Materials List 2022-23

EARTH SCIENCE

Items to be purchased

These items should be purchased. Any source is fine. Prices given are for budgeting purposes and subject to change based on suppliers.)

General Supplies

Also used in other science courses. You may have these from the past or will use them in the future.

- ☐ Mead Quadrille Notebook (for labs)
  - Each student needs their own notebook. It can be used in multiple courses.
- ☐ Composition or Note-taking notebook (for homework)
- ☐ Blue or Black indelible ink pen
- ☐ Pencils
- ☐ Ruler with both inches and centimeters
- ☐ **Thermometer: One of two options (needs to read Celsius and measure as low as 15°C)**
  - **Recommended: Scientific ($13) (Amazon)**
  - **Recommended: Scientific ($3.30) (HST)**
  - **Recommended: Digital meat ($11)**
  - **Please note: A regular thermometer used for taking one's temperature will not work. The range is not sufficient.**
- ☐ Eyedropper (1)
  - Recommended: Pipet (medicine dropper) (50 cents)
  - You may have these from medicine or make-up

Specific Supplies

Unique to Earth Science

- ☐ Mineral Study Kit
  - Please use: Mineral Study Kit, 15 Specimens ($15.95)

Materials List 2022-23

EARTH SCIENCE

Complete list of materials

What follows is a list of materials for each lab. The majority of the materials are common household items. Students should ensure that all materials are ready before work is begun on each lab throughout the year. Students should always bring their calculator and lab notebook to class. Items listed above are underlined.

Unit 1: Lab Notebook Set-up and Solar System Tour

- ☐ None

Unit 2: Moon Investigation

- ☐ penny
- ☐ quarter
- ☐ flashlight
- ☐ large ball or globe
- ☐ base-ball sized ball

Unit 3: Latitude and Longitude Activity

- ☐ None

Unit 4: The Greenhouse Effect and the Cycle of Scientific Enterprise

- ☐ Thermometer
- ☐ dirt
- ☐ foam or paper cup
- ☐ plastic wrap
- ☐ Ruler
- ☐ desk/table lamp (preferred) or flashlight
    - The less energy efficient the lightbulb, the better this lab will work

Unit 5: Discovering Jupiter's Moons

- ☐ None

Unit 6: Mineral Formation Lab

- ☐ Pencil
- ☐ String
- ☐ Scissors
- ☐ ½ cup hot water (Boil just before class and keep as hot as possible)
- ☐ Spoon

- ☐ 2 glass jars/cups
- ☐ Oven mitts OR pot holders (for holding glass jar with hot water)
- ☐ Epson salt OR non-Ionized table salt

Unit 7: Mineral Identification Lab

- ☐ Mineral Study Kit
- ☐ Vinegar
- ☐ Eyedropper
- ☐ paper towel
- ☐ penny
- ☐ magnet
- ☐ **Optional:** Small glass bowl/plate/jar
    - **Note!** This will be used for a hardness test, which means minerals will scratch it

Unit 8: Mineral Identification Lab continued

- ☐ Mineral Study Kit
- ☐ Vinegar
- ☐ Eyedropper
- ☐ paper towel
- ☐ penny
- ☐ magnet
- ☐ **Optional:** Small glass bowl/plate/jar
    - **Note!** This will be used for a hardness test, which means minerals will scratch it

Unit 9: Rock Cycle

- ☐ Die (1 dice)

Unit 10: Sedimentary Rock Formation

- ☐ 3 colors of clay or playdough
- ☐ Knife (metal or plastic)
- ☐ Colored pencils

Unit 11: Rock Identification Lab

- ☐ 10 rocks collected during observation exercises for units 10 and 11
- ☐ Magnifying glass (from mineral kit)
- ☐ Textbook
- ☐ Blank sheet of paper

Unit 12: Continental Drift Lab

- ☐ Scissors
- ☐ Colored Pencils
- ☐ Page 3 of this lab must be printed for the lab

