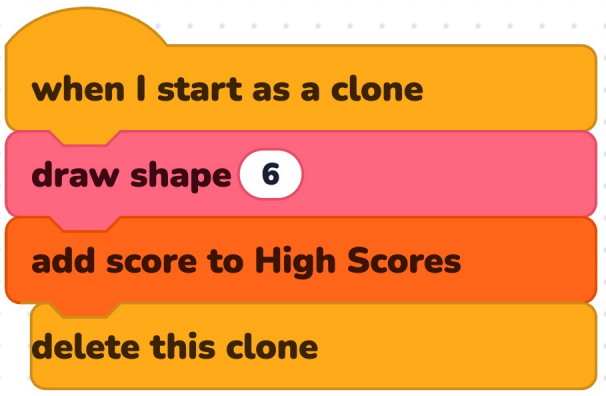
SCRATCH PROJECTS

Year 7

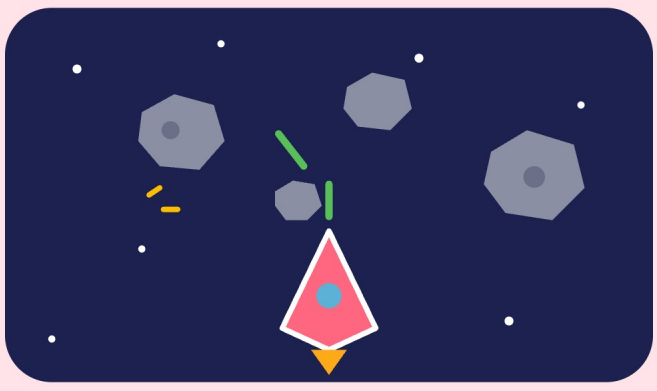
Clones, lists and Python

Five bigger projects that lead the way into Python.



Skills this year

- **Y7.1** Use clones for many copies of a sprite
- **Y7.2** Store and use data in a list
- **Y7.3** Make your own blocks with inputs
- **Y7.4** Break a big project into smaller parts
- **Y7.5** Follow variables with a trace table
- **Y7.6** Rebuild a Scratch project in Python



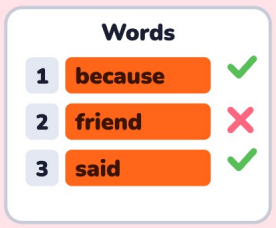
START HERE

Space Defender

Clones send waves of asteroids at your ship. Your own blocks keep the code tidy and easy to change.

Y7.1 Y7.3 Y7.4 Y6.1

Extend it Add power-ups that appear at random.

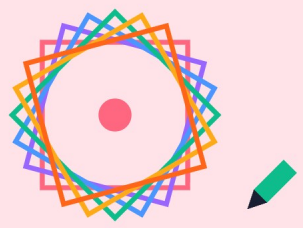


Spelling Tester

Words are stored in a list. Each one is read out, checked and saved to practise if wrong.

Y7.2 Y7.5 Y5.4

Extend it Let the teacher add new words to the list.



Spirograph Art

A draw shape block with inputs for sides and size creates spinning patterns with the pen.

Y7.3 Y4.1 Y4.6

Extend it Turn your pattern into music with Music blocks.

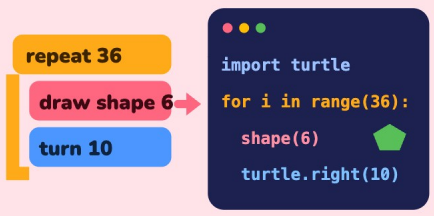


High Score Table

Keep the top five scores in a list and show them in order after every game.

Y7.2 Y7.4 Y6.2

Extend it Save each player's name next to their score.



Spirograph in Python

Remake your Spirograph Art in Python with turtle, matching each block to a line of code.

Y7.6 Y7.3 Y4.1

Extend it Let the user type how many sides to draw.

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