
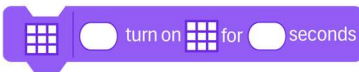







Hub Activities and Icebreakers

Try these activities and explore new ways to use the Hub in your LEGO® Education SPIKE™ Prime kit.



Activity	Challenge	Inspiration
Random Number Selector	<ul style="list-style-type: none"> In the classroom you may need to select a name or number for a lesson or activity. Can you program the Hub to act as a random number selector? Think about the range of numbers that is most appropriate for your classroom activity. 	<p>Consider using Operators to create your Number selector program.</p> 
Create Your Own Die	<ul style="list-style-type: none"> Do you like playing board games? A die is a six-sided cube to roll to randomize a number between 1 and 6. Can you program the Hub to mimic a rolling die? Roll your new Hub die to play a game in class. 	<p>Consider using Light blocks and Operators to program your dice.</p> 
Countdown Timer	<ul style="list-style-type: none"> 10... 9... 8... Can you create a countdown timer for classroom activities? Program your Hub to countdown. What will indicate the timer has reached zero? 	<p>Consider using Event blocks or Light blocks for your timer.</p> 
Color Sensor Multiple Choice	<ul style="list-style-type: none"> Develop a quiz game, multiple choice questions, or survey. Use the color sensor to record your responses. Use the Color Sensor to track responses. How will you display the results of your questions? 	<p>Consider displaying your responses using the Bar Graph blocks or Light Blocks.</p> 
Display My Answer Device	<ul style="list-style-type: none"> Your teacher will have many questions throughout the year. Can you use the Hub to display your answer? Can you program multiple choice letters to display on the Hub? What are alternative ways to show a response to a question? 	<p>Consider using the Light blocks to display your answer or using a motor to point to the correct response.</p> 
Hot Potato Game	<ul style="list-style-type: none"> Hot potato... Hot potato... Have you ever played the Hot Potato game? The game involves passing an object back and forth until a timer goes off and the person holding the Hot Potato is out of the game for that round. Can you design your Hub to act like the Hot Potato game? Program a timer and a sound to indicate the end of the round. 	<p>Consider using the Sound blocks to program a sound to indicate the end of a round of the game.</p> 
Create Your Own	<ul style="list-style-type: none"> Can you create your own unique way to use the Hub from your LEGO® Education SPIKE™ Prime set? Make a game, add a sensor, display a cool light pattern... it is up to you! Be creative and share your inventions with the class. 	<p>Have students create their own Hub activity. Then, share the inventions with the class and receive feedback from classmates.</p> 
How Many Different Ways	<ul style="list-style-type: none"> Remix the inventions. Select one of the activities or games above. Then, ask students how many different ways they could solve the challenge. There are multiple solutions and ways to program each of the challenges. Have students explore, create new programs, and share with the class. 	<p>Have students explore different ways to program the same challenge. Encourage students to test out new code blocks to design their new programs.</p> 