

Sphero Bolts on the Map 1st Grade

Social Studies Standard 2 Objective 3 & Standard 2 Objective 2

Science 1.2 & Standard 1.1.1

Math 1.G.

STEM Standard 1.AP.3

Previous Knowledge: Students will have knowledge of how to make a map using neighborhood and community symbols and landmarks. They will also have been taught the cardinal direction. Students also have previous knowledge of the use of Ipads and Sphero bolts.

Instructional Materials: Sphero bolts, Ipads, construction paper, solar panels, batteries, light, playdough, butcher paper.

Learning Objective: Students will be able to demonstrate understanding the sun rise and set in accordance with cardinal directions. They will show understanding of the needs of living plants along with the knowledge of community symbols and landmarks. Students will demonstrate understanding of how to code with the use of a Sphero bolt.

Procedure: Students will use a large piece of butcher paper to map out a community. They will then color and construct a house using construction paper. Students will have to decide where their house should be located for optimal lighting. They will work together to place community symbols and landmarks. Students will use a battery and solar panel with playdough to make their solar panel convert to energy and cause the light to light up. Students will then place a garden within the community and the yards of their homes. Lights will be turned off and a light will be used over the community to resemble the sun. Students will adjunct their community as needed for optimal plant growth and light for their solar panels. After the community is ready they will code a Sphero bolt to go through the community.

Assessments: Informative assessment throughout the lesson