JUNIOR ROBOTICS - ROVE HOTEL

SPIKE Essential

Develop your child's engineering design skills as they investigate ways of defining problems, brainstorming solutions, and testing and refining prototypes. They'll refine their problem-solving skills as they create a solution to a problem that has constraints, and improve on others' ideas. All while honing their ability to identify failure points and success criteria when comparing, modifying, and evaluating a solution.

Your child will improve their communication skills as they engage in a range of collaborative discussions about their solutions.

Date & Focus	Activity	Description / Activity Tasks
18th Sep – Introduction/ Guided lesson	***Bowling Fun***	Introduction to different elements of SPIKE Essential – motors, color sensor, built-in gyro sensor, light box, and word blocks Have fun with Daniel's bowling game! Can you get a strike?
25th Sep - Guided lesson	***Trash Monster Machine***	Help Sofie create a new way for her friends to throw out their trash. Explore the use of color sensor for coding the machine
2nd Oct – Guided Lesson	***Big Little Helper***	Build a robot helper that can help carry Daniel's things Code the robot to use the shortest path back home. Modify the robot to improve its features.
9th Oct - Computational Thinking	***Taxi! Taxi!***	Build and code a taxi that will help Leo go to the Art Museum. Design and code a new route to the Castle
16th Oct – Computational Thinking	***Big Bus***	Design and build a bus for Daniel to get to the sports stadium to see the big game.

		Upgrade the bus route to stop at different stops
23rd Oct – Computational Thinking	*Animal Alarm*	Design and build an animal alarm that can detect any animal passing by the campsite. Create a code that can detect different colored animals and sound an alarm
30th Oct – Design Engineering & Computational Thinking	*High Tech Playground*	Build and code a playground with a high-tech seesaw that works on gyro sensor
6th Nov – Design Engineering & Computational Thinking	*Get Around Town*	Design, build and code a mode of transportation to move around the town
13th Nov – Design Engineering & Computational Thinking	*Creative Carnival Games*	Design, build and code a new game for school carnival using motor, color sensor and gyro sensor
20th Nov – Design Engineering & Computational Thinking	*Your School Creation*	Design, build and code a creative invention for your classroom using at least one sensor and two motors