

## LESSON 7

# Introduction to Coding

20 minutes

My First Coding Adventure

### WHAT THIS LESSON DOES

This lesson guides teachers through introducing students to the concept of coding. It includes explaining coding as giving instructions, showing a video, discussing everyday devices that use coding, playing an instructional game, and wrapping up with a look ahead to using Scratch.

### WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand the basic concept of coding and its role in operating digital devices.
- Recognize the presence and application of coding in everyday life.
- Develop an understanding of the importance of precise and correct instructions in coding.
- Engage in critical thinking by identifying devices in their homes that use coding.
- Develop an interest in coding through interactive activities and games.
- Prepare for future lessons on coding, specifically using platforms like Scratch.

### BEFORE THE LESSON

- Check the introductory video plays with sound on the class display.
- Have the interactive whiteboard ready for the instructions game.
- No pupil devices are needed for this lesson.

## Introduction to Coding

### HOW THE LESSON RUNS

Introduction to Coding

What is coding?

Computers in your house

Giving instructions

Wrapping Up and Looking Forward

### TEACHING MOVES

- 1. Introduction to Coding. Frame coding as clear, ordered instructions using the sandwich analogy, then play the video for the whole class on the large screen.
- 2. What is coding? Ask what pupils think coding means first. Settle on giving instructions to a computer, then watch the video together.
- 3. Computers in your house. Ask the class to name three household things they can give instructions to. Use TV, phone, microwave or console only if they stall.
- 4. Giving instructions. Play the interactive activity several times. Invite pupils to the board or take spoken directions, and show when wrong order breaks the result.
- 5. Wrapping Up and Looking Forward. Recap the definition and everyday examples. Briefly name Scratch as where they will next make interactive stories, games and animations.

### WHAT TO WATCH FOR

- Students may think: Pupils think only phones and laptops count as computers that take instructions. What to do: Return to the TV remote, microwave buttons and games console examples and ask what instruction each one is given.
- Students may think: Pupils assume vague instructions are fine because a person would guess what they meant. What to do: In the board game, follow their directions exactly as given so they see why precision and order matter.

### DIFFERENTIATION

- Emerging: Pair them for the household-devices discussion so they can name one example with support. Let them offer a single simple direction during the board game rather than a full sequence.
- Developing: Ask them to restate why the sandwich steps must stay in order before playing again. Have them explain one household example back to a partner in their own words.
- Proficient: Challenge them to spot a missing or out-of-order step in a classmate's directions during the game. Ask them to add a further household device and say what instruction it takes.