

Master Supplies List for *Science in the Ancient World*
(Items in red are used only for the challenge lessons.)

- 👉 A ¼-cup measuring cup
- 👉 A ½-cup measuring cup (You need the kind that is used to measure out solids, because you will fill it to overflowing rather than filling it to a certain line.)
- 👉 A 1-cup measuring cup
- 👉 A 2-liter bottle, like the kind soda comes in
- 👉 Three 1-liter plastic bottles
- 👉 A bag of M&M or Skittles candies
- 👉 Two large hard candies that are different colors (I used cinamon candies and lemon drops, but you can use whatever you like. You will need six of each.)
- 👉 A small candy (I used Skittles, but you can use whatever you like. It needs to be smaller than the hard candies listed above. You need eight, and they need to be all the same color.)
- 👉 Life savers mints or candies (The mints work best.)
- 👉 A baseball or tennis ball (It can be some other ball, as long as it is about the same size as a tennis ball and has a thick outer coating into which pins can be stuck without harming the ball.)
- 👉 Two balls of different size (like a baseball and a basketball)
- 👉 A bathtub
- 👉 A birthday candle
- 👉 A block of hard cheese that is easy to bite into (A block of cheddar cheese is ideal.)
- 👉 A board that is at least 60 centimeters (2 feet) in length
- 👉 A bowl
- 👉 A butter knife
- 👉 A can opener
- 👉 A candle that either supports itself or is in a candle holder
- 👉 A cardboard tube from the center of a roll of paper towels
- 👉 A coffee filter
- 👉 A cookie cutter (The more interesting the shape, the better.)
- 👉 A dark towel or blanket
- 👉 A few antacid tablets (TUMS would be best, but anything that says calcium carbonate is the active ingredient will work.)
- 👉 A few marbles that are all the same size
- 👉 A flat surface that can stand to get a bit wet
- 👉 A flat, hand-held mirror (It can't be a magnifying mirror.)
- 👉 A funnel
- 👉 A garden hose attached to a spigot
- 👉 A medium-sized glass bowl or other glass container
- 👉 A large glass jar or other glass container
- 👉 A glass pan (or at least a pan with low edges)
- 👉 Two tall, clear glasses of the same size
- 👉 Six small, clear glasses, like juice glasses
- 👉 A hammer
- 👉 A heavy couch or other piece of furniture that has a small gap between its bottom and the floor.

- 👉 A small pebble
- 👉 A rubber band (It should be short enough to comfortably stretch between your index finger and thumb, but long enough to allow you to use it to launch a pebble into the air. It also needs to be wide enough so the pebble listed above can fit into it.)
- 👉 Three long rubber band
- 👉 Two rubber bands, one that is thick, and one that is thin.
- 👉 A rock that is small enough for you to completely close your hand around it
- 👉 A heavy rock (You need to be able to lift it easily.)
- 👉 A medium-weight rock
- 👉 A very light rock (It needs to be a rock, but it needs to be noticeably lighter than the one above.)
- 👉 A small rock (It needs to be about the same size as a wadded-up sheet of paper.)
- 👉 A small board or tray that you can set rocks on and push them off the edge easily
- 👉 A hotpad
- 👉 A lamp that can be pointed or tilted so its light bulb (not a compact fluorescent or LED light) can be put close to the surface of a counter. (If it's a warm, sunny day, don't worry about the lamp.)
- 👉 A large bowl
- 👉 A large metal spoon
- 👉 A large piece of thick cardboard (It needs to be thick enough to push a thumbtack into.)
- 👉 A square or rectangle of cardboard (It needs to be larger than a paper plate)
- 👉 A sheet of cardboard
- 👉 A thick piece of cardboard, like the side from a cardboard box
- 👉 An index card or other piece of cardboard that is sturdy but is thin enough to fold easily
- 👉 Four nails (One has to be long, another has to be wide enough to make a hole through which water can easily flow, and the third needs to be a thin nail, like a finishing nail. The fourth cannot be a stainless steel or a galvanized nail but can be of any size.)
- 👉 A magnifying glass
- 👉 A magnifying mirror (It is easiest if the mirror is a small, hand-held magnifying mirror. However, it can be a larger one, such as one that sits on a vanity. The larger the mirror, the more dramatic the effect.)
- 👉 A marker
- 👉 A measuring tablespoon
- 👉 A measuring tape
- 👉 A measuring teaspoon
- 👉 A medicine dropper
- 👉 A large mirror, like one that hangs on a wall
- 👉 Quarters (10 if you are doing the challenge lessons, 4 if you are not doing the challenge lessons)
- 👉 A dime
- 👉 Two nickels
- 👉 A least 40 pennies (many should be dull and ugly)
- 👉 A normal sheet of paper (writing paper, printer paper, etc.)
- 👉 A pan in which you can boil water
- 👉 White paper plates (10 if you are doing the challenge lessons, 9 if you are not doing the challenge lessons)

