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SCIENCE PARENT GUIDE – UNIT 3

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| ***IMPORTANT CONCEPTS YOUR STUDENT SHOULD KNOW AND ACTIVITIES TO DO AT HOME*** | |
| **POLLUTION AND HUMAN IMPACT** | |
| **DESCRIPTION** | |
| Third grade Georgia Standards of Excellence for Science engage students in constructing meaningful models that allow them to gain understanding of the natural world. In this unit, students will recognize the effects of pollution on the environment. Students will explore, research, and communicate solutions, such as conservation of resources and recycling of materials, to protect plants and animals. | |
| **KEY WORDS TO KNOW** | |
| * **Organism-** A living thing * **Runoff-** Water from rain or snow that flows over land * **Water Pollution**- Water that contains chemicals from fertilizers, pesticides, household cleaners and trash. * **Air Pollution**- Happens when smoke, dust, or gases are released into the air * **Pollution:** Harmful material that is added to the environment * **Land Pollution**- Takes place when humans use pesticides and other dangerous chemicals that mix in with the soil. * **Ozone-** a gas that occurs naturally high in the atmosphere; it is dangerous to living organisms * **Habitat-** an area in an ecosystem in which a group of organisms lives * **Recycle:** To reuse a resource by breaking it down and making a new product. * **Reduce:** To use less of a resource * **Reuse:** To use a resource again and again | * **Natural Resource:** A material that is found in nature and is used by living things * **Renewable Resource:** A resource that can be replaced quickly * **Nonrenewable Resource:** A resource that, when it is used up, will not exist again during a human lifetime * **Conservation:** The saving of resources by using them   **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 3 

SCIENCE PARENT GUIDE – UNIT 1

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| **Children’s Literature (Available at your local public library or Amazon.)** | | | |
| 1. Just A Dream – Chris Van Allsburg  2. *The Giving Tree* – Shel Silverstein  3. *The Paper Bag Prince* – Colin Thompson  *4. The Lorax by Dr. Seuss* | | | |
| **POLLUTION AND HUMAN IMPACT** | | | |
| **Important Concepts**  **Addressed in this Unit** | **Sample Questions** | | **How You Can Help Your Child** |
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| **S3L2. Obtain, evaluate, and communicate information about the effects of pollution (air, land, and water) and humans on the environment.**  a. Ask questions to collect information and create records of sources and effects of pollution on the plants and animals.  b. Explore, research, and communicate solutions, such as conservation of resources and recycling of materials, to protect plants and animals. | 1. Which of the following is an example of a question a student could ask to determine whether the environment has been affected by a factory polluting a lake?   1. Have local trees grown smaller? 2. Are there fewer plants and animals? 3. Have local trees grown taller? 4. Have new insects moved into the region?   2. You see trash cans and litter on the beaches of Tybee Island. Which of the following would be a good solution to this problem?   1. Close the area until nature cleans it up. 2. Add recycling bins and more trash cans. 3. Hold a car wash to raise money for research. 4. Pass out flyers asking people to stop littering.   3. Which provides protection and avoids wasteful and destructive use?   1. Recycling 2. Resources 3. Conservation 4. protect | | **Digital Resources**  Science Curriculum STEMscopes or HMH via My Backpack  Study Jams <http://studyjams.scholastic.com/studyjams/jams/science/ecosystems/population-growth.htm> Brain Pop/Brain Pop Jr.[www.brainpop.com](http://www.brainpop.com)  * Humans and the Environment * Air Pollution * Water Pollution * Rachel Carson * Everglades * Waste Management * Hybrid Cars * Fossil Fuels * Natural Resources * Water Supply |
| **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. | |  | |