

# Coding with Sophie

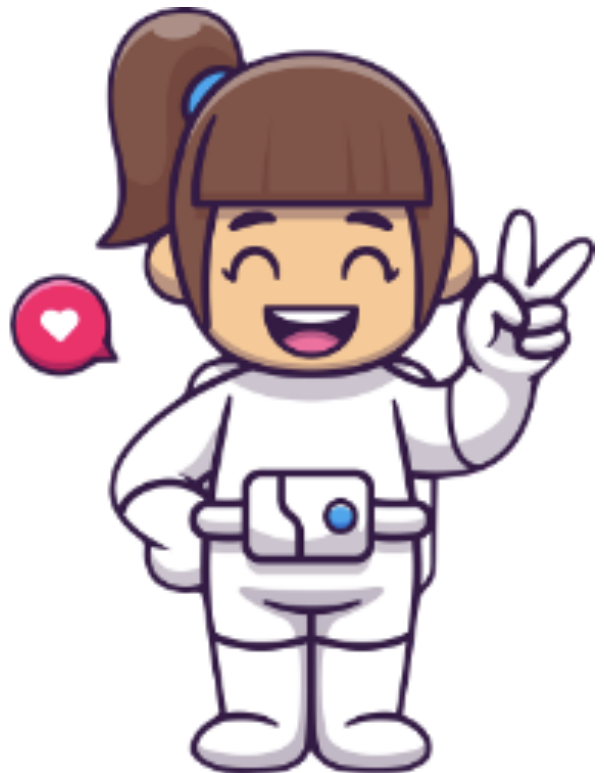
**What:** A coding program where students solve problems that Sophie the Astronaut faces on her journey to outer space.

**Who:** Targeted to 7-11 year olds. No previous programming experience is required.

**Duration:** six lessons, each roughly 1 hour long.

**Key goals:**

- basic programming (for/do loops)
- conditional logic (if and if/else statements)
- functions (with inputs and outputs)
- debugging (including explaining what a code will do without executing it)
- breaking big problems into smaller, solvable parts
- designing and writing their own programs to solve tangible problems



Our lessons are designed to complement the Key Stage 2 National Curriculum for coding. The topics covered also include some space physics, and the last lesson has students investigating spaghettification around black holes. Classes are taught by astrophysicists, chemists and engineers that use coding as a primary part of their job.

**Resources:**

We provide tablets for the students to use and all other resources. We travel to schools in Coventry and the surrounding area. Class sizes are capped at 20 and the program is provided for free.

**Contact:**

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