

IMAGINE THAT! AND FUTURE TECH

PARENT SUMMARY [CODE]A-BOT

This camp is a combination of EV3 Robotics, Coding and Advanced LEGO building.

We hope to complete all builds and activities offered in each camp.

EV3S



The **Riley Rover** bot will get students started with the basics in move blocks, motors and sensors and use flowcharts to create command sequences. With additions to the Riley Rover bot your student will advance through a series of challenges that include different sensors and programming blocks! How does time affect distance? Why are rotations not accurate when programmed? We'll answer these questions and more!



The Spik3r: This robot is all about throwing balls and striking your target. Spik3r spins around and around and when you're ready, it releases the ball from the shooter to knock over whatever target your student desires. Students will program the Spik3r in steps, each will have challenges to test out the students programming of that section.



Kraz3: The Kraz3 robot operates through separate IR remote. That's the bug that you see in the picture. Kraz3 reacts to the bugs commands through the color sensor. Your student can program the robot to act nuts and to just follow the bug remote around. Each of the EV3 building activities is built in sections where once a section is complete, students must complete programming challenges to move on in the building process.



The Wack3m: This building activity is loads of fun! This arcade style bot has students "wacking" the upraised disks as quickly as they can. It's all about speed! As students build, they will be required to stop and learn the programming associated with each section of the robot.

This activity can be played as it is being built. This is actually a great way to test students programming with each unit that is built.



CODING



CodeCombat: Students will have a great adventure while they learn to code with CodeCombat. Choosing an Avatar to battle its way through levels a student must complete the challenge by writing the correct code and sequence to move on. With success the player gains gems which they can use to buy armor or skills to progress through the game. We will begin learning Python, but the program can be used to teach LUA, Java Script and more. CodeCombat is considered one of the best learning tools and can be used at home.

ADVANCED LEGOO BUILD



Extreme Building/ The Snow Walker: This bot uses old school technology to get action. Using Pulleys, Levers and Gears the Snow Walker will move out on its mission.

This is considered an advanced build due to its complicated construction, needed interpretation and the fact that the pictured elements are shown all in white.

This will take creativity and time in order to complete.