

Conversions and Smoke Bombs!

Materials:

1. Salt Peter (Potassium Nitrate)
2. Sugar (regular, powdered, and brown)
3. Alcohol
4. Beaker
5. Alcohol
6. Stirring Rod
7. Pipette
8. Food Coloring

Procedure:

1. Convert the following ingredients from tablespoons to grams. 15 grams = 1 tablespoon
 - a. .3333 tablespoons potassium nitrate = _____ g
 - b. .5333 tablespoons of sugar = _____ g
2. Measure out each of the ingredients using the digital scale. Be extremely precise in order to get good results!
3. Use a mortar and pestle to crush the potassium nitrate as fine as possible.
4. Mix the potassium nitrate and regular sugar in a beaker.
5. Using the pipette, add just enough alcohol to make a thick paste. Stir until they are completely mixed.
6. Set your lump of ingredients onto a piece of wax paper (this is your control).
7. Repeat the experiment with the following changed variable:
 - a. Use **brown sugar** with crushed potassium nitrate
 - b. Use **powdered sugar** with crushed potassium nitrate
 - c. Use the potassium nitrate **without crushing** it and with regular sugar
 - d. Add **food coloring** to the crushed potassium nitrate and regular sugar

Conversions:

1. Convert 3.8 g to lb
 $1\text{ lb} = 453.49\text{ g}$
2. 670 oz to mL
 $1\text{ oz} = 29.57\text{ mL}$
3. 190m to yd
 $1\text{ m} = 1.09\text{ yd}$
4. 250 oz to g
 $1\text{ g} = .035\text{ oz}$