs complex skills: <ul style="list-style-type: none"> Identify different actions of light (reflection, refraction, absorption). Identify different actions of light (from one medium {material} to another). Investigate and explain that sound is produced by vibrating objects. Investigate and explain that pitch depends on how fast or slow the object vibrates. Energy transfer and transformations, is the Law of Conservation of Energy: Energy is conserved as it transfers from one object to another and from one form to another. <p>The student exhibits no major errors or omissions regarding the score 3.0 content.</p>
Score 2.0	The student: <ul style="list-style-type: none"> Recognizes or recalls specific terminology: <ul style="list-style-type: none"> Forms, Types and transfer of energy (light, heat {<i>thermal</i>}, sound, electrical, motion, chemical, mechanical) Straight line, reflected {reflect}, refracted {bend}, absorbed {absorb} Material {medium}, substance {media} Pitch, vibration Performs basic skills: <ul style="list-style-type: none"> Observe and describe types of energy (light, heat {thermal}, sound, electrical, motion, chemical, mechanical) Demonstrate that heat is produced when two objects rub against each other. <p>No major errors or omissions regarding the score 2.0 content.</p>
Score 1.0	With help, I know some of 2.0 and 3.0.
Score 0.0	Even with help, I am unable to understand.

Topic: Properties of Matter- A	
Included Standards: SC.5.P.8.1 (SC.3.P.8.1 SC.3.P.8.2 SC.3.P.8.3 SC.4.P.8.1) SC.5.P.9.1	
Grade: 5th	
Score 4.0	In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught. <ul style="list-style-type: none"> Investigate the distinction between mass and weight, and use them appropriately.
Score 3.0	The student will understand physical properties of matter and be able to compare, contrast, measure, describe and classify. Performs complex skills: <ul style="list-style-type: none"> Compare and contrast basic properties of matter. Measure physical properties. Classify physical properties. Differentiate the difference between weight and mass Find out about the Scientific Theory of atoms Identify the physical and chemical changes affected by temperature. <p>The student exhibits no major errors or omissions regarding the score 3.0 content.</p>
Score 2.0	The student: <ul style="list-style-type: none"> Recognizes or recalls specific terminology: <ul style="list-style-type: none"> Physical properties (mass, volume, solids, liquids, gases, size, shape, color, texture, hardness, odor, taste, temperature, attraction to magnets.) Celsius, Fahrenheit Performs basic skills: <ul style="list-style-type: none"> Describe physical properties of matter. Use dual thermometers to identify in degrees Celsius and Fahrenheit (conversions are not required) <p>No major errors or omissions regarding the score 2.0 content.</p>
Score 1.0	With help, I know some of 2.0 and 3.0.
Score 0.0	Even with help, I am unable to understand.

Topic: Properties of Matter - B	
Included Standards: SC.5.P.8.3 SC.5.P.8.2 SC.5.P.8.4	
Grade: 5th	
Score 4.0	<p>In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.</p> <ul style="list-style-type: none"> • Investigate the distinction between mass and weight, and use them appropriately. • Explore the scientific theory of atoms (also called atomic theory) by recognizing that all matter is composed of parts that are too small to be seen without magnification.
Score 3.0	<p>The student will understand separation of mixtures and be able to explain the observable properties.</p> <ul style="list-style-type: none"> • Performs complex skills: <ul style="list-style-type: none"> ○ Investigate with materials that dissolve in water and those that don't. ○ Categorize conditions that will speed up or slow down the dissolving process. ○ Deduce how mixtures of solids can be separated. ○ Classify objects and substances by their physical and chemical properties. ○ Differentiate between mass (the amount of matter (or "stuff") in an object) and weight (the measure of force of attraction (gravitational force) between an object and Earth). <p>The student exhibits no major errors or omissions regarding the score 3.0 content.</p>
Score 2.0	<p>The student:</p> <ul style="list-style-type: none"> • Recognizes or recalls specific terminology: <ul style="list-style-type: none"> ○ mixtures, properties, particle, dissolve, surface area, magnetic attraction, mass, weight • Performs basic skills: <ul style="list-style-type: none"> ○ Identify the materials that dissolve in water and those that don't. ○ Recognize that matter has two fundamental properties: matter takes up space and matter has mass. <p>No major errors or omissions regarding the score 2.0 content.</p>
Score 1.0	With help, I know some of 2.0 and 3.0.
Score 0.0	Even with help, I am unable to understand.