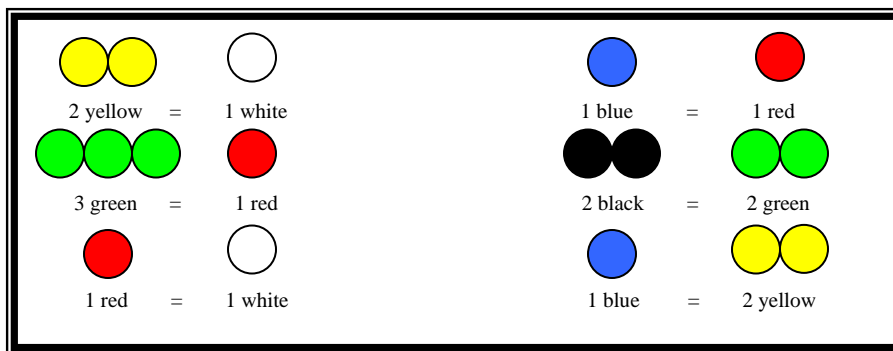


Name: _____ Section: _____
 Unit Relationships and Conversions – Colored Circles

Directions: In the following activity, you will begin to understand and experiment with the idea of units and converting units when not in the metric system. Below is a set of relationships. After looking at the relationships, try to answer the questions that follow. Be sure to identify the steps you must take in order to get from your starting point to your final destination. You may want to use the “**US Conversion Steps**” sheet as a reference when completing the questions. **YOU MUST SHOW ALL WORK!!!**



Example 1: One Step Conversions

How many *green circles* are equal to 12 *black circles*?

Starting point = 12 *black circles*
Final destination = # of *green circles*

$$\frac{(12 \text{ black circles})}{(1)} \cdot \frac{(2 \text{ green circles})}{(2 \text{ black circles})} = 12 \text{ green circles}$$

Example 2: Two Step Conversions

12 *white circles* are equal to how many *blue circles*?

Starting point = 12 *white circles*
Final destination = # of *blue circles*

$$\frac{(12 \text{ white circles})}{(1)} \cdot \frac{(2 \text{ yellow circles})}{(1 \text{ white circle})} \cdot \frac{(1 \text{ blue circle})}{(2 \text{ yellow circles})} = 12 \text{ blue circles}$$

1. 10 yellow circles are equal to how many white circles?

2. How many red circles are equal to 2 green circles?

3. 5 red circles are equal to how many yellow circles?

4. How many green circles are equal to 5 blue circles?

5. 4 black circles are equal to how many blue circles?

6. How many black circles are equal to 15 yellow circles?