

Name: \_\_\_\_\_

Period: \_\_\_\_\_

## Unit One Study Guide

**Directions:** Complete this study guide using the notes, classwork, and labs that we do in the classroom. This will be due the day of the unit one test. This is an **INDIVIDUAL** assignment.

1. List the steps of the scientific method
2. What are the types of observations?
3. What are different types of graphs?
4. Define quantitative observations and give three examples.
5. What are the prefixes we use when we measure?
6. What is a hypothesis?
7. Match the following terms to the definitions.

a. Independent variable	1. The factors that stay the same through every trial
b. Dependent variable	2. The variable that changes
c. Control	3. The trial where you change nothing (the baseline)
d. Constants	4. The variable that you measure
8. Define qualitative observations and give three examples.
9. What is the mnemonic to remember the prefixes?
10. What are observations?

Name: \_\_\_\_\_

Period: \_\_\_\_\_

11. Convert the following:

- a. 750 mg = \_\_\_\_\_ g
- b. 2.98 L = \_\_\_\_\_ kL
- c. 120 cm = \_\_\_\_\_ km
- d. 200000 kg = \_\_\_\_\_ mg

12. What is length and what unit do we use to measure it?

13. What scientific tool do we use to measure mass?

14. What is mass? What unit do we use to measure it?

15. Are mass and weight the same?

16. What scientific tool do we use to measure temperature?

17. What is volume and what unit do we use to measure it?

18. What is temperature?

19. What unit do we use to measure time?

20. What do graduated cylinders measure?

21. What scientific tool do you use to measure length?

22. What is the mean?

23. How many trials should you run?

Name: \_\_\_\_\_

Period: \_\_\_\_\_

24. Create a line graph from the following data:

PLANT	WEEK 0	WEEK 1	WEEK 2	WEEK 3
1	6 cm	8 cm	10 cm	12 cm
2	6 cm	7 cm	8 cm	9 cm
3	6 cm	6.5 cm	7 cm	7.5 cm

25. Create a bar graph from the following data of students' favorite ice-cream flavor:

CHOCOLATE	VANILLA	STRAWBERRY	COOKIES & CREAM
8	6	2	4

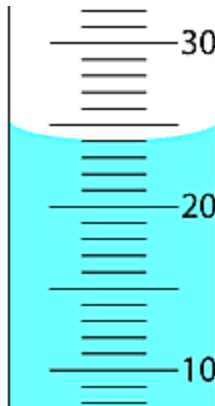
Name: \_\_\_\_\_

Period: \_\_\_\_\_

26. Create a circle graph using the data from the previous question:

CHOCOLATE	VANILLA	STRAWBERRY	COOKIES & CREAM
8	6	2	4

27. Give the measurements for the following (include units):

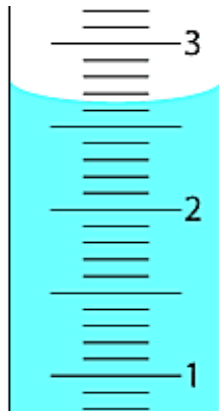


\_\_\_\_\_

Name: \_\_\_\_\_

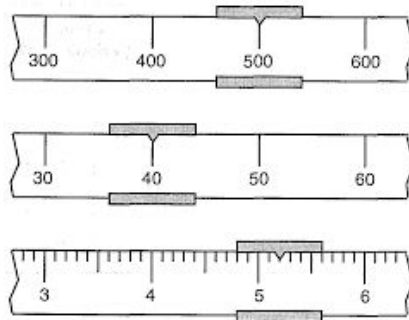
Period: \_\_\_\_\_

28.



\_\_\_\_\_

29.



\_\_\_\_\_

30.



\_\_\_\_\_