






Sphero BOLT *Activity Progression*

Programming CORE: Complete these activities to build strong foundations for programming BOLT

 Draw Manual Movement, Distance, Direction, Speed, & Color	 Beginning Block Roll, Delay, Sound, Speak, & Main LED	 Intermediate Block Simple Controls (Loops), Sensors, Speed, & Color & Comments	 Advanced Block Functions, Variables, Complex Controls (If Then), & Comparators	 Beginning Text JavaScript Movements, Lights, & Sounds
<ul style="list-style-type: none"> • Draw 1: Shapes 	<ul style="list-style-type: none"> • Blocks 1: Roll Block Squares • Blocks 2: Light & Sound Stories • Blocks 3: Matrix Emotions 	<ul style="list-style-type: none"> • Blocks 4: On Collision Event Pong • Blocks 5: If Then Animal Toss • Blocks 6: Sensor Storytelling Sidekick 	<ul style="list-style-type: none"> • Blocks 7: Flashlight Function Tug o' War • Blocks 8: Hot BOLTatoes & Variables 	<ul style="list-style-type: none"> • Text 1: Hello World

Subject Area Activities: Choose and adapt activities to fit your classroom and grade level needs

<p>Science</p> <ul style="list-style-type: none"> • Planetary Motion • El Corazon/The Heart • Circuit Coding Challenge • Costa Rican Turtles • Acceleration Equations • Hydro Hypothesis • Atom Tracks • Helmets for the Win • Organ Quiz 	<p>Technology</p> <ul style="list-style-type: none"> • The Ethics of Computing (Cyber) • How the Internet Works (Cyber) • Intro to Cryptography (Cyber) • Types of Hackers (Cyber) • Stopping Cyberbullying (Cyber) • The Powers of 2 (AP CSP) • Variables (AP CSP) • Morse Code/Data Structures 	<p>Engineering</p> <ul style="list-style-type: none"> • Tractor Pull • Chariot Challenge • Bridge Challenge • Sphero City • Swim Meet • Jousting Tournament
<p>Art</p> <ul style="list-style-type: none"> • Light Painting • Art for Social Justice • Holographic Projections • American Art 	<p>Math</p> <ul style="list-style-type: none"> • Draw 3: Perimeter • Geometric Transformation • Area of a Rectangle • Mathematical Darts • Linear Relationships • Fun Fun Functions 	<p>Language Arts & Social Studies</p> <ul style="list-style-type: none"> • Draw 2: Spelling • Programming the Nile • What a Character • Avoid the Minotaur