

# Mars Rover: Surface Operations

Lab 1 Images

# Suggested Role Responsibilities

## Builder

- Build steps 1-8 of the Code Base 2.0
- Help build step 18 of the Code Base 2.0
- Build steps 19-21 of the Code Base 2.0
- Build steps 1-4 of the Code Base 2.0 - LED Bumper Top
- Connect the Brain to VEXcode GO
- Open, name and save the project in Play Part 1
- Start and stop the project in Play Part 1
- Edit the project in Play Part 2

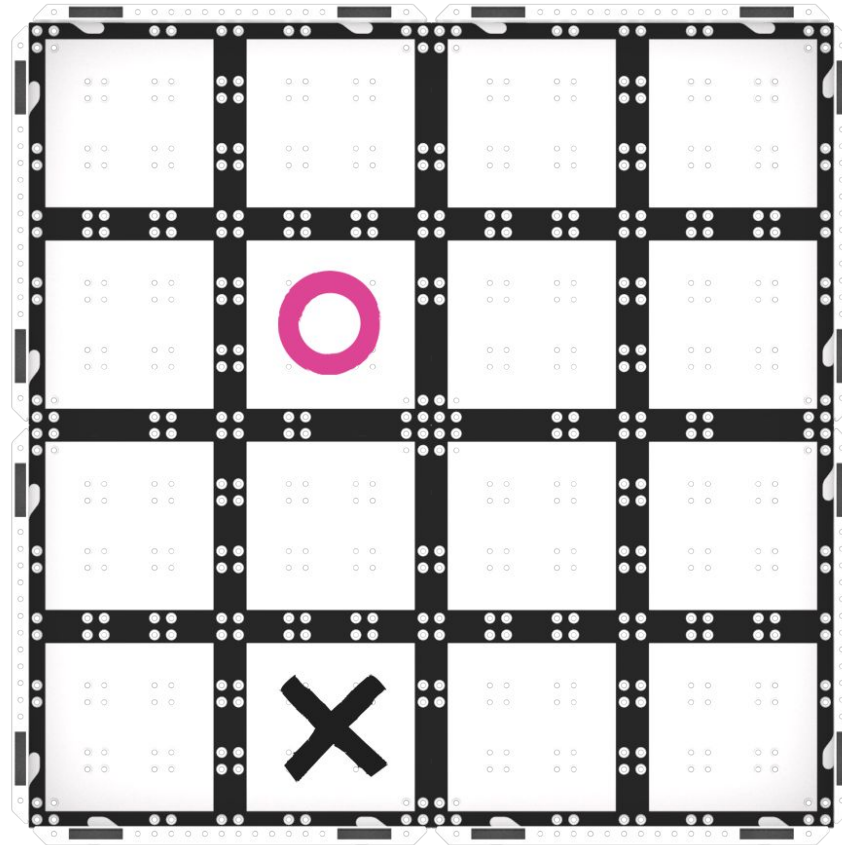
## Journalist

- Gather materials from the checklist
- Build steps 9-17 of the Code Base 2.0
- Help build step 18 of the Code Base 2.0
- Build steps 22-23 of the Code Base 2.0
- Build steps 5-9 of the Code Base 2.0 - LED Bumper Top
- Edit the project in Play Part 1
- Open, name and save the project in Play Part 2
- Start and stop the project in Play Part 2

