

Author: Rana Dajani

3<sup>ST</sup>  
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



**Author:** Rana Dajani

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Amman - Jordan

Fax: +962 6 5516404

Email: [info@lkd.com.jo](mailto:info@lkd.com.jo)

Tel: +962 6 5374141

P.O.Box: 851346

Web: [www.lkd.com.jo](http://www.lkd.com.jo)

## NEW SCRATCH - GRADE 3

- Lesson 01 Introduction to Scratch**
- Lesson 02 Around the Block**
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- Lesson 13 Geography Map**
- Lesson 14 Tourism in Jordan (Open Project)**
- Lesson 15 Animal Classes (Open Project)**





# 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.

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

The script area contains two main blocks. The first is a 'define start' block (pink) containing a sequence of blocks: 'switch costume to' (purple) set to 'avery walking-b', 'set rotation style' (blue) set to 'left-right', 'set size to' (purple) set to '100 %', 'point in direction' (blue) set to '90', and 'go to x: -195 y: -8' (blue). The second is a 'when clicked' block (yellow) containing: 'set my variable to 0' (orange), 'start' (pink), 'say My favourite kind of exercise is walking for 2 seconds' (purple), and 'broadcast message1' (yellow).

A 'broadcast message1' block (yellow) is shown above a 'New message' block (yellow) which contains 'message1' with a checkmark.

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

A 'when I receive message1' block (yellow) is shown above a 'New message' block (yellow) which contains 'message1' with a checkmark.

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

The script area shows three columns of code blocks. The first column is for 'when I receive message1' (yellow) and contains: 'repeat until my variable = 1' (orange), 'next costume' (purple), and 'wait .1 seconds' (orange). The second column is for 'when I receive message2' (yellow) and contains: 'repeat 30' (orange), 'change x by 10' (blue), and 'broadcast message2' (yellow). The third column is for 'when I receive message2' (yellow) and contains: 'repeat 30' (orange), 'change y by -2' (blue). The fourth column is for 'when I receive message2' (yellow) and contains: 'repeat 40' (orange), 'change size by -2' (purple), and 'change my variable by 1' (orange). The fifth column is for 'when I receive message2' (yellow) and contains: 'repeat 40' (orange), 'change x by 2.5' (blue). The sixth column is for 'when I receive message2' (yellow) and contains: 'repeat 40' (orange), 'change y by 3' (blue).

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

