

Content Area: Science

Strand: Properties and Principles of Matter and Energy	Missouri GLE:
Reporting Topic: Properties of Objects and Mixtures	8.1.B
Grade: 4	

Score 4.0	<p>In addition to Score 3.0, in-depth inferences or applications that go beyond what was taught. For example, the student may:</p> <ul style="list-style-type: none"> • Create a generalization or rule to differentiate between mixtures and solutions. • Demonstrate understanding of appropriate applications of measurement tools. • Take a position on whether or not technology is more harmful or helpful.
	3.5 In addition to 3.0 performance, in-depth inferences and applications with partial success.
Score 3.0	<p>The student will:</p> <ul style="list-style-type: none"> • Describe how mixtures and solutions are used or made (e.g. by combining solids, or liquids, or a combination of these, identifying water as a solvent). • Distinguish between the components in a mixture and a solution and explain ways to separate the components by their properties (e.g. sorting, filtration, magnets, screening). • Select the appropriate tool to measure mass to the nearest gram and choose the appropriate tool to measure volume. • Identify and classify materials and objects into “like” substances based on specific physical properties. • Describe how new technologies have helped scientists make better observations and measurements for investigations (telescopes, magnifiers, balances, microscopes). <p>The student exhibits no major errors or gaps in the learning goal (complex ideas and processes).</p>
	2.5 No major errors or gaps in 2.0 content and partial knowledge of 3.0 content.
Score 2.0	<p>The student will:</p> <ul style="list-style-type: none"> • Recognize and recall how mixtures are made by combining solids and show how water is a solvent when combining materials. • Recognize that materials can be separated by their properties • Recognize and recall specific terminology: solvent, solute, solution • Identify the given material by using their characteristic properties. • Identify the new technologies that have helped scientists make better observations and measurements for investigations. <p>The student exhibits no major errors or gaps in the simpler details and processes.</p>
	1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content.
Score 1.0	With help, a partial understanding of the 2.0 content and some of the 3.0 content.
	0.5 With help, a partial understand of the 2.0 content and none of the 3.0 content.
Score 0.0	Even with help, no understanding or skill demonstrated.