**Chapter 4: Activity 4-C Practice Measuring Mass Name:**

The **mass** of an object is the quantity of the matter that makes up the object.

People usually measure mass using a device called a **balance**.

Using **page 111** of your text please complete the following sentences.

1. Qualitative properties are not very exact. They depend too much on your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ about what words such as "small" or "green" mean.

2. Scientists prefer to measure matter so they can use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

quantitative properties as much as possible to describe matter.

3. Quantitative properties are properties that you can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and describe using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. All matter- large or small, heavy or light, solid, liquid, or gas - has two things in common: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

5. The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**of an object is the quantity of the matter that makes up the object.

6. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an object is the quantity of space that the object takes up.

7. You usually describe large masses with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. You usually describe small masses with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. 1 kilogram (kg) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ grams (g)

10. For much smaller masses you use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. 1 mg = \_\_\_\_\_\_\_\_\_\_\_\_ gram

11. A medium sized dog = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A slice of toast =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A grape =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A tiny car =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A stamp =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 4: Activity 4-C Practice Measuring Mass Name:**

**Purpose:**

Examine the solid sample objects one at a time. Estimate and record the mass of each sample.

**Hypothesis:**

Estimate the mass of each sample. Use the chart below to record your estimations.

**Materials:**

Balance, beaker or measuring cup, list the sample objects that will be measured: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Procedure:**

List the steps that you took to find the mass of the object:

**Results:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sample Object**  | **Estimated mass of object** | **Actual measurement of object** | **Rank**  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Conclusion: What did you find out?**

1. How accurate were your estimates? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Which object had the largest mass? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Which object had the smallest mass? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. How would you measure the mass of a liquid? Describe the method you might use. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_