



DeKalb County
School District
Fernbank Science Center

Title: Star Wars Robot Science (4208)
Level: Second
Location: Fernbank Science Center

Type: Single Visit
Length: 60 minutes
Limit: One class/period

Program Description

Students will explore the science and engineering behind a sphere bot that was featured in the latest Star Wars movie. Students will explore the process of writing code enabling robots to execute specific commands. The activities explored will include a basic programming introduction, APP overview, program a square, and square with loops. They will use materials provided (robots and iPads) to work in groups. This class is an introduction to a series of classes designed to expose students to the future of robotics and space exploration while completing engineering & design challenges.

Objectives

- 1) S2P2. Obtain, evaluate, and communicate information to explain the effect of a force (a push or a pull) in the movement of an object (changes in speed and direction).
- 2) S2E2. Obtain, evaluate, and communicate information to develop an understanding of the patterns of the sun and the moon and the sun's effect on Earth.

Vocabulary

coding
drag & drop

robot
angle

programming
degrees

Pre-Visit Activities

Poll students to see how many students have programmed a robot. Ask students if they have seen the latest Star Wars movie and if they are familiar with the robot BB-8.

Follow-Up Activities

The Lighting Lab in the Sphero education section invites interested students, teachers and families to participate in numerous activities involving math, science, and programming. These phenomenal hands-on activities are found at the following website

<http://www.sphero.com/education>