

Materials Supply List

Use the lists below to find everything you'll need to complete all of the lesson plans from each chapter of Middle School Chemistry.

In the few instances where special equipment is required that can't be purchased from a supermarket or office supply store, we've listed suggested sources in the materials section of the corresponding activity.

Three great sources for most of the special supplies used in MSC are [Sargent Welch](#), [Delta Education](#), and [Flinn Scientific](#).

- Sargent Welch: <https://www.sargentwelch.com/store/>
- Delta Education: <https://select.schoolspecialty.com/delta-education>
- Flinn Scientific: <https://www.flinnsci.com/>

In this document, you can find materials for:

- [Chapter 1](#)
- [Chapter 2](#)
- [Chapter 3](#)
- [Chapter 4](#)
- [Chapter 5](#)
- [Chapter 6](#)
- [All Lessons from MSC](#)

Chapter 1

- Clear plastic cups (tall, short)
- 2 large index cards (5 × 8")
- 8-oz plastic bottle
- Balance that measures in grams
- Ball and ring designed specifically for this demonstration
- Basketball, very deflated
- Bunsen burner for heating the ball
- Can of compressed gas (available at any office supply store)
- Detergent solution in a cup
- Droppers
- Food coloring (red, blue, yellow, green)
- Magnifier
- Popsicle sticks
- Pump
- Student thermometer
- Tape
- Water (room temperature, cold, hot (50 °C))
- Wax paper
- White sheet of paper

Chapter 2

- Clear plastic cups (wide, tall)
- Droppers
- Flat toothpicks
- Quart-size zip-closing plastic storage bags
- 2 sets of large metal washers on a string
- Brown paper towel
- Styrofoam balls (1 inch, 1½-inch)
- Dry Ice
- Duct tape
- Empty clean metal soup can
- Gallon-size zip-closing plastic bag
- Graduated cylinder or beaker
- Hot plate or coffee maker
- Ice
- Large beaker or coffee pot
- Magnifier
- Metal spoon or sturdy stick
- Paper towel
- Permanent marker
- Pliers
- Salt
- School glue
- Styrofoam cup
- Teaspoon
- Thermometer
- Water (room temperature, hot, cold)

Chapter 3

- 2 identical clear baby food jars
- Clear plastic cups (tall, short)
- 2 tea light candles in their metal containers
- Balance that measures in grams (able to measure over 100 g)
- Calculator
- Clay
- Copper cube and aluminum cube of the same volume
- Cubes marked A–H that you will share with other groups
- Droppers
- Food coloring (yellow, blue)
- Graduated cylinder (100 mL)
- Isopropyl alcohol, 70% or higher
- Paper towels
- Set of 5 different rods that all have the same mass
- Small cup
- Tape
- Two identical buckets or large containers
- Water (room temperature, hot, cold)
- Water-resistant card (from a deck of cards or laminated index card)

Chapter 4

- Plastic grocery bag
- Scissors
- Inflated balloon
- Small pieces of paper, confetti-size
- Sink
- Balloon
- 9-volt battery
- 2 wires with alligator clips on both ends
- 2 pencils sharpened at both ends
- Water
- Salt
- Clear plastic cup
- Tape
- Black paper
- Cup with salt from evaporated saltwater
- Magnifier
- Permanent marker
- Styrofoam balls (small, large)
- Toothpicks

Chapter 5

- Sheet of white paper
- Deli containers (that cups easily fit inside)
- Disposable cold packs
- Disposable hot packs
- Pennies
- Toothpicks
- Straws
- Brown paper towels
- Calcium chloride
- Cereal balls (Kix work well)
- Club soda
- Coarse kosher salt (sodium chloride)
- Construction paper (white, black)
- Corn syrup
- Dish detergent
- Droppers
- Epsom salt (magnesium sulfate)
- Food coloring
- Graduated cylinders (50mL, 100mL)
- Gram balance
- Isopropyl alcohol (70% or higher)
- Laminated index card or card covered with wax paper
- M&M's
- Magnifier
- Masking tape
- Mineral oil
- MSG (monosodium glutamate)
- Permanent markers (blue and red)
- Pipe cleaner
- Potassium chloride
- Salt
- Scissors
- Simple balance
- Small white plastic plate
- Sodium bicarbonate
- Sodium carbonate
- Styrofoam water molecule models from Chapter 2, Lesson 2 (two per student)
- Sugar (sucrose)
- Tablespoon
- Tape or glue
- Test tube
- Thermometers
- Water (room temperature, hot, cold)
- Zip-closing plastic bag (quart-size, storage-grade)
- Clear plastic cups
- Paper clips (large, small)

