



Ebd TEEMS NxtGen – Grade 5

At-A-Glance

Intended Audience: 5th Grade

Course Length: 6-8 weeks

Our Water, Our World engages learners in hands-on inquiry and design as they explore one of the greatest challenges of the 21st century: universal access to clean water. This Building Block integrates concepts of science, technology, engineering, and mathematics through the environmental context of water resource management and conservation. By utilizing an experiential approach, students collaboratively investigate global water issues and learn that stewardship and innovation can make a difference in solving the world's problems.

Objectives

- Identify Earth resources and materials that come from the environment to meet the needs and wants of humans.
- Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
- Identify science as a way of answering questions and explaining the natural world.
- Identify technology as a way of inventing tools and techniques to solve human problems.
- Describe an example of a common technological change in a community (transportation, communication) that has had either a positive or negative impact on society or the environment.
- Distinguish changes in the environment as natural or human-made.
- Compare changes in the environment that are good or bad.
- Describe how the results of the use of technology can be good or bad.
- Identify contributions that humans have made throughout the history of science and technology.
- Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- Distinguish the difference between the different spheres and how they interact with each other.
- Distinguish between a scientific fact and an opinion, providing clear explanations that connect claims and evidence.
- Describe the movement of water on Earth as it circulates through the phases of the water cycle.
- Generate questions about objects, organisms, or events that can be answered through scientific investigations.
- State a conclusion consistent with information, observations, and data.
- Use physical properties (shape, size, color, texture, temperature, volume) to describe matter.
- Provide an example of the effect that human waste has had on the environment (water).
- Determine the main idea of a text and support it with key details.
- Apply knowledge about a topic gained through research to the completion of a specified project.
- Design, conduct, and/or describe the steps of an investigation to test one variable.
- Identify tools, materials, and techniques used to make things or complete tasks.
- Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.
- Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of a problem.
- Describe the design process as a method of developing solutions to problems.
- Apply a design process that includes defining a problem, generating ideas, selecting a solution, making an item, evaluating it, and presenting results to solve a technological problem.
- Describe how the effects of new ideas, new ways of doing things, and inventions can be good or bad.



For More Information

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