**Kitchen Chemistry Equipment List**

The following kitchen tools are needed to do many of the activities in the Kitchen Chemistry Collection. There is also a table of conversion factors for length, volume, and mass measurements that can be downloaded.

**Length Measurements**
- A ruler or yardstick that includes metric markings (mm and cm). If metric markings are not included, use the conversion factors below to convert the measurements.
- For irregular objects, such as filled balloons, use a string to measure the length and then a ruler to measure the string.

**Volume Measurements**
- For measuring liquid volumes between two tablespoons and two cups you can use a measuring cup and then convert the cup measurement to ml using the conversion factors below. For measurements that are less than two tablespoons, use a measuring spoon. For measurements that are larger than two cups you can use a large measuring cup that also has metric markings, estimating the volume by viewing it at eye level.
- For measuring solid volumes use measuring spoons.

**Mass Measurements**
- Most kitchen food scales include measurement in grams and ounces. [This one](#) is an example of a scale that measures up to 11 pounds and includes both gram and ounce measurements.
- If your kitchen scale does not include gram measurements, convert the ounce measurement to grams using the conversion factors below.

**Temperature Measurements**
- Use a thermometer or temperature probe for temperature measurements. You should use one that can measure temperatures between 0°F and 250°F.
- Use the conversion factors below to convert temperature measurements to Celsius.

**Other Tools**
- Balloons – 12” round
- Beaker Replacement – you can replace a beaker with a glass or clear plastic cup or container
- Bowl – a variety of sizes
- Bucket or large storage container
- Calculator
- Candles – pillar, birthday, votive, tea lights
- Coffee Filters
- Film Canisters
- Funnel
- Graduated Cylinder Replacement – use a measuring cup
- Lighter – stick variety
- Mason Jars
- Paper Clips
- Scissors
- Stopwatch – cell phone
- Tape