**WEEK 3 – Grocery Shopping Math**

**Grade:** Primary (K-3)

**Unit:** Geometry and Spatial Sense

**Curriculum Expectation**
 Describe the relative locations (e.g., beside, two steps to the right of) and the movements of objects on a map (e.g., “The path shows that he walked around the desk, down the aisle, and over to the window.”)

**Activity** 1) You and your family need to go to the grocery store during the quarantine to stock up on groceries. Your list includes apples, toilet paper, bread, pasta sauce, eggs, milk, and soap.
2) It is up to you to map out the path in the grocery store that will allow you to pick up these items.
3)You will write step-by-step code programming a “robot” (Ex. A block, game piece, eraser, etc.) to navigate the grocery store using individual coding instructions that will be performed by the robot.
3) Students will only be allowed to write 4 phrases as code: “Move \_\_\_ steps to the left” “Move \_\_\_ steps to the right” “Move \_\_\_ steps up” “Move \_\_\_ steps down”.
4) Students will write code to have the robot walk through and collect the items on their grocery list using the map below and finish their path at the checkout (the star).
4) Once code is written by the student, the robot will perform the code exactly as it is written
6) Once code is complete, students will fill out the recording sheet below.

**Note**: Code must be followed exactly. If for whatever reason code does not go as originally thought, students are not to simply add an extra piece of ‘code’ mid-operation to make the code work. Code must be restarted if not successfully completed after a change is made.
**Challenge**: After completing the recording sheet try to find a path that collects all items in the fewest total steps.

**Check for Understanding**
I engaged with the computational process and understand the importance of each piece of ‘code’
My code got more accurate with practice
I can describe the location of the items and the movements of my robot throughout the store

**Materials**
 Recording sheet and grocery store map (attached below), pencil, small item to act as a robot (Ex. A block, game piece, eraser, etc.)

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| grocery store floor plan - Google Search |  |  |  | Egg clipart egg carton, Egg egg carton Transparent FREE for ... |  |  |  | Slice of bread clipart black and white free - WikiClipArt |  |
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| Collected Objects  | My Code  | Number of Steps |
| Slice of bread clipart black and white free - WikiClipArt | Move 1 step to the left.Move 6 steps up.  |  7 |
| Slice of bread clipart black and white free - WikiClipArtApple |  |  |
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 **Total number of steps\_\_\_\_\_\_\_\_\_\_\_\_\_\_**