

NAME: PERIOD: DATE:

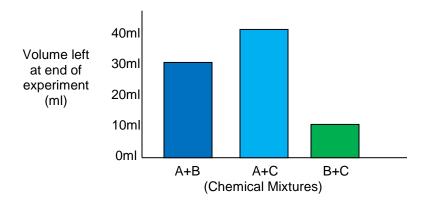
Volume Classwork #2

Answer all questions as best you can. Use your notes to help you. Be specific. Be scientific.

- 1. What is volume? (Pick one.)
- a. a measurement of how much something weighs
- b. a measurement of how much space something takes up
- c. a measurement of the amount of atoms or parts of atoms in an object
- d. all of these

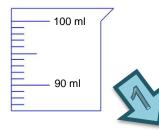
Read the description below, and be sure you understand the graph below before answering questions 2 and 3.

Elwood mixed chemicals together in different ways for an experiment. First, he mixed chemical A with chemical B, then A with C, and finally B with C. He wanted to see what volumes there would be after the experiment was over. Look at his graph:



- 2. After Elwood mixed chemicals B and C what was the volume of what was left?
- 3. Which combination of chemicals had the most volume left over at the end of the experiment? How much did they have left?
- 4. Give two examples of units that are used to measure volume in the Metric system.
- 5. Give two examples of **units** that are used to measure volume in the **English** system.
- 6. What does displacement mean?
- 7. What is the **scale** of the graduated cylinder to the right? (Fill in the blank below)

Each mark is _____ ml



- 8. Find the **volume** of a block of wood that has a length of 22cm, a width of 6cm, and a height of 14cm.
- 9. In the picture to the right, if the flask was a graduated cylinder, would the person be reading it right?

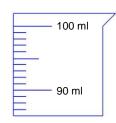
Why or why not?



10. Read the statement below, and then Circle ALL the TRUE statements that follow.

I have a block of Styrofoam that has a volume of 100cm³ and a brick that is the same volume.

- A. Both blocks weigh the same because they are the same size.
- B. The Styrofoam block and the brick cannot be the same volume.
- C. Both blocks have the same volume.
- D. 100cm³ is not a measurement of volume, the units are wrong.
- E. Both blocks take up the same amount of space.
- F. The volume of the brick is greater, because it is heavier.
- 11. On the cylinder to the right, <u>draw a meniscus</u> to show that there is 92ml in the cylinder.



- 12. List the four rules for using a graduated cylinder in the space below:
- a.
- b.
- С
- d.