

Science Pacing Guide - Second Grade

National Geographic: Exploring Science

*** Useful Information about the program:

https://www.cengage.com/coursepages/mtpleasant_exploring22

[Online access website](#) and for individual usernames and passwords [CLICK HERE](#)

Trimester 1 - Unit: Physical Science - Structure and Properties of Matter

- This is recommending that you teach two to three lessons per week for 30 - 40 min each lesson. (21 lessons)

*** Each bullet represents an approximate day's Science Block (30 - 40 min)

- Pre-Test (Teacher Guide Book pages: 116-123)
- Matter
- Liquids
- Solids
- Investigate: Solids and Liquids
 - Each group of 4 - graduated cylinder (100ml), 2 plastic cups (9 oz), marble ($\frac{5}{8}$ "), water
- Properties
- Color
- Texture: **Science in a Snap**: Each group of 4 - Common objects w/ varying textures such as sandpaper, sea shell, dish sponge, plastic ruler, metal washer, rubber ball or other rough & smooth materials
- Hard and Soft: **Science in a Snap**: Each group of 4 - Objects such as dish sponge, cotton ball, golf ball, rubber ball, pencil, rock, or other hard & soft objects
- Bend and Stretch: **Science in a Snap**: Each group of 4 - Rubber bands of different sizes & thicknesses, other classroom objects that can bend or stretch
- Sink and Float: **Science in a Snap**: Each group of 4 - Paper clip, rock, pencil, wooden block, marble
- **Think Like a Scientist**: Plan and Investigate
- Investigate: Materials That Absorb
 - Each group of 4 - water, measuring cup (8 oz), 4 plastic cups (10 oz), timer, paper, aluminum foil, cotton cloth & paper towel
- Build It
- **Think Like a Scientist**: Make Observations
- Cooling: **Science in a Snap**: Each group of 4 - water in a plastic cup (100 ml), modeling clay (1 stick), small paper plates
- Heating: **Science in a Snap**: Each group of 4 - 20 cm (8 inch) square of foil, small paper plate, ice cube, clock or timer
- Change It?
- **Think Like a Scientist**: Make an Argument
- **Science Career**: Materials Scientist
- Post Test (Teacher Guide Book pages: 116-123)

Trimester 2 - Unit: Earth Science - Earth's Systems: Processes that Shape the Earth

- This is recommending that you teach two to three lessons per week for 30 - 40 min each lesson. (19 lessons)

- Pre-Test (Teacher Guide Book pages: 129-135)
- Earthquakes
- Volcanoes
- Weathering and Erosion: **Science in a Snap:** Each group of 4 - piece of sandstone, plastic jar of water with screw-on lid, hand lens
- Wind Changes Land
- Water Changes Land
- Wind and Water Move Sand
- Investigate: Erosion
 - Each group of 4 - 2 plastic trays (8" x 12" x 2"), potting soil (8 cups), water (200 ml.), measuring cup (8 oz), gravel ($\frac{3}{4}$ cup), 5-6 small rocks, 3-4 chenille stems, 2-3 craft sticks
TEACHER USE - spray bottle with water)16 oz)
- **Think Like a Scientist:** Make Observations
- **Think Like an Engineer:** Case Study - Protecting New Orleans
- **Think Like an Engineer:** Compare Solutions
- Understanding Maps
- Rivers and Oceans
- Lakes and Ponds
- **Think Like a Scientist:** Make a Model
- Ice on Earth
- **Think Like a Scientist:** Obtain Information
- **Science Career:** Glaciologist
- Post Test (Teacher Guide Book pages: 129-135)

Trimester 3 - Unit: Life Science - Interdependent Relationships in Ecosystems

- This is recommending that you teach two to three lessons per week for 30 - 40 min each lesson. (15 lessons)

- Pre-Test (Teacher Guide Book pages: 124-128)
- What Plants Need
- Investigate: Plants and Light
 - Each group of 4 - 2 radish plants, masking tape, plastic spoon, water. FOR TEACHER USE - 10 clear plastic cups (9 oz), radish seeds, potting soil, water
- **Think Like a Scientist**: Plan and Investigate
- Animals Pollinate Flowers
- **Think Like an Engineer**: Case Study - Save the Bees!
- Animals Spread Seeds
- **Think Like a Scientist**: Develop a Model
- Living Things Are Everywhere
- Living Things on the Coast
- Living Things in a Wetland
- Living Things in a Grassland
- **Think Like a Scientist**: Make Observations
- **Science Career**: Field Biologist
- Post Test (Teacher Guide Book pages: 124-128)