



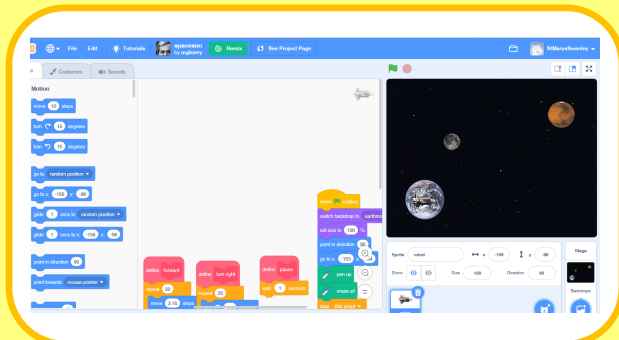
Computing

We are Astronauts

Background Information

In this unit, the children will build on previous learning to program a sprite (such as a spaceship) to move around the screen. This also acts as a springboard for their learning as they move through the school.

SWITCHED ON
Computing



In this unit the children will...

- Have a clear understanding of algorithms as sequences of instructions.
 - Convert simple algorithms to programs.
 - Predict what a simple program will do.
 - Spot and fix (debug) errors in their programs.

By the end of this unit....

All children can:

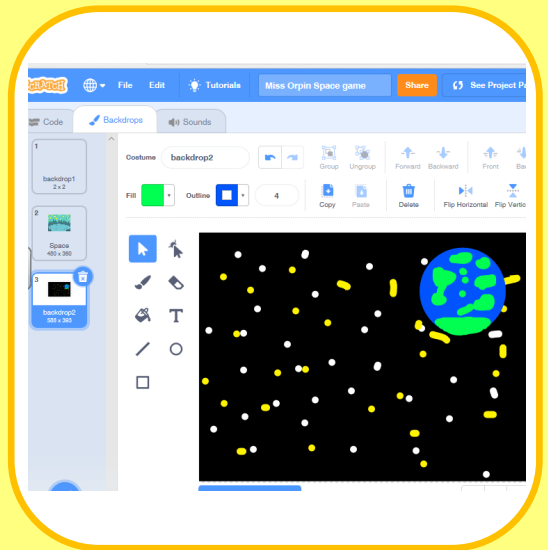
- Plan an algorithm to move a spaceship from Earth to the Moon.
- Implement algorithms on BeeBots.
- Implement algorithms as programs on a screen sprite using simple blocks without parameters.
- Debug their programs.
- Solve the Earth-Moon challenge on a variety of programmable devices.

Most children will:

- Plan an algorithm to move a spaceship from Earth to the Moon and then on to Mars.
- Follow instructions given to them as if they were a robot.
- Use logical reasoning to predict what their programs will do.
- Solve the Earth-Moon-Mars challenge on a variety of programmable devices.

Some children will:

- Implement algorithms as programs on a screen sprite using blocks with parameters.
- Find particularly efficient, elegant or original solutions to these challenges.



Key Vocabulary

Scratch, desktop, laptop, computers, iPads, Interactive White Board, games, coding, blocks, sprite, background, backdrop, left, right, move, turn, parameters, debug, algorithms, solve.