# Rockets - starting with Visual

Learn

## Learning Objectives

- To understand how block coding works.
- To program a simple algorithm using block coding.

## Learning Outcomes

**All children:** move the rocket around the screen using move and turn blocks.

**Most children:** move the rocket to the moon and back to the starting point, using move and turn blocks.

**Some children:** make the rocket repeat its actions using the repeat block.

## Cross curricular links

Maths: geometry-position and direction.

## Vocabulary

blocks, code area, sprite, algorithm, code, motion blocks, block menu ( see glossary ).

## Resources

Template: j2e.com/code/template/Y1template3

Example: j2e.com/code/examples/visual/Y1example3

Video: just2easy.com/vids/j2code/Y1video3

Code

## Introduction

Recap work done on JIT. Show example 3. Look at the difference in the code from JIT *(it's made up of blocks that can be moved and changed).* Discuss the wording on each block. Show children how to change the wording *(use the dropdown)* and change the numbers *(by highlighting and over-typing).* Introduce the word motion blocks and show the children how to drag these from the block menu onto the code area.

## Main Activities

Load template 3.

Task 1- children experiment with making the rocket move around using the move and turn blocks. Can they make a square? Stop the class to discuss any problems.

Task 2- move the rocket to the moon and back to its start position. Let children experiment to do this in different ways. Stop the class and show children how to create a new background and a rocket sprite and how to rename and resize them *(refer to video).* Let the children experiment with doing this themselves.

## Challenge

Using the repeat block, experiment with making the rocket repeat its actions.

Repeat

## Follow up lesson(s)

Allow children to gradually use more level1 blocks.

Children can be encouraged to continue to experiment by accessing Visual at home.

Schools with access to the Just2easy ToolSuite may choose to blog some work, teachers may also save and share their own examples and templates. Other schools may use the "link" button to save work to a url.

## Assessment

Self and peer assessment - pupils can work with a partner to review, and help correct their code (debug).