**Lesson Title: ‘Quick Proportions**

**Length: (45 minutes)**

**Standard(s) Addressed: 6.RP.A.3, 7.RP.A.3, 7.NS.A.3**

**Materials:**

1. Pint jar
2. Solo cup
3. Digital scale
4. Measuring cups
5. Measuring spoons
6. Nesquick
7. Creamer
8. Powdered milk

**Outline:**

1. Look at the serving size recommendation (volume) on each of the ingredients.
2. Write a recipe for a cup (8 fl. oz.) of hot cocoa. (You may adjust for tastes)
3. Compute the volume of the entire recipe.
4. Scale the recipe to fill a pint container (16 fl. oz.) (of powder).
5. Look at the serving size recommendation (weight/mass) on each of the ingredients.
6. Write a recipe for a cup (8 fl. oz.) of hot cocoa.
7. Write an equation (y=kx) for each ingredient where x is the size of the container to fill with powder (in fl. oz.) and y is the mass of the ingredient.
8. Use your equation to find a recipe for the cocoa mix that will fit in the pint container (16 oz.)

**Questions:**

1. Which is easier to use volume or weight/mass to fill the container?
2. Why did we do the volume calculations first?