



We are astronauts

Programming on screen

In this unit you will:

- 1 Plan instructions and try them out.
- 2 Work out how to get from the Earth to the Moon – and then on to Mars!
- 3 Work with Scratch.
- 4 Use Scratch to program your spaceship.
- 5 Write a program in Scratch. Debug it.
- 6 Move your sprite from the Earth to the Moon – and then on to Mars!

Word bank

algorithm
instructions
predict
problem
program
robot
Scratch
sprite

Exploring Scratch spacesim

Click here to download your own copy of the project.

Lots more blocks are available if you want to experiment.

You can change the background image.

Click here for the custom blocks.

The program is written using custom blocks.

Scroll down if you'd like to see how the blocks are made.

Working at Age Expected		Working at Greater Depth	
Plan an algorithm to move a spaceship from Earth to the Moon and then to Mars		In addition to the above, implement algorithms as programs on a screen sprite using blocks with parameters; and find particularly efficient, elegant or original solutions to these challenges	
Implement algorithms as programs on a screen sprite using simple blocks without parameters			
Follow instructions given to them as if they were a robot			
Use logical reasoning to predict what their programs will do			
Debug their programs			