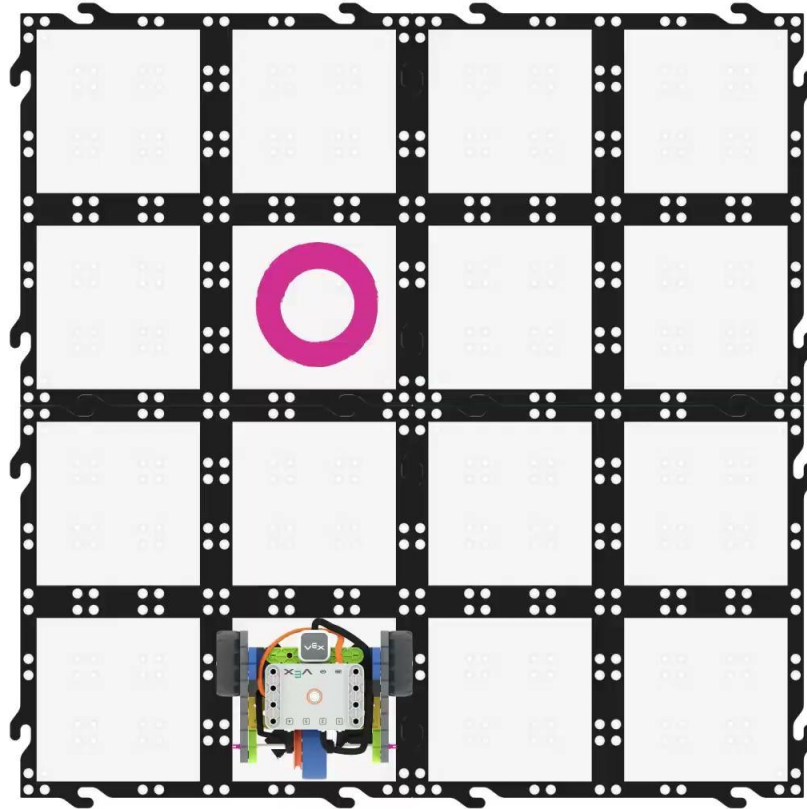
# Code Base 2.0 - LED Bumper Top



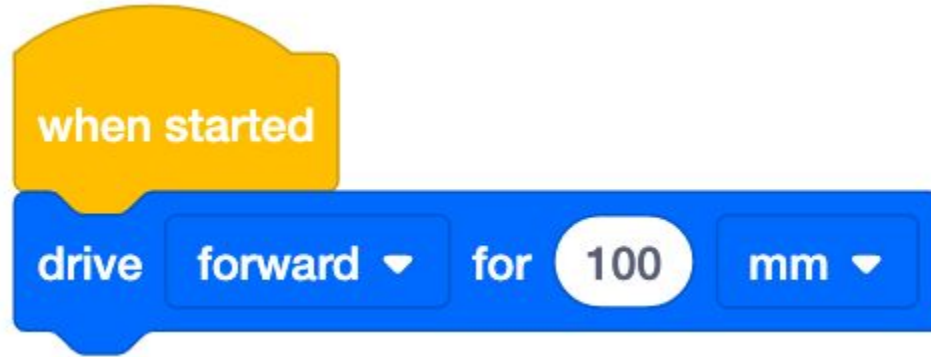
# Field Setup



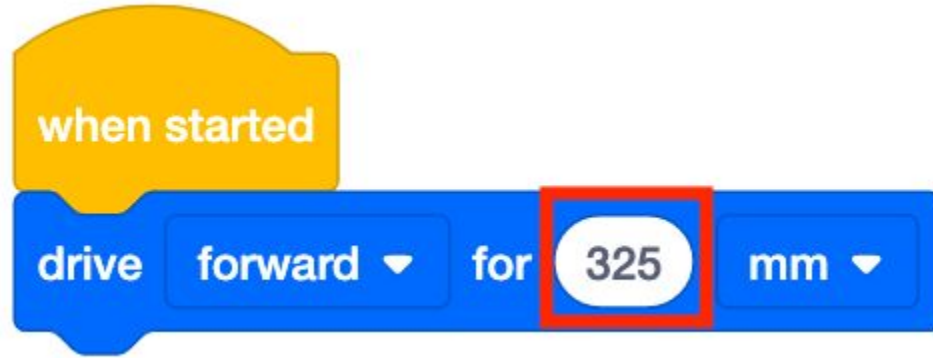
# Collect a sample



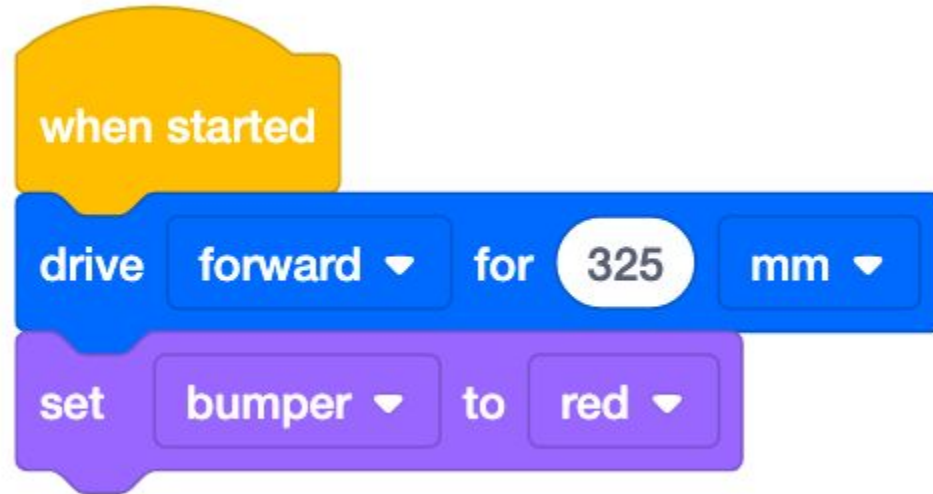
# Add [Drive for] block



# Change Parameters

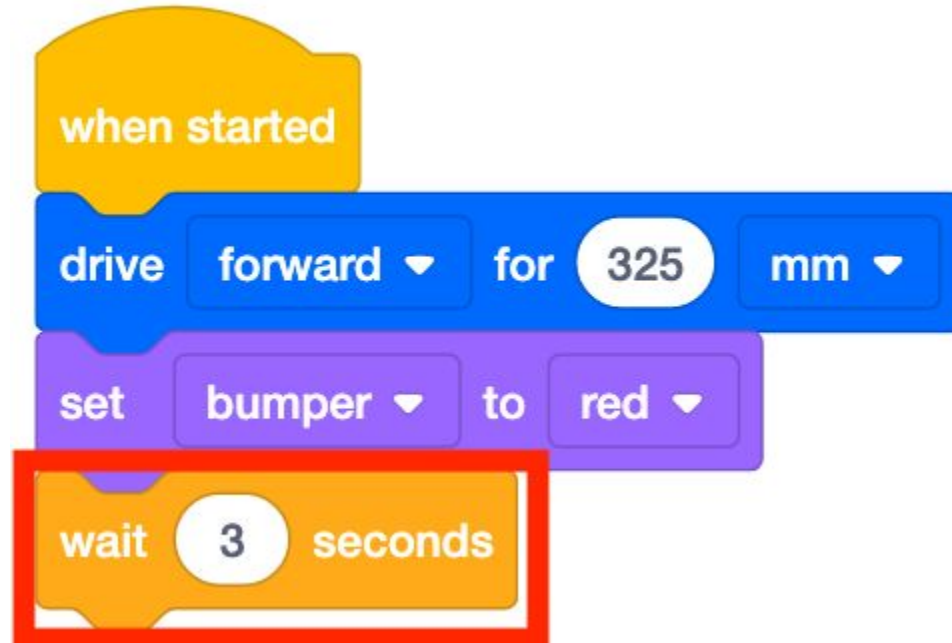


# Add [Set bumper color] block

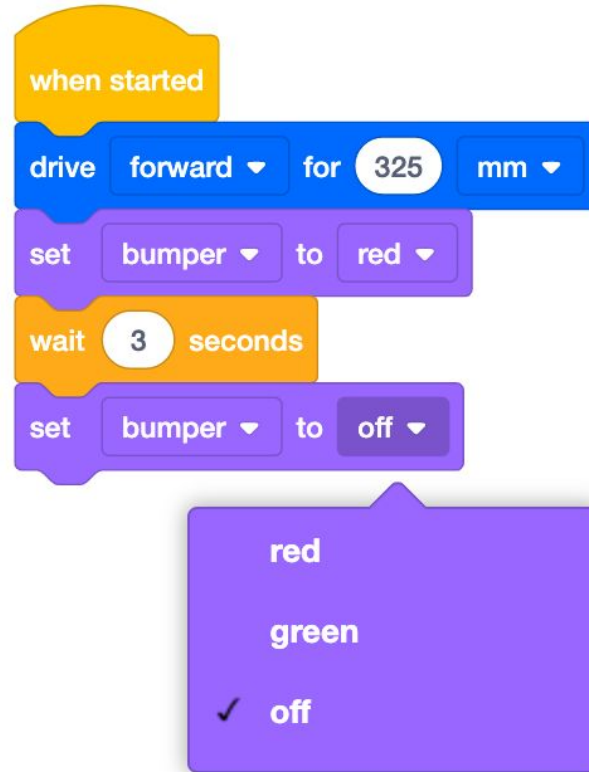




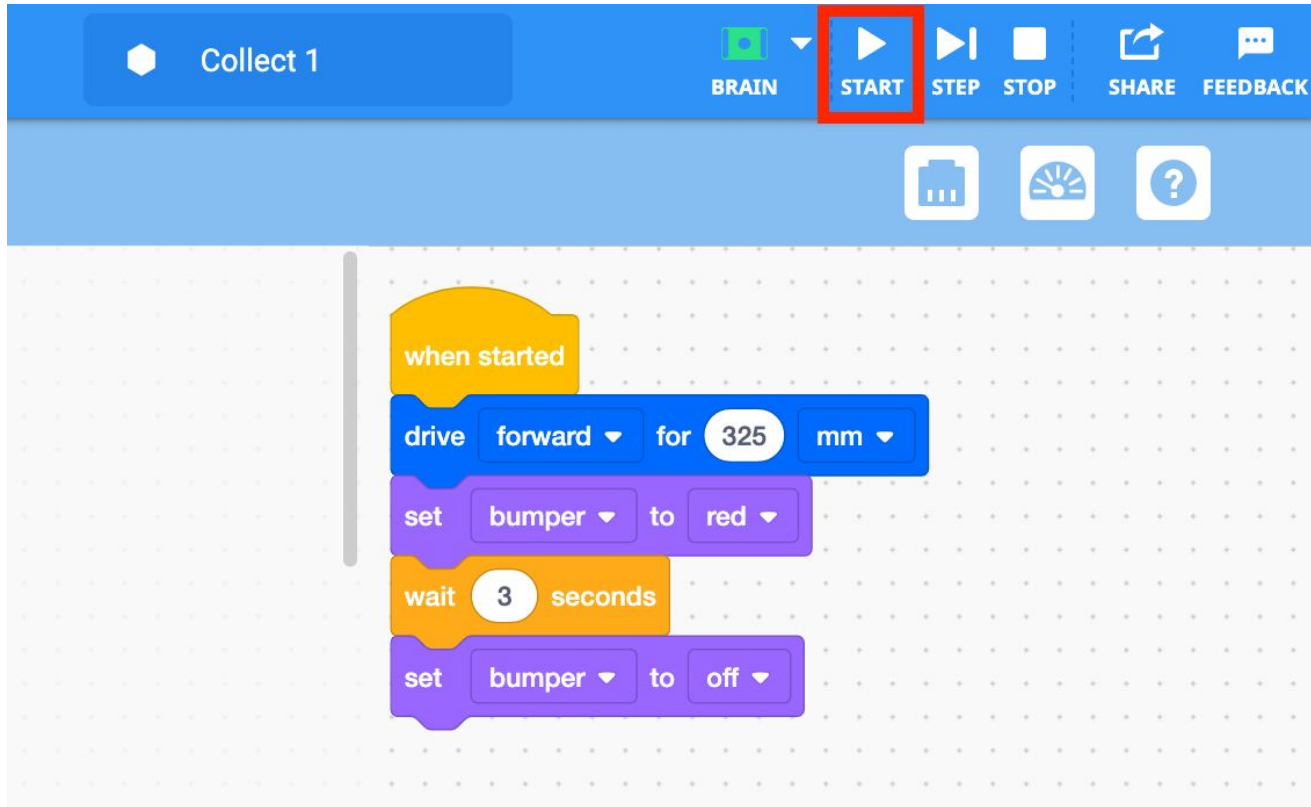
