

Activity Supplies

Opening activities are listed at the beginning of each lesson, and optional activities are listed at the end of each lesson. Optional activities are not required but are offered as enhanced learning opportunities for you to complete with your child.

Lesson 1: What Is a Paleontologist?

- none

Lesson 2: Fossils

Optional Activity

- rock, toy dinosaur, small dog bone, or other similar-sized item

Lesson 3: Dinosaurs in Museums

- several pipe cleaners

Optional Activity

- play dough or modeling clay
- small object

Lesson 4: What Did Dinosaurs Eat?

- 3 foods the child likes, such as sliced banana, warmed green peas, or sliced strawberry (keep foods hidden)
- handheld mirror
- piece of lettuce per child
- piece of jerky per child
- plate
- quarter
- 5 dimes
- 5 nickels

Lesson 5: Reptiles in the Air

Optional Activity

- large bowl
- water
- 10 small pieces of fruit
- slotted spoon or small strainer

Lesson 6: Dinosaurs on the Land

Optional Activity

- different shapes of dried pasta
- paper
- glue

Lesson 7: Ancient Sea Creatures

Optional Activity

- 1 c flour
- $\frac{1}{2}$ c salt
- $\frac{1}{2}$ c warm water
- parchment paper
- small shells or similar sea objects
- oven (optional)

Lesson 8: Ancient Mammals

Optional Activity

- sidewalk chalk

Lesson 9: Extinct Animals

- none

Lesson 10: What Is a Geologist?

- magnifying glass
- measuring tape
- sandpaper
- cup of water
- pencils, colored pencils, or crayons
- paper
- outdoor area with rocks or a handful of rocks if indoors
- something to take photos with (optional)

Lesson 11: Layers of the Earth

- bed

Optional Activity

- cutting board
- apple
- knife (for adult use only)



Activity Supplies. cont.

Lesson 12: Landforms

Optional Activity

- damp play sand
- large casserole dish

Lesson 13: Glaciers

- paper or plastic cup
- small rocks
- water
- blue food dye (optional)
- access to a freezer
- baking sheet with raised edges or cake pan
- wax paper
- flour
- book (2.5-5 cm, or 1-2 in, thick)

Lesson 14: Earthquakes

Optional Activity

- blocks or craft sticks
- straws
- tape
- tabletop



Lesson 15: Volcanoes

- blankets and pillows

Optional Activity

- play dough or modeling clay
- small cup
- large baking sheet
- ¼ c baking soda
- red food dye (optional)
- utensil to mix
- ¾ c vinegar



Lesson 16: Caves

- a blanket
- 2 chairs
- flashlight

Optional Activity

- cardstock or construction paper
- paint
- crayons or markers

Lesson 17: Rocks

- clean rock

Optional Activity

- 1-2 rocks
- paints
- paintbrushes

Lesson 18: Igneous Rocks

Optional Activity

- handful of mini marshmallows
- 2 Tbsp chocolate chips
- handful of dry cereal (such as corn flakes)
- microwave-safe bowl
- heat-safe spoon
- microwave

Lesson 19: Sedimentary Rocks

- wax or parchment paper
- play dough
- heavy item (such as a cast-iron pan)

Optional Activity

- 1-qt clear container with tight-fitting lid
- 1 c uncooked rice
- funnel (optional)
- 1 c dark-colored dried beans
- 1 c flour
- water
- duct tape (optional)



Activity Supplies. cont.

Lesson 20: Metamorphic Rocks

- play dough or modeling clay (2–4 colors)
- plastic sandwich bag

Optional Activity

- candy bar (with peanuts, nougat, or caramel), OR avocado, cream cheese, and salt & pepper
- plastic sandwich bag
- heavy item

Lesson 21: Mining

- prepared cupcake
- 2 plates
- plastic knife
- soda can (rinsed and filled with drinking water)
- pencil (regular or mechanical)
- plastic spoon
- toothpick
- 1 c hard-packed brown sugar
- pebbles
- 2 colors of play dough or modeling clay
- sprinkles
- frosting

Lesson 22: Gemstones

- treat or snack

Optional Activity

- paper
- drawing utensils
- something to hide

Lesson 23: Geodes

- sticky note or piece of paper
- cardboard egg carton
- scissors
- plastic wrap
- blue paint
- paintbrush
- small sandwich bag
- 2 Tbsp Epsom salt
- blue food coloring
- glue

Optional Activity

- geode
- safety goggles
- tube sock
- chisel
- rock hammer or sledgehammer

Lesson 24: Diamonds

- play dough or modeling clay
- scrap paper
- plastic object
- metal spoon
- glass object

Optional Activity

- diamond (real or in a picture)



Lesson 25: Metals

- 3–5 metallic items, such as a ring, paper clip, safety pin, coin, or key

Lesson 26: Extracting Metals

- paper clips
- play dough or modeling clay

Optional Activity

- paper clips
- shallow baking dish
- soil
- magnet

Lesson 27: What Is Geography?

- map of your town, city, or country

Optional Activity

- modeling clay or play dough

Lesson 28: Maps

- small toy or book
- hand-drawn map (see lesson for details)

Lesson 29: The Continents

- world map or globe (optional)

Lesson 30: Zones of the World

Optional Activity

- map of where you live

