Science 3 (2 of 2)

Course Description:

Science 3 (2 of 2) investigates plants and animals, and how traits are passed from parent to offspring. It examines how plants are sorted into flowering and nonflowering categories. Animal characteristics are described and sorted into major groups based on key characteristics. Topics include climate and weather, our solar system, and natural resources.

Course Objectives:

- Study fossil information to show where they might have lived and which other creatures could have things in common with them.
- Describe how the environment can impact the success of certain traits.
- Explain how the Sun is the source of energy for Earth's systems.
- Explain how tools and technology are used to put together, look at, and think about weather data.
- Explain the flow of energy from the Sun to producers and consumers.
- Find the differences between renewable and nonrenewable resources.
- Find the differences between the meaning of words in science and everyday words.
- Describe how scientists use models to better understand and explain how things work.
- Explain how not having some traits can change how organisms survive in their environments.
- Explain fast changes on Earth's surface.
- Explain that people can learn more about the natural world by careful observation.
- Explain the relationship between orbits and the location of the Sun, Earth, and Moon.
- Create many solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- Identify and model stages in animal life cycles and plant groups, including how they act with stimuli, and their external and internal parts.
- Predict how changes in a food chain can impact the ecosystem.

Required Materials:

Required:

- 2 balls that are the same size
- 3 objects to represent human-made structures
- a piece of chocolate or butter
- flat surface that can be shaken
- materials for house (toothpicks, posterboard, popsicle sticks, pins, string, cardboard etc.)
- model materials for Water an Weather activity
- paper
- pencils
- printables (see Course Syllabus for link)
- printer and copy paper (for worksheets)
- sand, gravel, or a pile of small objects
- sunny window or lamp
- telescope or online resources

Optional

- crayons/markers/colored pencils

Science 3 (2 of 2)

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.
- **Checkpoints** test mastery of skills from lessons. 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.