

OBJECTIVES OF THE KITCHEN LABORATORY

1. To observe chemical and physical properties and changes of a variety of substances.
2. To make practical applications of lecture information.
3. To learn to properly use simple kitchen equipment as laboratory equipment.
4. To develop proper kitchen laboratory technique.
5. To improve problem solving skills.

CHECKLIST FOR KITCHEN

This is the equipment that you should have readily available in your kitchen. You will be using this equipment for experiments in your kitchen.

PROVIDED AS A RENTAL (IF NEEDED) FROM THE COLLEGE:

| Quantity | Item |
|----------|--|
| 1 | Kitchen balance (weighs to nearest gram & 11 pound max). |

PROVIDED AS A KIT FROM THE COLLEGE:

| Quantity | Item |
|----------|---------------------------|
| 1 | 100 mL graduated cylinder |
| varies | Plastic pipettes |

PROVIDED BY STUDENT:

| Quantity | Item | Quantity | Item |
|----------|----------------------------|----------|--|
| 1 | Apron | 1 | Tweezers |
| 1 | Safety Glasses | | Paperclips |
| 1 | Standard Ruler | | Toothpicks |
| 1 | Pencil | | Clean spoon |
| 1 | Wooden Block | 2 | Plastic containers (Gladware) |
| 1 | Kitchen scale | 2 | Narrow jars – baby food or olive |
| | Tap Water | | Steel Wool |
| | Distilled Water | | Red Cabbage Leaves (used in 2 different experiments) |
| 1 | Small Glass | | Vegetable Oil |
| 4 Colors | Food Coloring | | Plastic bags, various sizes, zip top |
| | Honey | | Vinegar |
| | Colored Dishwashing Liquid | | Baking Soda |
| | Rubbing Alcohol | | Non-iodized table salt or Kosher salt |
| 24 | 12-oz clear plastic cups | | Epsom Salts |

| | | | |
|----------|---|----------|--|
| 5 | Clear tall glasses or plastic cups | | Small saucepan |
| 360 g | Granulated sugar | 9 | Marbles – 3 in 3 different colors |
| | Tablespoon | 2 | Bag plain M & Ms (12 oz) |
| 1 | Bag skittles (12 oz) | | Kool-Aid (3-4 flavors/colors) |
| 1 pkg | Coffee filters | | Table salt |
| | Scissors | | Aluminum foil |
| | Empty 2-L bottle with cap | | Gumdrops – at least 6 colors |
| | White construction paper | | Colored pencils |
| 25 | 1 cm cube wood blocks (Hobby Lobby) | | Colored markers – red, blue, black |
| 1 packet | Soy sauce or ketchup | 3 | Clear 16 oz plastic bottles, label removed |
| 1 | Pen cap | | Modeling clay or silly putty |
| | Birthday candle | | Matches |
| | 3% hydrogen peroxide | 3 pkg | Dry yeast |
| | Borax (grocery) | 4 oz | White glue |
| 1 box | Cornstarch | | Alka seltzer or generic tabs |
| 3 | Regular aspirin tables | 3 | Buffered aspirin tablets |
| 3 | Enteric coated aspirin | 12 | 8 oz clear plastic cups |
| | Milk | | Egg whites |
| | Drain cleaner - such as drano | | Cream of tartar |
| | Liquid hand soap | | Shampoo |
| | Cola or other soft drink | | Glow sticks (craft store) |
| | 1000 mg Vitamin C tablets | | Tincture of Iodine 2% (pharmacy) |
| | 3% hydrogen peroxide | | 9 volt battery |
| 2 | Wooden pencils | | Electrical tape |
| 2 | 4-6 inch pieces of small gauge wire in two colors | | Masking tape |
| | Tarnished silver | 5 | Old dull pennies |
| | Plastic spoons | | Paper towels |
| | Staples | | Stopwatch |
| 1 can | 14 oz sweetened condensed milk | 3 ½ cups | Whole milk |
| 4 tbsp | Butter | 2 tsp | Vanilla extract |
| 2 | 9-inch baking pans (or similar) | | Aluminum foil |
| 1 packet | Dark colored Kool-Aid | 1 packet | Light colored Kool-Aid |
| 24 oz | Semi-sweet chocolate chips | 12 oz | Milk chocolate chips |
| 1 pkg | 14.4 oz graham crackers | 1 bag | 10.35 oz Hershey's chocolate bars – snack size |
| 1 bag | 10 oz large marshmallows | | |

Read through the list of required supplies. Determine which items need to be purchased. If there are any supplies that are unfamiliar to you, please ask in our Lab Q&A board.