

Student Sheet 17

Assessment Review

Lesson 19 is an assessment. The assessment covers many of the concepts, much of the content, and many skills you have learned since starting this module. Table 1 is a guide to help you review Part 2 of the module. Use it, your student sheets, science notebook, and Student Guide to review for the assessment. Refer to Student Sheet 6 to remind you of the topics covered in Part 1 of the module.

As in the previous assessment, many of the questions in Lesson 19 ask you to apply the concepts and skills you have learned to new situations. Look ahead to Lesson 19 to review the lab work you will be asked to do.

It is important that you save this student sheet. It will be useful when you review for the final assessment in the module.

Table 1 Review for Part 2 Assessment

Key Concepts	Key Content	Related Skills
Mixtures	<ul style="list-style-type: none"> • Materials can be classified as pure substances or mixtures. • Mixtures contain more than one pure substance. • Mixtures can vary in composition. • Solutions are the most homogeneous (best mixed) mixtures. 	<ul style="list-style-type: none"> • Describe the components of mixtures, using criteria such as color, crystal shape, magnetic properties, density, and solubility.
Making solutions	<ul style="list-style-type: none"> • Solutions consist of a solvent and solute(s). • The components of a solution can be solids, liquids, or gases. • There are solvents other than water. • Some substances will not dissolve in water but will dissolve in other solvents. • Saturated solutions are solutions in which no more solute can be dissolved. • Different substances have different solubilities. • Mass is conserved during dissolving. 	<ul style="list-style-type: none"> • Use terms such as dissolve, soluble, insoluble, solution, solvent, and solute to describe the process of dissolving. • Determine whether a substance is soluble or insoluble. • Recognize when a saturated solution has been made. • Approximately measure solubility.
Applications of solutions and mixtures	<ul style="list-style-type: none"> • Solubility (in a particular solvent) is a characteristic property of matter. • Solubility can be used to separate and purify substances. • Different solvents have different uses. • Chromatography can be used to separate a mixture of solutes dissolved in the same solvent. • Impurities affect melting points, boiling points, and other properties. • Mixtures are widely used as materials (some of these mixtures are called composites). 	<ul style="list-style-type: none"> • Separate an insoluble and a soluble substance by filtering. • Design a standardized procedure. • Construct a scoring rubric for a fair test. • Present a summary of results and conclusions. • Make and interpret a paper chromatogram.