

Investigation #1: In the Beginning...God Created Dinosaurs!

1 ½ - 2 Cups of clay or play dough (not too sticky)
Paper plates
Paper towels
Disposable container for mixing plaster
Container of cool water
1-cup measure
Stirring spoons
Plaster of Paris (plain)
Vaseline or oil
Small meat tray
Plastic wrap
Small plastic toy or other object to represent a foot (be creative; each "footprint" should be at least 0.5 cm wide)
Wooden block
Leaf (not too fragile)
Cylindrical object to use in rolling over clay
(Lids of shoebox)
(Metric ruler)
(Teacher's book recipe for play dough)

Investigation #2: Making a Big Impression!

(3) Bowls (or foam trays)
(3) Wire screens a little larger than the trays
Containers for mixing
1 ½ Cups of cool water
3 cups of hot water
¼ cup Salt
¼ cup sugar
Plaster of Paris
Stir sticks
Baking soda
Vinegar
Spoon
2 Chicken wing bones
(3) Sponges
2 Containers (in which bones can soak)

Investigation #3: No Bones About it!

Old toothbrush
Screwdrivers
Popsicle stick
Paper towels
Paper plate
Toothpicks
Prepared rock biscuit with "fossil" inside
Chocolate Chip cookies

Investigation #4: Digging In and Reconstructing Fossils

Measuring tape
Several 1 meter strips of paper to lay on floor
Masking tape
Reference materials about dinosaurs
Ziplock baggies one for each student
Rocks – several for each student
Lettuce leaves
Vinegar

Investigation #5: Can Rocks tell Time?

Empty liquid detergent or water container with a release spout
Toothpick
Food coloring
Container to catch dripping water

Investigation #6: Leave no Stone Unturned

Diagram of rock strata, intrusive rocks, and canyon in the Appendix

Investigation #7: Just How Salty is the Ocean?

Three glasses or plastic cups (at least 12 oz size)
Distilled water (at least 24 oz)
Three wedges of a potato, about same size
Straws
Salt
Cool water
Test tubes
Sheets of paper
Teaspoon
3 different bottles of food coloring

Investigation #8: Ocean Zones—from Light to Dark Places

Milk carton with 3 holes down one side in a vertical line
Duct or masking tape
Water
Large plastic pan

Investigation #9: From Shelf to Shelf and In-Between

Up to date references about submersibles and the deep ocean zones.

Investigation #10: Currents in the Ocean

Global Map
Colored water frozen into cubes
Large pan
Pitcher of warm water

Investigation #11: Where the Rivers Run into the Sea

Map of the United States showing major rivers and lakes (See Appendix)

Colored markers

Internet or other references about the Mississippi River, its tributaries, and the Lewis and Clark expedition

Investigation #12: Evaporation, Condensation, and the Water Cycle

Concentrated, colored salt solutions

Paint brush

Paper

Colored markers

Drinking glass

Ice cubes and water

Bowl

Plastic wrap

Investigation #13: God's System of Purifying Water

Small amount of dirt containing little sticks

Water

Cup to mix dirt and water

Cup to collect water

Stirrer

Hammer

Nail

Empty tin can

Washed sand with small amount of washed gravel

Investigation #14: Weather or Not!

Shaving cream (not gel)
3 paper plates
Pen or pencil
Ice cube
Safety goggles
Shiny metal cans
Clear bottle with narrow neck
References about weather

Investigation #15: Day and Night, Summer and Winter

Clear Tape
String
Ball
Colored Tape
Flashlight
Paper Clip
Styrofoam Ball
Marker
White Paper

Investigation #16: The Temperature's Rising

(2) 8-oz plastic glasses
Water
Dirt
2 electric lamps (or other light that provides heat)
2 Thermometers (same kind)
Round-shaped balloons
Empty soda bottle
Container of hot and ice water
Dark colored marker
Flash light
Empty cardboard roll from toilet paper or wrapping paper
Small ruler

Investigation #17: Weather Instruments

File folder or other stiff paper
Scissors
Drinking straw
Straight pin (or hat pin)
Pencil with eraser
Tape
Hair dryer or fan
Pattern for arrow (Appendix)
Compass
1-liter plastic soda bottle
Marker
Food coloring
Metric/English ruler
Air thermometer

Investigation #18: Forecasting the Weather

National weather maps from a newspaper or the Internet collected over a 5-day period

Investigation #19: From Gentle Breezes to Dangerous Winds

2 empty 2-liter bottles
Tape

Investigation #20: Climate Change

2 shallow pans (same size and shape)
2 cardboard boxes (same size and shape and larger than the pans)
1 small lamp (remove shade)
Scissors
Water
Freezer
Thermometer
Measuring cup (milliliters)
Metric ruler