

# Grocery Store Gather and GO

### Materials needed if you don't have the robot:

- Printed and cut out Blockly pieces from the Blockly Cut Outs worksheet
- Shopping list: Write out five items that you can gather at a grocery store.
- Materials to create your local grocery store layout: This can be a physical or sketch layout.
- Device to take photographs and videos

### Materials needed if you do have the robot:

- Shopping list: Write out five items that you can gather at a grocery store
- Materials to create your local grocery store layout: This can be a physical or sketch layout.
- Device to take photographs and videos

### Goal of challenge/objective:

During this time, there are so many people who cannot physically go out and need help with gathering weekly supplies. Your goal over the next three challenges is to gather those supplies and help deliver them to those in need.

#### Directions without the robot:

- 1. Download and print out the Blocky Cut Outs worksheet. If you do not have a way to print the Blocky Cut Outs, you can simply create your own code cards using paper. Make sure that the code you draw looks as close to the way the code cards look.
- 2. Create your list of the five items that you will pick up at the grocery store.
- 3. Sketch out your grocery store layout. Make sure you note where each item from your shopping list is.
- 4. Using the Blockly Cut Outs, create a program that would allow YOU to move through the store to collect the five items. Don't forget to consider that you can't go through the shelves and that you will need to use the aisles as you would in real life.
- 5. Did your program work? Were you able to grab the items that you needed? Remember to think like a robot. What steps (turn left, move X distance) do you need to program that will allow you to reach your goal? How can you grab the items when you arrive at them? Did you program that in? Adjust as needed.
- 6. Gather the evidence needed to submit for the completion of the challenge.

#### Directions with the robot:

(Please keep in mind that you aren't actually needing to pick any items up yet; you are just in the design phase currently, but there is more to come in the next challenges.)

- 1. Download one of the Wonder Workshop apps (Blockly, Wonder, or Cue) to help design your program.
- 2. Create your list of the five items that you will pick up at the grocery store.
- 3. Sketch out your grocery store layout. Make sure you note where each item from your shopping list is.
- 4. Create a program that would allow your robot to move through the store to collect the five items. Don't forget to consider that your robot can't go through the shelves and that the robot will need to use the aisles, just like a human would in real life.
- 5. Did your program work? Were you able to grab the items that you needed? Remember to think like a robot. What steps do you need to program that will allow you to reach your goal? How can the robot potentially grab the items? Did you program that in?
- 6. Gather the evidence needed to submit for the completion of the challenge.

# Evidence needed without the robot:

Please submit the following for evidence of completion:

• If you used the Blockly Cut Outs, please upload a picture of your laid-out program.

# Evidence needed with the robot:

Please submit the following for evidence of completion:

• Please note the <u>program key</u> to help showcase the program you created. If you used the Cue app, please take a screenshot of the program and submit the image.