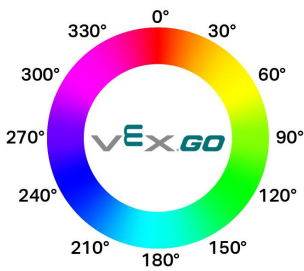


VEX GO Activity - Coding



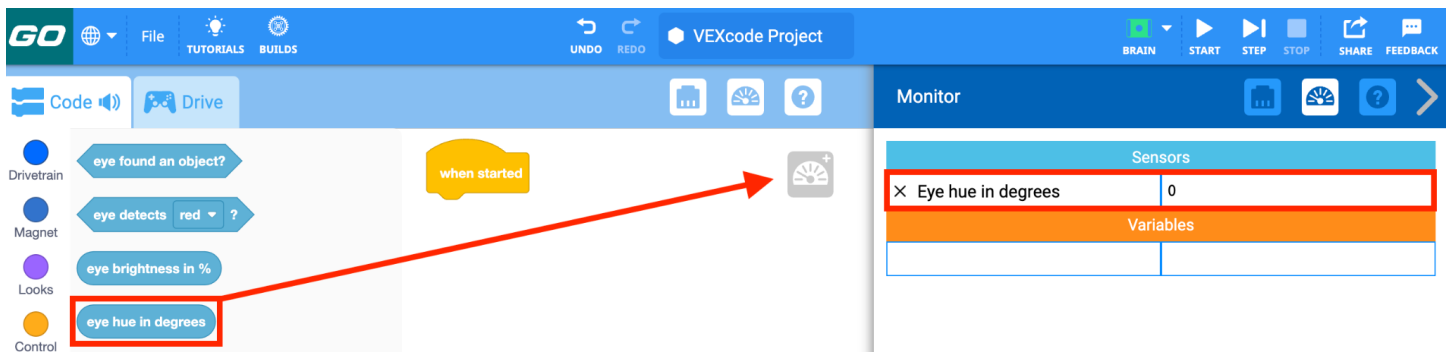
Mars Rover - Sample Analysis

Practice Sensing

Code your Code Base - Eye + Electromagnet as a Mars Rover to analyze the color of a sample.

Step by Step

1. Build the Code Base 2.0 - Eye + Electromagnet robot ([PDF Build Instructions](#) or [3D Build Instructions](#)). Place a Disk under the Eye Sensor for analysis.
 - a. Build the Code Base 2.0, if needed, using the [PDF Build Instructions](#) or [3D Build Instructions](#)
2. The goal is for the robot to analyze the color of the sample. Then find the color on the Color Hue Wheel above.
3. Using VEXcode GO, configure the Code Base, select and drag the **Hue of** block in the Eye Sensing category to the Monitor Console icon, and read the value in the [Monitor Console](#) to meet the goal.



'LEVEL UP'

- **What is that color?** - Use the Eye Sensor to measure the color hue of the sample. Then use conditional statements and operators to determine the color and print the color to the Print Console.
- **Collect the carbon-based samples!** - Drive the robot forward to a Disk, stop, and analyze color. If the Disk is Green (carbon-based) then pickup the Disk with the Electromagnet. Then return back to the home base.

Pro Tips

Example Projects

There is a 'Printing Values' example project available to help you with your goal.



Standard: ISTE (1) Empowered Learner - 1c: Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.