Consider Your Technologies

When using video and interactive games with students, you need to make decisions before using them in the classroom. Which type of technology device will you use to display the online interactives and videos? Will students work individually, with partners or as a whole group? Each decision hinges on what you know about your classroom and your students.

When deciding which type of technology device to use, consider the following:

Interactive Whiteboards (IWBs) or projectors allow you to project a computer display on a larger interactive touch screen. Displaying videos and games helps the whole class visualize concepts and practice them together, as students will take turns with you.

Laptop computers and tablets let students experience and explore the interactive games with a partner or individually. Supply students with a mouse and two sets of headphones. It is ideal to also give them an audio "splitter," which allows two children to listen to the same audio when playing a game together.

Learning With Video

Videos are an important part of this website and introduce students to the focal STEM concepts. To get the most out of the video co-viewing experience:

Use "pause points" and questions to support children's learning.
Don't be afraid to break videos into smaller segments than what is recommended. Replaying short segments of video (1 - 2 minutes) several times helps children focus on the topic.

Pause to explain the focal STEM concepts. Use these pauses with students to ask questions, explain challenging concepts, and determine students' interest level.

Learning With Interactive Games

Interactive games provide opportunities for students to practice skills in pairs and in small or large groups, and can scaffold and support students' learning. As an educator, you play a critical role in supporting learning throughout the school day. Your role will be just as important when implementing this website activity.

Supporting Interactive Game Play

In order to have a successful learning experience with interactive games, children must have a meaningful understanding of three components of game play.

- **How to use the laptops and accessories (headphones/mice).** For example, how to click and make things happen within a game, as well as how this is different from game play on the Interactive Whiteboard, where you use your finger to touch and select objects.
- **The rules and goals of the game.** In a small-group setting, model the interactive game with a quick demonstration. Then, allow students an opportunity to play the game, rotating throughout the room to engage students in conversation about their play, or sometimes pausing the group to reinforce the rules and goals of the game.

During Game Play

Observe students' progress while they play, and ask questions to assess if they need help. To gauge whether students understand the interactive game and are focusing on the STEM concepts, watch them play and consider if they are clicking purposefully or randomly. If children appear to be clicking randomly or are off-task, ask them to explain what they are doing or to explain the rules to you, then follow up with targeted directions, prompts or strategies to help them move forward.