

Summer Session 2024 – Equipment and Materials

Chemistry 112:

The labs are designed to be completed at home without access to the resources of a school. A scale for measuring mass is used in multiple labs and students will have to acquire one. There is an inexpensive scale (\$20) available on Amazon: [Digital Scale](#).

All other materials are listed by laboratory:

Conductivity Lab: <ul style="list-style-type: none">▪ 10 small beakers or cups▪ deionized or distilled water (0.5L)▪ unfiltered tap water (60mL or ¼ cup)▪ table sugar (6g or 1 teaspoon)▪ vinegar (60mL or ¼ cup)▪ table salt (6g or 1 teaspoon)▪ chalk dust (6g or 1 teaspoon)▪ lemon juice (60mL or ¼ cup)▪ conductivity tester OR materials to build a conductivity tester (battery, small light bulb, wires)	Conservation of Mass Lab: <ul style="list-style-type: none">▪ scale▪ 2 small beakers or cups▪ 50 mL vinegar (weak acetic acid)▪ 10 mL baking soda (sodium bicarbonate)▪ Alka-Seltzer tablets▪ balloon
Stoichiometry Lab: <ul style="list-style-type: none">▪ scale▪ 2 small beakers or cups▪ 50 mL vinegar (weak acetic acid)▪ 10 mL baking soda (sodium bicarbonate)	

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Chemistry 122:

The labs are designed to be completed at home without access to the resources of a school. A scale for measuring mass and a thermometer are used in multiple labs and students will have to acquire both. There is an inexpensive scale (\$20) available on Amazon: [Digital Scale](#). There is also an inexpensive thermometer (\$20) available on Amazon: [Digital Thermometer](#).

All other materials are listed by laboratory:

Specific Heat Capacity Lab: <ul style="list-style-type: none">▪ 600mL beaker / pot for heating water▪ styrofoam cup OR coffee mug▪ thermometer▪ scale▪ 2 metal objects (iron nail, aluminum foil, copper wire, ...)	Alka-Seltzer Lab: <ul style="list-style-type: none">▪ small beaker or cup▪ thermometer▪ scale▪ 10 tablets of Alka-Seltzer▪ mortar and pestle (or something with which to grind tablets)▪ food coloring OR 2 glow sticks.
Spontaneity Lab: <ul style="list-style-type: none">▪ package of matches▪ deck of cards▪ 10 coins	Isomer Models Lab: <ul style="list-style-type: none">▪ package of toothpicks▪ bag of mini-marshmallows
Milk to Plastic Lab: <ul style="list-style-type: none">▪ 600mL beaker / pot for heating milk▪ 250mL (1 cup) of milk▪ 20 ml of vinegar	