



Super Smart Sphero!

Let's test our knowledge with Sphero! In this activity, students will take a "pop quiz" by answering questions and driving Sphero to the correct answer. This activity will begin by have answer choices set up (A,B,C,D). From there, multiple choice questions for any given subject area will be assigned to students. To answer the questions, students will drive the Sphero over to their answer choice.

Materials

- Sphero Bolt Robot or Sphero SPRK + Robot
- Device to control Sphero (iPad, cellphone, etc.)
- Sphero Play or Sphero Edu App
- Internet access
- Paper or digital space to record questions

Student Objectives

- Students will be able to answer questions in various subject areas
- Students will be able to read question prompts
- Students will be able to write or verbally share question responses
- Students will collaborate with peers to move Sphero
- Students will learn programming skills to drive their Sphero robots

Teacher Technology Skills Needed

- Understanding of the Sphero Robots
- Understanding of Sphero Play/Sphero Edu App
- Understanding of how to push out content digitally to students
- Skills for driving and controlling the Sphero Bolt/SPRK+

Standards

NGSS Standards:

- K-2-ETS1-1- Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

Common Core State Standards:



- RI.2.1- Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- MP.2- Reason abstractly and quantitatively.

Procedure

1. Start the lesson by determining what subject you would like to create a quiz for. Once you have decided on a subject, brainstorm what the quiz will be about. This can be done across subject areas.
2. Once the content has been decided, begin creating multiple-choice questions. The questions can be recorded on paper (notecards). Be sure to make each question and answer on a new notecard. This can also be done digitally, depending on available resources.
3. Setup your quiz space by writing letters A,B,C,D on large colored paper. Then, students can select a notecard from a pile, which will include all of the questions.
*Tip- Use a paperclip to place the four answer choices with the question so that they can easily be accessed.
4. Next, students will use the Sphero to move to the correct answer choice. This will be done by using the Sphero Play App on Tilt or Drive mode. The Sphero Edu App could also be used to add code to move the Sphero.
5. Students will then choose a question, read it aloud, and read the 4 answer choices that will be placed on each letter. Students will then drive their Sphero to the correct answer choice. There are two choices for how this can be done, depending on materials available.
-Each student can have their own Sphero to drive and whoever gets to the right answer first, earns a point.
-Students can take turn answering questions and driving the Sphero
6. This can continue until all questions have been answered. The student with the highest number of points wins!
7. This lesson will conclude by having a review of the content learned throughout the activity as well as key concepts and findings while using the Sphero robot.

Extension Activity

- Task students with the challenge of developing additional questions for their peers to answer. This can be typed out, handwritten, or verbally shared.
- Challenge students by having them create additional twists and turns for their Sphero robot to get to the correct answer choice.