Unit 13: Plate Tectonics Lab

- ☐ 4 colored pencils
- ☐ Ruler
- ☐ 1 piece of white paper
- ☐ 2 pieces of cardstock or heavier paper
- ☐ 1 piece of construction/colored paper (blue preferred)
- ☐ Tape
- ☐ Scissors
- ☐ 2 paper towel tubes
- ☐ 6 large books
  - The books need to make two stacks of approximately the same height
  - Books should be thicker, like textbooks or dictionaries

Unit 14: Exam Review Game

- ☐ No supplies needed

Unit 15: Island Formation

- ☐ 2 pieces of paper
- ☐ playdough/clay
- ☐ tape

Unit 16: Historical Reading and Discussion

- ☐ no supplies needed

Unit 17: Model of the Earth

- ☐ 3 colors of playdough/clay
- ☐ tissue paper or fabric
- ☐ knife
- ☐ toothpick

Unit 18: Weathering Lab

- ☐ 2 clear plastic water bottles/jars with lids of approximately equal size (16 oz. disposable water bottles are ideal)
- ☐ 1-2 cups aquarium gravel

- ☐ water
- ☐ masking tape

Unit 19: Deposition Lab

- ☐ 2 bottles with gravel from unit 18
- ☐ 1 new clear plastic bottle with a cap
- ☐ water
- ☐ 1/4 cup gravel
- ☐ 1/4 cup sand
- ☐ 1/4 cup dirt
- ☐ 1/4 cup small woodchips/wood shavings/ripped up leaves/broken twigs
- ☐ ruler
- ☐ sharpie
- ☐ masking tape

Unit 20: Porosity Investigation

- ☐ Deposition bottle from Unit 19
- ☐ water
- ☐ 1/4 cup dry gravel
- ☐ 1/4 cup dry sand/dirt
- ☐ playdough/clay
- ☐ 3 cups
- ☐ ruler
- ☐ tablespoon

Unit 21: Mass Movement Lab

- ☐ Dirt/soil/sand (1-2 cups)
- ☐ Water
- ☐ Spoon
- ☐ Plastic/glass shoe-box sized box or small casserole dish
- ☐ Ruler

Unit 22: Surface Area and Weathering Lab

- ☐ 3 Alka Seltzer tablets
- ☐ 3 large clear jars or cups
- ☐ 1 c. measuring cup
- ☐ Water
- ☐ Paper towel
- ☐ Optional: Stopwatch

Unit 23: Wind Erosion Simulation

- ☐ casserole dish or shoe-box sized plastic/glass box
- ☐ dirt/sand (a quart or more
- ☐ leaves, sticks, or other biological material
- ☐ textbook

Unit 24: Ocean Currents Model

- ☐ casserole dish or shoe-box sized plastic/glass box
- ☐ pepper or other spice that can float
- ☐ can of soup/beans
- ☐ straw
- ☐ water

Unit 25: Historical Event Analysis

- ☐ No supplies needed

Unit 26: Atmosphere Investigations

- ☐ index card
- ☐ cup
- ☐ water
- ☐ large bowl
- ☐ metric ruler (should have cm)
- ☐ 4 sheets of paper
- ☐ tape

Unit 27: Air Properties and Wind Investigations

- ☐ two large bowls
- ☐ hot water
- ☐ water
- ☐ olive oil (about 1/4 c. or less)
- ☐ ice
- ☐ balloon
- ☐ Empty bottle/jar with opening over which a balloon can fit
- ☐ clear cup or jar

Unit 28: Cloud Creation Lab

- ☐ clear, glass jar with lid
- ☐ match
- ☐ ice (crushed or in small pieces if possible)
- ☐ dark paper or piece of cardboard
- ☐ hot water (boil before class and keep as hot as possible)
- ☐ ruler

Unit 29: Historical Hurricane Model and Discussion

- ☐ No supplies needed

Unit 30: Review Game

- ☐ No supplies needed