EbD TEEMS NxtGen – Grade 1
At-A-Glance

Intended Audience: 1ˢᵗ Grade   **Course Length: 6-8 weeks**

Can You Hear Me? engages young learners in hands-on inquiry and design as they explore one of the greatest challenges of the 21st century: how we are able to hear and process sounds. This Building Block integrates concepts of science, technology, engineering, and mathematics through the environmental context of noise pollution. Science and mathematics concepts that are reinforced include the history of the telephone, echolocation, vibrations, and counting beats of a rhythm. By utilizing an experiential approach, students collaboratively investigate the issue of noise pollution, which is probably something they do not realize is a form of pollution. Following guided inquiry activities, a design challenge provides an opportunity for students to apply knowledge and skills in a meaningful way as they design and create something that makes a sound and also helps them detect sounds. A *Grand Challenge for Engineering* identified by the National Academy of Engineering as "Reverse-Engineer the Brain" serves as a real-world inspiration for students to connect their learning with the present and the future.

Objectives

- Identify tools and techniques that people use to help them complete tasks.
- Name materials used to make things.
- Distinguish between the natural world and the human-made world.
- 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.
- Categorize objects as either natural or designed by humans.
- Describe a product that has been made to meet a specific human need or want.
- Provide an example of how the way people live and work has changed throughout history because of technology.
- Recognize that everyone can design solutions to problems.
- Describe design as a creative process.
- Apply a design process that includes identifying a problem, looking for ideas, developing solutions, and sharing solutions with others to solve a technological problem.
- Write and draw ideas and solutions during the design process.
- Construct an object using the design process.
- Identify agricultural technologies that make it possible for food to be available year round and to conserve resources.
- Generate questions about objects, organisms, or events that can be answered through scientific investigations.
- Design, conduct, and/or describe the steps of an investigation to test one variable.
- State a conclusion consistent with information, observations, or data.
- Identify contributions that humans have made throughout the history of science and technology.
- Ask and answer questions about details in a text with prompting.
- Identify the main topic and retell key details of a text.
- Ask and answer questions to determine unknown words.
- Write informative text that includes the topic name, some facts supplied about the topic, and a closure.
- Answer questions on a provided topic following shared research.
- Describe familiar people, places, things, and events with relevant details and express ideas clearly.
- Accurately count beats using a variety of rhythms.

For More Information

Contact Us At

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