Physics 100 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 1: Physics Basics

**Notes: Metric Measuring, Part 1**

Metric Base units: Name the basic **metric** units for each of the following…

1. Volume (size) : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Mass (amount of matter in something): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Weight (how heavy something is; a measure of gravitational attraction) : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Length : \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Metric Estimation: Provide the correct metric unit for each of the following.

Answer Choices:

mm (millimeter) , cm (centimeter), L (liter), mL (milliliter), N (Newton), kg (kilogram), g (gram), m (meter)

5. The width of a pinky fingernail = 1 \_\_\_\_\_\_\_

6. The length of a long step = 1 \_\_\_\_\_\_\_

7. The mass of a standard Nalgene bottle full of water = 1 \_\_\_\_\_\_\_

8. The mass of a paper clip = 1 \_\_\_\_\_\_\_

9. The volume of a chocolate chip = 1 \_\_\_\_\_\_\_

10. The volume of a standard Nalgene water bottle = 1 \_\_\_\_\_\_\_

11. The thickness of a dime = 1 \_\_\_\_\_\_\_

12. The weight of an uncooked burger patty = 1 \_\_\_\_\_\_\_

13. Half of a mile is a little bit less than 1 \_\_\_\_\_\_\_\_

Metric Ratios: Enter numbers that give the correct ratios

14. \_\_\_\_\_\_\_ m = \_\_\_\_\_\_\_\_ cm

15. \_\_\_\_\_\_\_ mm = \_\_\_\_\_\_\_ cm = \_\_\_\_\_\_\_ m

16. \_\_\_\_\_\_\_ m = \_\_\_\_\_\_\_\_ km

**Practice: Metric Measuring, Part 1**

Each of the items below is approximately equal to 1 metric unit. Write the name of the unit and what that unit measures. For some items, there is more than one answer.



Measuring in cm and mm:

1. Measure the line on the right and record the length in cm and mm.

Length = \_\_\_\_\_ cm = \_\_\_\_\_\_\_mm

2. Measure the line below, and record the length in cm and mm.

Length = \_\_\_\_\_\_\_\_\_\_ cm = \_\_\_\_\_\_\_\_\_\_ mm