

LESSON 8

Scratch Tutorial

40 minutes

My First Coding Adventure

WHAT THIS LESSON DOES

This lesson guides teachers through introducing their students to Scratch, a coding platform. Teachers will explain what coding is, show a Scratch tutorial video, and guide students through creating their first project. This includes making a sprite move, adding a loop, changing the numbers, and adding a backdrop.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Students will understand the basics of coding and its importance in creating games, animations, and interactive stories.
- Students will be able to navigate and use the Scratch platform effectively.
- Students will learn how to create and control a sprite using various coding blocks in Scratch.
- Students will understand how to use loops and control structures to create repeated actions in Scratch.
- Students will learn how to add and manipulate backdrops in Scratch to enhance their projects.
- Students will develop an attitude of exploration and creativity in coding, leading to the creation of unique and personalized projects.

BEFORE THE LESSON

- Check school filter allows scratch.mit.edu and that sound works for the intro video on a shared screen.
- One device per pupil (or stable pairs) with a browser ready. No Scratch accounts needed in class: work will not be saved on school devices.
- Have the Create editor path clear: scratch.mit.edu, then Create at the top, close any pop-up tutorial box.

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HOW THE LESSON RUNS

Introduction
Introducing Scratch
Open the Scratch website
Make the cat move
Turn the Cat
Add a loop
Change the numbers
Add a backdrop
Explore Scratch
Conclusion

TEACHING MOVES

- 1. Introduction. Frame Scratch as making games, animations and stories. Ask what coding might be and what they would love a character to do. Keep energy high, not technical.
- 2. Introducing Scratch. Play the video on the large screen. Pause once to notice how sprites move. Ask one idea they might try with their own sprite.
- 3. Open the Scratch website. Coach turn-on, browser, scratch.mit.edu, then Create. Help anyone stuck on the URL. Close the small tutorial box together so all land in the same editor.
- 4. Make the cat move. Model Events then Motion: when green flag clicked, snap move 10 steps. Have everyone click the green flag and watch the cat shift right.
- 5. Turn the Cat. Add turn cw 15 degrees under move. Run the green flag again so they see move and turn happen as one sequence.
- 6. Add a loop. Show the forever block shape and the gap. Ask what the gap is for, then wrap move and turn inside forever so the action repeats until stopped.
- 7. Change the numbers. Explain numbers set steps and degrees. Change move to 50 and turn to 25, run again, and invite a few pupils to try their own values.
- 8. Add a backdrop. Point to Choose a Backdrop bottom-right. Let each pupil pick one scene so the stage matches the story they imagine.
- 9. Explore Scratch. If time remains, set short challenges: try a new block, add another sprite, or remove a block they do not want. Stay circulating.
- 10. Conclusion. Speak the three reflection prompts aloud. Suggest interested pupils try Scratch at home with a parent if they want to save work.

WHAT TO WATCH FOR

- Students may think: Pupils think blocks only run if they are near the sprite, or that order on the stage matters more than stack order. What to do: Point to the stack: top to bottom is the instruction order. Click the green flag and trace each block with a finger as it runs.
- Students may think: Pupils expect the forever loop to stop on its own, or panic when the cat keeps moving. What to do: Show the stop button beside the green flag. Name forever as repeat until we stop the project.
- Students may think: Pupils change a number but nothing seems different because they did not run the script again. What to do: After every edit, click the green flag (or stop then flag) so they link the new number to the new motion.

DIFFERENTIATION

- Emerging: Sit with them for the first two snaps: green flag then move. Let a partner read the toolbox colours while they drag. Reduce the first goal to one working green-flag plus move stack before adding turn.
- Developing: Prompt them to narrate the stack aloud before they hit the flag: start, move, turn, repeat. If the forever wrap fails, have them pull blocks out and re-snap inside the gap with you watching once.
- Proficient: Challenge them to try other Motion or Looks blocks and say what each does. Invite a second sprite with its own short stack, still started from the green flag.