

LESSON 11

City Cruise: Driving Through the Streets

30 minutes

Creative Stories

WHAT THIS LESSON DOES

As the teacher, guide students through a creative coding activity. Start with a charades game using action cards, then introduce a Scratch Jr project where they'll program a car to drive across a city scene, adding movements and experimenting with resizing.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand and apply the process of removing and adding characters in a digital project.
- Develop the ability to change backgrounds in a digital environment.
- Gain skills in recreating a digital scenario with minimal guidance.
- Acquire advanced skills in resizing characters within a digital project.
- Enhance creativity and exploration by adding diverse elements to a digital scenario.

BEFORE THE LESSON

- Print and cut out the action cards for step 2 and put them in a hat or box before the bell.
- Check ScratchJr is installed and opens on each device, with pupils able to start a new blank project.
- Have your own ScratchJr project ready on the board so you can demonstrate deleting a character, changing the background and adding move blocks.
- Confirm the city background and a car character are available in the version of ScratchJr on your devices.

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HOW THE LESSON RUNS

Introduction

Acting Out Algorithms: Charades Game

Introducing the Car Driving Activity

Say Goodbye to Scratch the Cat

Adding the Car and Changing the Background

Coding the City Drive

Resizing the Car (Advanced)

Exploration and Free Play

TEACHING MOVES

- 2. Acting Out Algorithms: Charades Game. Stress the rule as pupils draw cards: act out exactly what is written, nothing added. Link it straight to how a computer follows an instruction without guessing.
- 4. Say Goodbye to Scratch the Cat. Demonstrate the tap-and-hold on the board, then wait until every pupil has the X showing and Scratch gone before moving on. A missed delete leaves two characters on the stage.
- 5. Adding the Car and Changing the Background. Set the city background first, then add the car. Point to the road on the background so pupils know where the car should end up driving.
- 6. Coding the City Drive. Model dragging the green flag first, then the move-forward blocks. Tap the number inside a block and change it in front of them so they see distance is something they control.
- 7. Resizing the Car (Advanced). Only for pupils whose car already drives. Show the shrink and grow blocks in the Looks palette and let them snap one into their sequence to see the effect.
- 8. Exploration and Free Play. Ask the placement questions aloud: where would a boat belong, could a dragon fly over the city? Push pupils to match each character to where it makes sense in the scene.

WHAT TO WATCH FOR

- Students may think: Pupils think one move-forward block will carry the car all the way across, and are surprised it barely moves. What to do: Show that the number inside the block sets the distance. Have them raise the number or chain several blocks, then run it and watch.
- Students may think: Pupils add the car without deleting Scratch, so two characters sit on the stage. What to do: Check every screen after step 4 is clean before adding the car. Reshow the tap-hold-X delete to anyone who still has Scratch.
- Students may think: Pupils snap blocks together without the green flag start, then wonder why nothing runs. What to do: Remind them the green flag block goes first every time, and have them point to it before they tap to run.

DIFFERENTIATION

- Emerging: Sit beside them for the delete and background steps and let them copy each tap from your board one action at a time. Give a single target: get the car to move at all, using two or three move blocks, before worrying about crossing the whole city.
- Developing: Ask them to say their sequence out loud before running it, then check the car does what they predicted. Have them adjust one block's number and predict what changes before they tap run.
- Proficient: Send them to the shrink and grow blocks in step 7 to add a size effect to the drive. Challenge them to add a second vehicle and explain to you why it belongs on the road or elsewhere in the city.