Add [Wait] block and set to 3 seconds



# Add [Set bumper color] and set to off

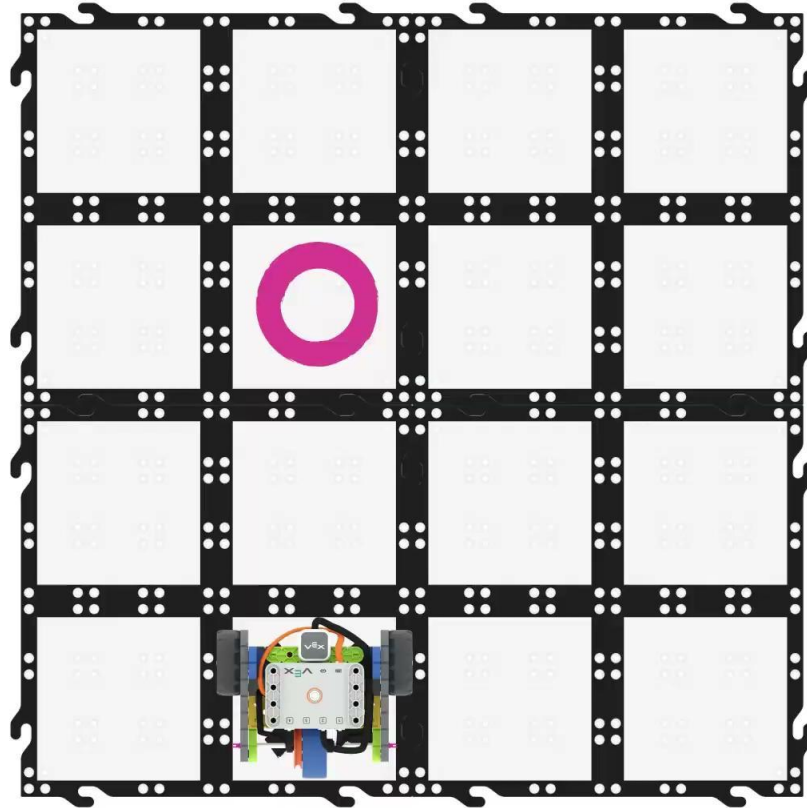


# Select Start to test the *Collect 1* project



The screenshot displays the VEX GO software interface. At the top, a blue header bar contains the project name 'Collect 1' on the left and a series of control buttons on the right: 'BRAIN' (with a camera icon), 'START' (with a play button icon and highlighted by a red box), 'STEP' (with a right arrow icon), 'STOP' (with a square icon), 'SHARE' (with a share icon), and 'FEEDBACK' (with a speech bubble icon). Below the header bar, there are three icons: a folder, a sun, and a question mark. The main workspace is a light gray grid with a vertical scroll bar on the left. A sequence of code blocks is visible, starting with a yellow 'when started' block, followed by a blue 'drive forward for 325 mm' block, a purple 'set bumper to red' block, an orange 'wait 3 seconds' block, and a purple 'set bumper to off' block.

# Collect and deliver the sample



# Collect Return project

```
when started
drive forward for 325 mm
set bumper to red
wait 3 seconds
set bumper to off
turn right for 180 degrees
drive forward for 325 mm
set bumper to red
wait 3 seconds
set bumper to off
```

# [Turn for] block



Select Start to test the *Collect Return* project

