

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

Date: \_\_\_\_\_

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

Assignment #: \_\_\_\_\_

## METRIC MADNESS

Directions: You will visit each station. Read the instructions and answer the questions for that station. Our class has been studying METRIC. We know that the three standard metric units are

**grams,  
liters,  
meters.**

We also learned six prefixes that describe the metric units.

### Station 1: Meter sticks

1. How many meters are in a meter stick? \_\_\_\_\_
2. How many centimeters are in a meter stick? \_\_\_\_\_
3. How many millimeters are in a meter stick? \_\_\_\_\_
4. How many decimeters are in a meter stick? \_\_\_\_\_

### Station 2: Meter stick Arrows

1. The blue tab is on \_\_\_\_\_ mm.
2. The red tab is on \_\_\_\_\_ cm.
3. The yellow tab is on \_\_\_\_\_ meters.
4. The green tab is on \_\_\_\_\_ decimeters.

### Station 3: Measuring Items

1. How long is the file folder? \_\_\_\_\_ cm \_\_\_\_\_ mm
2. How wide is the file folder? \_\_\_\_\_ cm \_\_\_\_\_ mm
3. What is the diagonal of the folder? \_\_\_\_\_ cm \_\_\_\_\_ mm
4. What is the length of the file folder opened? \_\_\_\_\_ cm \_\_\_\_\_ mm
5. What is the diagonal of the opened folder? \_\_\_\_\_ cm \_\_\_\_\_ mm

#### Station 4: Measuring the Floor

1. Find the length of one square on the floor. \_\_\_\_\_ cm
2. Find out how many squares are on the floor from the door to the windows. \_\_\_\_\_ Squares
3. Multiply the number of squares by the length of the first square. \_\_\_\_ cm

#### Station 5: Measuring the Room

1. Using a meter stick find out how long the room is from the chalkboard to the back wall. \_\_\_\_\_m \_\_\_\_\_ cm

#### Station 6: Ruler Rules

1. What are the value of the numbered increments? \_\_\_\_\_
2. What is the value of the unnumbered increments? \_\_\_\_\_
3. What does centi mean? \_\_\_\_\_
4. What does milli mean? \_\_\_\_\_
5. What is definition of hectometer? \_\_\_\_\_

#### Section 7: Triple Beam Balance

1. What is the capacity of the balance? \_\_\_\_\_
2. What is the capacity of the ones bar? \_\_\_\_\_
3. What is the capacity of the hundred bar? \_\_\_\_\_
4. What is the capacity of the tens bar? \_\_\_\_\_

#### Section 8: Balance Rules

1. Which bar do you move first? \_\_\_\_\_
2. Which bar do you move last? \_\_\_\_\_
3. What number do you put the bars on to zero the balance?  
\_\_\_\_\_
4. How do you carry the balance? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### Section 9: Mass of the Graduated Cylinder

1. Find the mass of the graduated cylinder. \_\_\_\_\_
2. Add 10 ml of water and find the mass. \_\_\_\_\_

#### Section 10: Mass of the test tubes

1. Find the mass of the test tube with blue liquid. \_\_\_\_\_
2. Find the mass of the test tube with red liquid. \_\_\_\_\_

**Section 11: Mass of the liquid.**

1. Find the mass of the DRY beaker. \_\_\_\_\_
2. Find the mass of 20 ml of water and the beaker. \_\_\_\_\_
3. How much mass does the water have? \_\_\_\_\_

**Section 12: Mass of the Liquid.**

1. Find the mass of the dry beaker. \_\_\_\_\_
2. Find the mass of the red liquid in the beaker. \_\_\_\_\_
3. Find the mass of the red liquid only. \_\_\_\_\_

**Section 13: Pour Liquids**

1. How does the liquid change as it goes to container to container? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Section 14: Graduated cylinder rules**

1. Why is a graduated cylinder named that? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. How much can this graduated cylinder hold? \_\_\_\_\_
3. What is the scale at each graduate? \_\_\_\_\_

**Section 15: Reading the Graduated Cylinder**

1. How much red liquid is in the graduated cylinder? \_\_\_\_\_
2. How much blue liquid is in the graduated cylinder? \_\_\_\_\_
3. How much orange liquid is in the graduated cylinder? \_\_\_\_\_
4. How much green liquid is in the graduated cylinder? \_\_\_\_\_

### **Station 1: Meter sticks**

**At your station, there is a meter stick for you to use. Answer the questions on your lab paper.**

### **Station 2: Meter stick Arrows**

**At your station, you have a meter stick with a blue tab, red tab, yellow tab, and a green tab. Read the measurement at that tab and record it on your paper.**

### **Station 3: Measuring Items**

**There is a file folder at your station. Read the file folder and record the measurements on your paper.**

### **Station 4: Measuring the Floor**

**You are going to find out how wide the classroom is. You need to measure one square on the floor. Record that measurement and then count the squares from the door to the windows. Remember there are some squares covered by lab tables and stations. Please use your ruler to measure the map cabinet (behind the computer) and convert that into squares. Then multiply all of your squares by the measurement of the first square.**

## **Station 5: Measuring the Room**

**You are going to find out how long the classroom is. You need to measure from the chalkboard to the back wall with the meter stick. I suggest you put the meter stick on the floor and find out how long the room is.**

## **Station 6: Ruler Rules**

**Use the ruler to answer the questions.**

## **Section 7: Triple Beam Balance**

**Use the balance to answer the questions.**

## **Section 8: Balance Rules**

**Answer the question on your lab sheet.**

## **Section 9: Mass of the Graduated Cylinder**

**Put the graduated cylinder on the zeroed balance and find the mass of it. Add 10 ml of water and find the mass of both the graduated cylinder and the water.**

## **Section 10: Mass of the test tubes**

**Zero the balance. Find the mass of the blue test-tube. Re-zero the balance. Find the mass of the red test-tube.**

## **Section 11: Mass of the liquid.**

**Zero the balance. Find the mass of the dry beaker. Add 20 ml of water to beaker and find the mass of both the water and the beaker. Now subtract the second answer from the first answer and you will have the mass of the water.**

## **Section 12: Mass of the Liquid.**

**Zero the balance. Find the mass of the dry beaker. Add the red liquid. Find the mass of the red liquid in the beaker. Subtract the mass of the dry beaker from the beaker and the red liquid.**

## **Section 13: Pour Liquids**

**Pour the green liquid into the 250 ml beaker. Now pour that into the square graduated carton. Now pour that into the 600 ml beaker. Pour that into the graduated cylinder. Pour that into the flask. Pour the green liquid back where you started. Record what happens as the liquid moves from container to container.**

## **Section 14: Graduated cylinder rules**

**Answer the questions about the graduated cylinder on your lab paper.**

## **Section 15: Reading the Graduated Cylinder**

**Read and record how much liquid is in each graduated cylinder.**