

## Make Your Own Ruler!!

1. Compare your “ruler” to the 12” ruler:
  - Is your “ruler” the same length?
  - If not, adjust it by trimming it to the proper length.
2. Mark off 1 inch increments:
  - Make your mark all the way across the ruler; straight down.
  - Write 1-12 on the markings (make narrow numbers so that they stay on the 1” marking)
  - Observe that the 1” increments have the same space between them.
  - Each space is 1 inch apart.
  - Must start from zero to go to 4 inches, etc.
3.  $\frac{1}{2}$  Inch increments:
  - What do we use when we do not have a whole inch? \_\_\_\_\_
  - If we were to go  $\frac{1}{2}$  the distance from zero to 1 inch, what fraction is that?  
\_\_\_\_\_
  - Mark your ruler with  $\frac{1}{2}$  inches.
  - Make your make  $\frac{1}{2}$  the length of the 1 inch marking.
  - Label your units of halves.
  - How many halves are in a whole? \_\_\_\_\_(write as a ratio)\_\_\_\_\_
  - How many halves are in 2 inches?\_\_\_\_\_ (write as a ratio)\_\_\_\_\_
  - How many halves are in 3 inches?\_\_\_\_\_ (write as a ratio)\_\_\_\_\_
  - How many halves are in 4 inches?\_\_\_\_\_ (write as a ratio)\_\_\_\_\_
  - What “rule” can you make when comparing halves to a whole unit?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  - When would you use  $\frac{1}{2}$  inches in measurements?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4.  $\frac{1}{4}$  Inch increments:
  - What unit of an inch would you use if it were a half of a half-inch? \_\_\_\_\_
  - Draw your fourths of an inch;  $\frac{1}{2}$  the size of the fourths.

- Label your units of fourths
- How many fourths does it take to make one-inch? \_\_\_\_\_
- How many fourths are in one-half? \_\_\_\_\_
- Write these equivalent fractions comparing halves to fourths:

$$\frac{1}{2} = \frac{\quad}{4} \qquad \frac{\quad}{2} = \frac{4}{4}$$

5.  $\frac{1}{2}$  inch increments:

- What fractional part is  $\frac{1}{2}$  of  $\frac{1}{4}$ ? \_\_\_\_\_
- How many eighths does it take to make one whole? \_\_\_\_\_
- Write equivalent values for fourths to eighths:

$$\frac{1}{4} = \frac{\quad}{8} \qquad \frac{2}{4} = \frac{\quad}{8} \qquad \frac{3}{4} = \frac{\quad}{8}$$

6. Write ten equivalent fractions that you see on your ruler:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

7. Measure your height to the nearest  $\frac{1}{4}$  inch: \_\_\_\_\_

8. Measure the length of your foot to the nearest  $\frac{1}{2}$  inch: \_\_\_\_\_

9. Measure five objects in the room to the nearest  $\frac{1}{4}$  inch: \_\_\_\_\_

Item: \_\_\_\_\_ Measurement: \_\_\_\_\_

Item: \_\_\_\_\_ Measurement: \_\_\_\_\_

Item: \_\_\_\_\_ Measurement: \_\_\_\_\_

Item: \_\_\_\_\_ Measurement: \_\_\_\_\_

Item: \_\_\_\_\_ Measurement: \_\_\_\_\_