

Course Description:

Science 2 (2 of 2) explores the structures of the human body, compares living things in different environments, and digs deeper into natural resources. Explorations include: the different types of landforms, bodies of water, and how to map both landforms and bodies of water. The course examines how changes are made to Earth's surfaces through weathering, erosion, earthquakes, volcanoes, hurricanes, and floods. It digs deeper into the weather, seasons, and objects in the sky such as the Sun and Moon. This course also features lessons on the connection between cultural beliefs and nature, and how natural resources are made, collected, and transported.

Course Objectives:

- Find out what the best solution to severe weather is based on how well they work.
- Compare and tell what happens when the Earth's surface changes quickly and slowly.
- Compare solutions for ways to slow or stop water and wind from changing the shape of the land.
- Tell how to reduce, reuse, and recycle to protect resources.
- Tell what the features of landforms and water bodies on Earth's surface are and how they are mapped.
- Tell what the flow of energy in a food chain is and how food chains are all connected.
- Tell where the brain, heart, lungs, muscles, skeleton, and stomach are, how they look, what they do, and why each is important for survival.
- Design a model to represent land and bodies of water.
- Tell the difference between natural and manmade resources.
- Tell what the changes in the movement, position, and shapes of other objects in the sky are.
- Tell how plants and animals change as the environment changes.
- Tell what sense organs are and what they do.
- Tell how animals help carry pollen and seeds from one place to another.
- Tell about the weather patterns that predict severe weather and name the different types of severe weather.
- Explain why people need air, food, energy, shelter, and water for survival.
- Describe how people have different beliefs about nature.
- Tell how people from different cultures and communities celebrate nature.
- Describe how people get natural resources from the Earth.
- Describe and sort the ways natural resources are made ready for people to use.
- Learn about and draw how a system works to get natural resources to people.

Required Materials:

Required:

- balloon
- bowls (2)
- chocolate chips (10-12 pieces)
- cotton swabs (20)
- crayons/colored pencils
- cup
- fan
- materials for map model

- materials for house model
- paper
- pencils
- plastic sandwich bag
- pot
- printer and printer paper (for printables)
- printables (see Course Syllabus for link)
- research materials, like books or the internet
- scissors
- warm water
- water

Optional Materials:

- cardboard
- colored building blocks
- colored construction paper
- markers, crayons, or colored pencils
- craft sticks
- foam cups or containers
- foam sheets
- glue
- modeling clay
- fabric scraps
- small pebbles
- sticks
- plastic
- plastic wrap
- foam
- wood
- plastic tub

Course Overview:

This course is made up of 6 units. Each unit has five lessons. Lesson are made of up activities that include the following types of learning:

- **Direct Instructions** provide modeling of new skills and concepts. These are not graded activities.
- **Guided Practices** allow for practice of a skill with support. These are graded activities only on a completion basis.
- **Independent Practices** allow for practice of a skill without support. These are graded activities.
- **Unit Reviews** allow for practice of skills prior to taking unit exams. These are not graded activities.
- **Unit Exams** test mastery of skills from the unit. These are graded activities.
- **Projects** provide an opportunity for practice of more complex skills across several activities or lessons within a unit. These activities require a final graded submission.

