Name: _____ Class: _____ /35

MIX-IT-UP

Please complete the following worksheet based on station 6 from your Mix-It-Up experiments.

/2 ***Purpose:***

The purpose of this activity is to examine how the _____ of _____ affects _____. (Hint: Think about why there were two beakers of water. Be sure to use proper terminology.)

/2 ***Equipment:***

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/6 ***Procedure:***

1. Record observations of the materials before you mix them.
2. Measure out _____mL of cold water and pour it into a clean test tube.
3. Measure out _____mL of hot water and pour it into a clean test tube.
    - Use the hot mitt when handling the hot water.
4. Place the test tubes in the test tube rack.
5. Using the measuring spoons and the funnels, add 2 mL of hot chocolate powder to both of the test tubes _____.
6. Record observations of the mixtures before you shake them.
7. Put the _____ in the test tubes, holding them with your thumbs, turn the tubes upside down, and shake them.
8. Record what you observe immediately after you are done shaking the mixtures.
9. Allow the test tubes to sit in the test tube rack for a minimum of _____ (more time is better).
10. Record observations of the mixtures after they have rested.
11. Wash your test tubes and place them _____ in the rack to dry.
12. Tidy up all of your other supplies, leaving no _____ for the next group.

Observations:

/8 In the table below record the sensory observations you made at station 6. Describe what is happening at each stage. Be very specific about how the hot and cold trials were different.

Stage	Sensory Observations	
	Hot	Cold
Before Mixing		
Before Shaking		
After Shaking		
After Settling		

/2 Attach, to the back of this assignment, a series of detailed drawings/pictures clearly depicting all four stages of the experiment.

/15

Discussion:

Answer these discussion questions based on information obtained from all 8 experiments.

If you choose to do so, you may type these answers, print them, and staple them to this worksheet.

1. Name a station in which you formed a homogeneous mixture. How do you know it is homogeneous? Why do you think it became so (3 marks)?

2. Name a station in which you formed a heterogeneous mixture. How do you know it is heterogeneous? Why do you think it became so (3 marks)?

3. Make a generalized statement about how the temperature of water affects how the solids react. Explain how it was different and why this happened. Provide a specific observation from the experiments to support your comment (4 marks).

4. When you combined the half test tube of sugar and half test tube of water it did not add up to one full test tube. Explain in detail why you think this happened, making specific reference to the particle theory of matter (5 marks).