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| ***IMPORTANT CONCEPTS YOUR STUDENT SHOULD KNOW AND ACTIVITIES TO DO AT HOME*** |
|  **Cells and Microorganisms Unit** |
|  **Important Concepts Addressed in this Unit** |
| **S5L3. Obtain, evaluate, and communicate information to compare and contrast the parts of plant and animal cells.** a. Gather evidence by utilizing technology tools to support a claim that plants and animals are comprised of cells too small to be seen without magnification. b. Develop a model to identify and label parts of a plant cell (membrane, wall, cytoplasm, nucleus, chloroplasts) and of an animal cell (membrane, cytoplasm, and nucleus). c. Construct an explanation that differentiates between the structure of plant and animal cells.**S5L4. Obtain, evaluate, and communicate information about how microorganisms benefit or harm larger organisms. (Clarification statement: Possible microorganisms could include Tardigrades, Lactobacillus, Probiotics, Rotifers, Salmonella, Clostridium botulinum (Botox), E-coli, Algae, etc. Students are not expected to know these specific microorganisms. The list is provided to give teachers examples.)** a. Construct an argument using scientific evidence to support a claim that some microorganisms are beneficial. b. Construct an argument using scientific evidence to support a claim that some microorganisms are harmful | * I can analyze evidence collected by technology to support a claim that plants and animals are comprised of cells too small to be seen without magnification.
* I can develop a model to identify and label parts of a plant cell (membrane, wall, cytoplasm, nucleus, chloroplasts) and of an animal cell (membrane, cytoplasm, and nucleus).
* I can refine explanations and models that differentiate between the structure of plant and animal cells.
* I can use scientific evidence to provide multiple examples that support a claim that some microorganisms are beneficial.
* I can use scientific evidence to provide multiple examples that support a claim that some microorganisms are beneficial.
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| **Key Words To Know** | **How You Can Help Your Student** |
| 1. **Cells:** The basic unit of structure and function in all living things
2. **Microscope:** A tool that makes tiny objects, such as cells, appear much larger
3. **Magnification**: the process of making objects appear larger than they are
4. **Organelle:** Part of the cell that does a certain job in a cell
5. **Cell Membrane:** A covering that surrounds and protects the cell
6. **Cell Wall:** Stiff covering outside the cell membrane that supports and protects a plant cell
7. **Cytoplasm:** A jelly, liquid like substance that fills the space between the cell membrane and nucleus. It contains chemicals that help the cell stay healthy
8. **Nucleus:** Most important organelle and the control center of the cell
9. **Chloroplast:** Organelle that uses light energy to make food for the plant cell
10. **Microorganism:** An organism that is too small to be seen with the unaided eye. These include bacteria, fungi, viruses, and protozoa.
11. **Bacteria:** A certain type of microorganism. They are single-celled and do not contain a nucleus.
12. **Mold:** A type of microorganism classified as a fungus that can be both beneficial and harmful.
 | **Interactive Learning Games:** Playing games is a wonderful way to practice skills at home in a fun environment**.****Study Vocabulary-**Study vocabulary nightly with your child from this parent guide. Websites:\*\*All vocabulary words and articles/activities read and completed during class can be on the google classroom, which can be accessed at home anytime.<http://www.ducksters.com/><https://www.brainpop.com/><https://jr.brainpop.com/> |