- 1. The scientific instrument used most often for measuring temperature is the
- 2. The curved surface formed by a liquid in a graduated cylinder is called the ...
- 3. If a brick of gold is 4 cm wide, 3 cm thick and 10 cm long, how would you calculate the volume of the brick?
- 4. On the 50 mL graduated cylinders we use in this class, each small space is equal to
- 5. The numbers on the graduated cylinders shown in Fig.A and Fig. B represent what metric unit?
- 6. What are graduated cylinders used for?
- 7. Why would a person want to use the graduated cylinder in Fig.C instead of the one in Fig.A? (see last page)
- 8. What is the main purpose of the plastic rings around the top of graduated cylinders? (see last page)
- 9. What is the water level shown in the graduated cylinder in Fig. A? (see last page)
- 10. What is the water level shown in the graduated cylinder in Fig. B? (see last page)
- 11. What is the water level shown in the graduated cylinder in Fig. C? (see last page)
- 12. Fig. D (last page) shows the original level of water in a graduated cylinder before a marble was added.
 Fig. E shows the same cylinder with the marble in the water. What is the volume of the marble?
- 13. In Fig. F (last page), what value is arrow "Q" pointing to?
- 14. In Fig. F (last page), what value is arrow "R" pointing to?
- 15. In Fig. F (last page), what value is arrow "S" pointing to?
- 16. If a marble is dropped into a graduated cylinder containing 35 mL of water and the water rises to a new level of 38 mL, what is the volume of the marble?
- 17. The metric ruler is used to measure
- 18. A small metric ruler like the one we use in class is divided into
- 19. What is normal human body temperature on the Celsius scale ?

20. Name the common units of <u>length</u> in the metric system. c1-completion-rev.doc 9/29/03 Do <u>not</u> let other students look at your answers! CHEATERS ARE LAZY! Make the rascals do their own work!

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21. How many millimeters does it take to make a meter?

22. How many grams does it take to make a kilogram?

- 23. About how many pounds in a kilogram?
- 24. Objects with a <u>density</u> less than that of water will always______ when placed in water.
- 25. The temperature scales used most often in scientific work are called.....
- 26. In an experiment designed to test the effectiveness of a fertilizer, 100 plants are grown in soil without fertilizer added and 100 plants are grown in fertilized soil. <u>The group of plants WITHOUT</u> <u>fertilizer is called the</u> ...
- 27. Prefixes are used to change metric units by multiples of
- 28. One milliliter of water is equal in volume to one...
- 29. What metric unit would be most appropriate for expressing the distance from the earth to the sun?
- 30. What is the basic unit of mass in the metric system?
- 31. Without placing an object in the water, how can you determine if it will float?
- 32. What is the basic unit of length in the metric system?
- 33. What is the basic unit of volume in the metric system ?
- 34. What is the basic unit of temperature in the metric system?
- 35. A kilometer is equal to _____ meters and _____ centimeters.
- 36. The standard system of measurement used by all scientists is often called the
- 37. On the Celsius temperature scale, water boils at
- 38. On the Celsius temperature scale, water freezes at
- 39. A liter is slightly larger than what standard American unit?
- 40. Normal room temperature on the Celsius scale is about
- 41. Another name for the metric system is
- 42. A kilogram is equal to _____ grams and _____ milligrams.
- 43. How many centigrams in a gram?

44. How many milliliters in a liter? c1-completion-rev.doc 9/29/03 Do <u>not</u> let other students look at your answers! CHEATERS ARE LAZY! Make the rascals do their own work!

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45. How many centimeters in a meter?

46. Physical science is the study of

47. What is meant by the term *decimal system*?

48. Look at the graph at the bottom of page 3. At what *time* did the chemical finish evaporating?

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49. Look at the graph at the bottom of page 3. At what temperature was the chemical completely evaporated?

- 50. Look at the graph at the bottom of page 3. Why did the temperature go back up?
- 51. Scientific instruments used to measure mass include
- 52. What are the two different symbols (units) that are used to represent "cubic centimeters" ?
- 53. When looking at the curved surface of a liquid in a graduated cylinder, one should always read the quantity closest to
- 54. Which of the following occurs only at the surface of a liquid? evaporation vaporization
- 55. Which of the above can occur at the surface of a liquid or at the bottom of a liquid?
- 56. How many experimental variables should a well designed experiment have?
- 57. Which part of every good experiment contains the variable to be tested?
- 58. Why is it necessary to have a "control" portion in an experiment?
- 59. In a combustion experiment, two clamp assemblies hold pieces of paper towel. One clamp assembly holds a piece of paper towel treated with an oxidizer and the other holds a piece that is not treated. The setup that holds the piece of paper towel that is *untreated* is known as the ...
- 60. Which branch of science would the burning paper towel experiment fit into best?

TEMPERATURES OF A LIQUID CHEMICAL AS IT EVAPORATES FROM A THERMOMETER BULB 20 10 0 °C -10 0.5 1.0 1.5 2.0 3.5 4.0 4.5 3.0 2.5 c1-completion-rev.doc 9/29/03 TIME (MINUTES)

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