

Student Learning Plan

Title: Learning about Liquids		Content Area/s: Science - Matter
Grade Level: 1st	Time Frame: 2:00-2:50 pm	Date: 3/5/08
<p>SOLs:</p> <p>1.1 The student will conduct investigations in which:</p> <p>d) observations and data are communicated orally and with simple graphs, pictures, written statements, and numbers</p> <p>g) simple experiments are conducted to answer questions</p> <p>1.3 The student will investigate and understand how different common materials interact with water. Key concepts include:</p> <p>a) some liquids will separate when mixed with water, but others will not</p> <p>Related SOLs: none</p> <p>Technology SOLs: None</p>		
<p>Lesson Objectives:</p> <p>The student will predict and describe how various liquids act when mixed with water during whole class discussion and investigations. The student will be able to describe and identify the properties of liquids and match liquids with their descriptions.</p>		<p>Resources (Texts & Technology):</p> <ul style="list-style-type: none"> • Harcourt Science Text & Workbook • Virginia Department of Education - Science Enhanced Scope and Sequence – Grade 1
<p>Content:</p> <p>The unit on matter focuses on students learning the three major states of matter: solids, liquids, and gases. Students will sort objects based on their state of matter, make predictions and conduct experiments, and practice changing objects and their state of matter.</p>		
<p>Instructional Procedures: Include the estimated time for each activity. (Number steps beginning with <i>Initial Activity</i> and ending with <i>Closing Activity</i>.)</p> <ol style="list-style-type: none"> 1. Initial: Students will take their spots on the rug for whole group discussion and the class will review what matter is and the properties of solids and liquids. Students will raise their hands to share information about what they already know or have learned about matter. (5 minutes) 2. The teacher will read the BIG book version of class text about Liquids (p. E9-E11). (2 minutes) 3. The teacher will read the liquids section of the matter trade book. (5 minutes) 4. Students will remain on the rug for the liquid experiments. For each liquid, the students will make a prediction of whether it will mix and dissolve in water. Students will rotate in a circle formation to share their hypothesis with a new student for each new liquid. The teacher will have students take turns giving their hypothesis and writing them on the board. The teacher will then ask for volunteer scientists to help pour and mix the liquids. After mixing the liquids, the students will make observations about whether the liquid dissolved in the water. 		

Instructional Procedures (continued):

4. (continued) The teacher will write a general statement of each of the results on the board and sum up the findings of the experiments. (20 minutes)
5. After the experiments are complete, the students will return to their seats to complete page 111 “What Can We Observe About Liquids?” in their workbooks. Students will work individually to answer the three questions. (5 minutes)
6. Next the students will work on the “What is a Liquid?” handout that involves matching a picture of a liquid with the description of the liquid. (5-10 minutes)
7. Finally, the class will review what they learned about liquids that day and pack up to go home. (2 minutes)

Assessment/s:

Formative assessments will involve the students verbal participation in sharing what they know about matter and the states of matter, making predictions in the experiment, and sharing observations. The workbook page and worksheet will serve as a summative assessment for the lesson.

Extension Activities/ Interdisciplinary Links:

- Students can make a graph in math to show how many liquids mixed and dissolved in water and which liquids did not.
- Students can also be given the opportunity to design their own experiment with liquids.
- Students will also be able to complete investigations in which solids are dissolved in water.

Differentiation Strategies/Activities:

Students who need support in reading will have assistance with reading the worksheets. Students may require additional wait time during questioning and may require assistance with phrasing their response for the rest of the class.