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SCIENCE PARENT GUIDE – UNIT 5

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| ***IMPORTANT CONCEPTS YOUR STUDENT SHOULD KNOW AND ACTIVITIES TO DO AT HOME*** | |
| **FOSSILS** | |
| **DESCRIPTION** | |
| The third grade Georgia Standards of Excellence in Science engage students in raising questions about the world around them. In this unit, students will study fossils as evidence of life millions of years ago. Students will construct an argument from observations of fossils (authentic or reproduction) to communicate how they serve as evidence of past organisms and the environment in which they lived. Students will develop their understanding of fossils by creating models to describe the sequence and conditions required for an organism becoming fossilized. | |
| **KEY WORDS TO KNOW** | |
| **Fossils**: preserved parts or traces of animals and plants that lived in the past  **Authentic**: the real or actual object  **Reproduction**: model of the actual object  **Model:** a representation of something found in real life  **Evidence:** material that proves a point  **Organism-** Any living thing. Organisms carry on life processes, which include reproduction and metabolism.  **Fossil-** The hardened traces or remains of animals or plants naturally preserved in the ground.  **Sequence:** the order of something  **Conditions:** the circumstances involved in something  **Remains**-to be left when the other parts are gone or have been use | **Archaeologist-** a scientists that examines the physical remains that human left behind such as decaying ruins and buried objects including fossils.  **Paleontologist**- a scientists that studies the remains of living things (fossils) of past times.  **Excavate-** to dig out and remove  **Sediments-**material (such as stones and sand) that is carried into water by water, wind, etc.  **Minerals-** naturally occurring solid substance (as diamond, gold, or quartz) that is not of plant or animal origin.  **Fossilized-**to become changed into a fossil  **Preserve-** to keep intact, or free from decay  **Extinct-**no longer in existence; lost or especially having died out leaving no living representatives  **AT HOME VOCABULRY STRATEGIES**  1. Read aloud with your child.  2. Use vocabulary words in daily conversations.  3. Build a word wall or window.  4. Play simple vocabulary games.  5. Relate words to real life experiences.  http://1.bp.blogspot.com/-QOn2S_p5PU8/Vg5eWgC54BI/AAAAAAAAPuU/lQnA-gp1UkM/s640/vocabulary.png |

SCIENCE PARENT GUIDE – UNIT 5

SCIENCE PARENT GUIDE – UNIT 1

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| **Recommended Children’s Literature (Available at your local public library or Amazon.)** | | | |
| **Get Epic (click on link) or getepic.com**   * [***Fossils***](https://www.getepic.com/app/read/40302) by Carla Mooney * [***What are Fossils***](https://www.getepic.com/app/read/8116) by Natalie Hyde * [***Plant Fossils***](https://www.getepic.com/app/read/8087) by Natalie Hyde * [***Animal Fossils***](https://www.getepic.com/app/read/8084) by Natalie Hyde * [***Figuring Out Fossils***](https://www.getepic.com/app/read/6019) by Sally Walker * [***Tyrannosaurus Rex***](https://www.getepic.com/app/read/22388) by Barbara Alpert (Other dinosaurs are available!) | | *Rocks and Fossils* by Ray Oliver *Fossils Tell of Long Ago* by Aliki Brandenberg*Digging up Dinosaurs* by Aliki Brandenberg*Curious About Fossils* by Kate Waters | |
| **ROCKS AND SOIL** | | | |
| **Important Concepts**  **Addressed in this Unit** | **Sample Questions** | | **How You Can Help Your Child** |
| S3E2. Obtain, evaluate, and communicate information on how fossils provide evidence of past organisms.   1. Construct an argument from observations of fossils (authentic or reproduction) to communicate how they serve as evidence of past organisms and the environments in which they lived. 2. Develop a model to describe the sequence and conditions required for an organism to become fossilized.   (Clarification statement: Types of fossils (cast, mold, trace, and true) are not addressed in this standard). | A fossil is…Dinosaur bonesThe preserved remains of a once-living organismHard rocks that look like a dinosaurCER-Claim-Evidence-ReasoningFossils can provide scientists with information about past environments. They can also determine the age of the organism. Imagine that you found two fossils in the desert. Write a claim and provide evidence to support your reasoning of why you think the fossils were found in the desert.https://cdn.acceleratelearning.com/system/content_images/contents/70414/original/what_happened_before.png?1481731295  1. Which of these could be best used to model how a fossil form? 2. Water carrying away dirt as it flows 3. A plate of sand being blown away by a fan 4. An object buried between layers of clay 5. Digging a hole in a cup of sand  Which type of environment did this fossil live in? Image result for fossil of a fish DesertPrairieOceanTundra | | **Digital Resources**  Science Curriculum STEMscopes or HMH via My Backpack Fossils<http://studyjams.scholastic.com/studyjams/jams/science/rocks-minerals-landforms/fossils.htm>Brain Pop/Brain Pop Jr. via My Backpack[www.brainpop.com](http://www.brainpop.com)FossilsThe Nye site can be found at <http://billnye.com>.<http://www.fossilsforkids.com> This site contains fossil information including a safety guide, tools of the trade, fossil history timelines and great links to other fossil sites. <http://www.fossils-facts-and-finds.com/index.html> |
| **CHANGES TO SCIENCE STANDARDS: Students are expected to perform the practices while learning the content and understanding the crosscutting concepts.** | | | |
| **Science and Engineering Practices**  Students can use their understanding to investigate the natural world through the practices of science inquiry, or solve meaningful problems through the practices of engineering design.  **Crosscutting Concepts**  Provide students with connections and intellectual tools that are related across the differing areas of disciplinary content and can enrich their application of practices and their understanding of core ideas.  **Core Ideas**  Core ideas cover the four domains: physical sciences, earth and space sciences, life science, and engineering and technology. | |  | |