Chapter 6

- 2 6-well spot plates or 1 12-well spot plate
- Glow sticks
- Alka-Seltzer
- Aluminum foil
- Atom cut-outs from the activity sheet
- Baking powder
- Baking soda
- Calcium chloride
- Carbonated water (club soda or seltzer water) in wide, clear, plastic cup
- Citric acid
- Clear plastic cups
- Colored pencils
- Copper II sulfate
- Cornstarch
- Cream of tartar
- Detergent solution
- Disposable self-heating hand warmer
- Droppers
- Epsom salt (magnesium sulfate)
- Flat toothpicks
- Glass jar, large enough to be placed over the candle
- Glue
- Graduated cylinder (50 mL, 100 mL)
- Household ammonia
- Hydrogen peroxide (3%)
- Instant heat pack (magnesium sulfate or calcium chloride)
- Insulated cups
- Magnesium sulfate
- Masking tape and pen or permanent marker
- Matches
- Measuring spoons ($\frac{1}{8}$, $\frac{1}{4}$, and $\frac{1}{2}$ teaspoon)
- Pen
- pH color chart
- Plastic waste container
- Popsicle sticks
- Salt
- Scissors
- Self-inflating balloon
- Sheet of colored paper or construction paper
- Snack-sized zip-closing plastic bag
- Sodium carbonate
- Solution A, sodium carbonate solution
- Solution B, more concentrated sodium carbonate solution
- Spot plate
- Straw
- Tea light candle or other small stable candle
- Test tube
- Testing chart (laminated or covered with wax paper)
- Thermometer

- Tincture of iodine
- Universal indicator pH color chart
- Universal indicator solution
- Vinegar
- Water (room temperature, hot, cold)

- Yeast
- Plastic cups (small, tall, wide)
- Tape
- Toothpicks

All Lessons from MSC

- 6-well spot plates or 1 12-well spot plate
- 8-oz plastic bottle
- 9-volt battery
- Alka-Seltzer
- Aluminum foil
- Atom cut-outs (download from MSC)
- Baking powder
- Baking soda
- Balance that measures in grams (over 100 g)
- Ball and ring designed specifically for this demonstration
- Balloon
- Basketball, very deflated
- Brown paper towels
- Buckets or large containers
- Bunsen burner
- Calcium chloride
- Calculator
- Can of compressed gas
- Carbonated water (club soda or seltzer water)
- Cereal balls (Kix work well)
- Citric acid
- Clay
- Clear plastic cups (tall, short)
- Clear plastic cups (wide, tall)
- Club soda
- Coarse kosher salt (sodium chloride)
- Colored pencils
- Construction paper (white, black)
- Copper cube and aluminum cube of same volume
- Copper II sulfate
- Corn syrup
- Cornstarch
- Cream of tartar
- Cubes marked A–H
- Deli containers (that cups easily fit inside)
- Detergent solution
- Disposable cold packs
- Disposable hot packs
- Droppers
- Dry Ice
- Duct tape
- Empty clean metal soup can
- Epsom salt (magnesium sulfate)
- Flat toothpicks
- Food coloring (red, blue, yellow, green)
- Glass jar
- Glow sticks
- Glue
- Graduated cylinder (50 mL, 100 mL)
- Gram balance

- Hot plate or coffee maker
- Household ammonia
- Hydrogen peroxide (3%)
- Ice
- Identical clear baby food jars
- Inflated balloon
- Insulated cups
- Isopropyl alcohol (70% or higher)
- Laminated index card
- Large beaker or coffee pot
- Large index cards (5 × 8")
- M&M's
- Magnesium sulfate
- Magnifier
- Masking tape
- Matches
- Measuring spoons ($\frac{1}{8}$, $\frac{1}{4}$, and $\frac{1}{2}$ teaspoon)
- Metal spoon or sturdy stick
- Mineral oil
- MSG (monosodium glutamate)
- Paper clips (large, small)
- Pen
- Pencils sharpened at both ends
- Pennies
- Permanent markers (blue and red)
- pH color chart
- Pipe cleaner
- Plastic cups (small, tall, wide)
- Plastic grocery bag
- Plastic waste container
- Pliers
- Popsicle sticks
- Potassium chloride
- Pump
- Salt
- Scissors
- Self-inflating balloon
- Set of 5 different rods that all have the same mass
- Sets of large metal washers on a string
- Simple balance
- Sink
- Small pieces of paper, confetti-size
- Small white plastic plate
- Sodium bicarbonate
- Sodium carbonate
- Sodium carbonate solution
- Concentrated sodium carbonate solution
- Spot plate
- Straws
- Student thermometer
- Styrofoam balls (1 inch, 1½-inch)
- Styrofoam cup
- Sugar (sucrose)

- Tablespoon
- Tape or glue
- Tea light candles in their metal containers
- Teaspoon
- Test tube
- Thermometers
- Tincture of iodine
- Toothpicks
- Universal indicator pH color chart
- Universal indicator solution
- Vinegar
- Water (room temperature, hot, cold)
- Wax paper
- Wires with alligator clips on both ends
- Yeast
- Zip-closing plastic bags (snack, quart, gallon)