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3ST
GRADE

3.0



SCRATCH PACK

CODING PROJECTS

```
when green flag clicked
  set rotation style to all around
  repeat 10
    move 10 steps
    turn 15 degrees
    go to random position
    if on edge, bounce
```



Creative Coding Book for Kids



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NEW SCRATCH - GRADE 3

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LESSON 2
AROUND THE BLOCK

BY RANA DAJANI



AROUND THE BLOCK

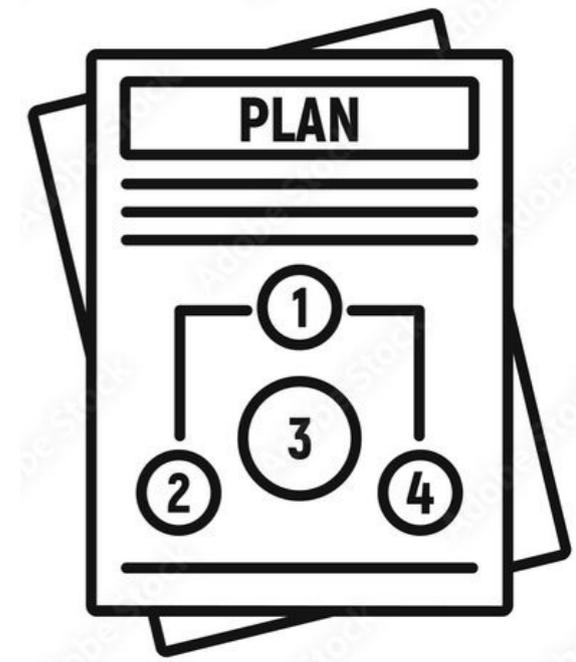


Create a walking exercise!

- Move your character along the road, and around the block
- The character has to walk diagonally

- 1 Add your characters
- 2 Choose a background
- 3 Create a plan to follow

- decide the initial characteristics of your characters you want to start with
- figure out how to move the character diagonally along the road



AROUND THE BLOCK

Broadcasting a message can activate many sets of code at the same time.

To make the character move diagonally the x and y values have to be changed at the same time.

This variable is going to manage for how long the character going to keep changing its costume, until the end of the program.

These blocks will decrease the size of the character as it moves further away

4 Drag all the code blocks that you think you will need to the script area

```
define start
  switch costume to avery walking-b
  set rotation style left-right
  set size to 100 %
  point in direction 90
  go to x: -195 y: -8

when clicked
  set my variable to 0
  start
  say My favourite kind of exercise is walking for 2 seconds
  broadcast message1
```

```
broadcast message1

New message
✓ message1
```

```
when I receive message1

New message
✓ message1
```

```
when I receive message1
  repeat until my variable = 1
  next costume
  wait .1 seconds

when I receive message1
  repeat 30
  change x by 10
  broadcast message2

when I receive message1
  repeat 30
  change y by -2

when I receive message2
  repeat 40
  change size by -2
  change my variable by 1

when I receive message2
  repeat 40
  change x by 2.5

when I receive message2
  repeat 40
  change y by 3
```

Think about the order



AROUND THE BLOCK

CHALLENGE
YOURSELF!



Modify your program to have the character walk back to the original place

Hint: figure out how to add more messages to have the character walk back, change the direction the character is facing and change the place of the variable block to the end of the program