- 👉 A pencil that has never been used
- 👉 A pie pan, preferably with a completely flat bottom
- 👉 A piece of white paper that has print on it, such as a newspaper
- 👉 A pin or needle
- 👉 **A pineapple (It can't be canned. It needs to be an actual pineapple.)**
- 👉 A place with several different kinds of trees and bushes to investigate
- 👉 **A plastic pen (It should be made of slick plastic.)**
- 👉 **A plate (It can't be made of paper, foam, or plastic.)**
- 👉 A reasonably large funnel
- 👉 A round cookie cutter or a glass
- 👉 A ruler or
- 👉 A meter stick
- 👉 **A saucepan**
- 👉 A sharp knife
- 👉 Five sheets of construction paper (Four have to be very dark, preferably black.)
- 👉 A short sidewalk or driveway along which the wagon can be pulled for a little while
- 👉 A shovel, rake, or other tool that has a long, strong, wooden handle
- 👉 A sink that can be filled with water
- 👉 A small amount of raw ground beef
- 👉 A small container (like a juice glass or a small jar) made of clear glass
- 👉 A small container, like a Tupperware storage container (It needs to be one you can mark up.)
- 👉 A small desert bowl or a small glass
- 👉 A small plate
- 👉 **A small Styrofoam cup**
- 👉 A smooth countertop that has an edge off of which you can hang something
- 👉 A spatula
- 👉 A spoon
- 👉 A spray bottle that can produce a fine mist
- 👉 A square of paper, about 13-cm (5-inches) by 13-cm (5-inches)
- 👉 A stepstool, ladder, or something that is safe to stand on so that you can reach high up
- 👉 A stopwatch or a watch with a seconds hand
- 👉 A straight pin
- 👉 **A Styrofoam cup**
- 👉 A sunny window (If it's not sunny, you can use a dark room and a lamp that has a shape which makes it easy to recognize the top and bottom of the lamp.)
- 👉 **A tablespoon**
- 👉 **A thimble (or something else you can use to push on a needle without getting hurt)**
- 👉 A tree or tall pole that casts an easy-to-see shadow
- 👉 A tree stump sitting outside. (It would actually be a bit better to find a large tree branch that has fallen on the ground and have an adult use a saw to cut it in the middle. The idea is that you need a nice, flat surface that you can sand to bring out the tree rings. It is also best to use a stump or branch from a tree that loses its leaves in the winter.)
- 👉 A wagon or something else that you can ride on as it is pulled by another person
- 👉 **A wheel (It can be from anything that rolls - a bicycle, wagon, wheelchair, etc. It works best if you can remove it from the thing to which it is attached so that there isn't a significant bump in the center.)**

- 👉 A working, hand-held flashlight
- 👉 A regular-sized Ziploc bag
- 👉 A large Ziploc bag
- 👉 Four Ziploc bags of any size
- 👉 Active dry yeast (available in the baking section of any supermarket)
- 👉 Alcohol (The container needs to indicate that it is at least 90% pure. Rubbing alcohol is usually 91% pure, and denatured alcohol, which is sold in hardware stores, is usually 95% pure. Either will work.)
- 👉 Rubbing alcohol
- 👉 Aluminum foil
- 👉 An empty 12-ounce can, like the ones containing soda
- 👉 An empty CD case (A small box will work as well.)
- 👉 Two empty metal cans, like the kind soup comes in
- 👉 Bendable straws (6 if you are doing the challenge lessons, 5 if you are not doing the challenge lessons)
- 👉 Baking soda
- 👉 **Butter (Real butter is better than margarine, but margarine will work.)**
- 👉 Clear ammonia (sold with the cleaners in the supermarket)
- 👉 Craft sticks or Popsicle sticks (Two if you are doing only the regular lessons, 18 if you are doing the challenge lessons)
- 👉 Crayons, colored pencils, or markers
- 👉 Dish soap
- 👉 Dried beans from the supermarket
- 👉 **Elmer's glue (or any other white, all-purpose glue in a bottle)**
- 👉 Finger paint (Regular paint and brushes will work as well.)
- 👉 Food coloring
- 👉 Four spools of thread. (If the spools are empty, that's ideal, but spools with thread on them will work as well.)
- 👉 Glue
- 👉 Hydrogen peroxide (You can get it at any drugstore or large supermarket.)
- 👉 Unflavored gelatin (This kind of gelatin is clear when it sets.)
- 👉 Kitchen tongs or pliers
- 👉 Legos (marbles or beads that are made of glass or plastic will work as well)
- 👉 Masking tape (or another type of tape that is easy to see)
- 👉 Matches or a lighter
- 👉 Modeling clay, like Play-Doh
- 👉 Newspapers
- 👉 Paper towels
- 👉 Pepper
- 👉 Plastic wrap
- 👉 Red grapes (You cannot use green grapes. You need the grapes that have a red peel and a whitish, fleshy interior. They are the most common grape [other than the green grapes] sold in the produce section of the supermarket.)
- 👉 Salt
- 👉 Sandpaper
- 👉 Scissors

- 👉 Several leaves from different plants (When you pull them off the plant, make sure the stalk that connects them to the branch comes off with each leaf.)
- 👉 Several marbles
- 👉 Several white sheets of paper
- 👉 **Skim milk (Even 1% fat doesn't work nearly as well.)**
- 👉 Some dirt
- 👉 Some newspaper
- 👉 Some toilet paper
- 👉 String (It needs to be strong string. Yarn will do if you don't have any strong string.)
- 👉 **Super glue**
- 👉 Syrup, honey, or icing (Essentially, it needs to be something sweet and a bit sticky.)
- 👉 Tape
- 👉 Thread
- 👉 **Two bananas that are over ripe (They should have several dark spots on their peels.)**
- 👉 Two flat pieces of wood, wooden boards, or rectangular wooden blocks (They don't have to be very big.)
- 👉 Two magnets (You cannot use refrigerator magnets for this experiment, because they are made of composite materials that behave differently from normal bar magnets.)
- 👉 Two metal sewing needles
- 👉 Two pencils that are the same size
- 👉 Two pushpins or thumbtacks
- 👉 Two straight pins
- 👉 Two toothpicks
- 👉 Vegetable oil
- 👉 Clear vinegar
- 👉 Water
- 👉 Wax paper
- 👉 Wooden matches