SPHERO BOLT LONG JUMP

OVERALL TIME *Up to 1-hour lesson*

GROUPS *Three to four kids*

PROGRAMMING LEVEL *Draw: Manual Movement, Distance, Direction, Speed, and Color*

CONTENT THEME *Science*

OVERVIEW

Kids will use block coding to get the Sphero BOLT to jump the farthest.

A variety of 3 ramps will be used to see which one results in the longest jump.

Kids will record their data in the EDP journal documenting mean, median, mode, and range.

MATERIALS

- **Box of sand**
- **3 ramps**
- **Maze Tape or ruler**
- **Sphero BOLT**
- **Electronic device**

INSTRUCTIONS

Create a simple block code that will send the Sphero BOLT on its way to the ramp.

Make a prediction in your EDP journal as to how the Sphero BOLT will fly for Ramp 1, 2, and 3.

Document your results for Ramp 1, 2, and 3. Include heading, speed, duration, and distance traveled (cm).

SPHERO BOLT LONG JUMP

NAME _____

Ramp Height	Speed	Distance (cm)	Heading

When you've tested all your ideas look back at your recording sheet and ask yourself:

- *Why did those ideas cause the Sphero BOLT to jump a shorter distance?*
- *Which ideas helped the Sphero BOLT jump farther?*
- *Why did those ideas make the Sphero BOLT jump farther?*
- *Which idea or combination of ideas helped the Sphero BOLT jump the farthest?*
- *Why did that idea or combination of ideas help the Sphero BOLT jump the farthest?*
- *Are there any other ideas or combinations of ideas that you want to go back and test?*

Mean	*Median*	*Mode*	*Range*