

LESSON 11

Animal Sounds

40 minutes

Exploring Coding

WHAT THIS LESSON DOES

This lesson guides students through creating a Scratch project where they add different animal sprites and program them to make unique sounds when clicked. Students will learn how to use sound blocks in Scratch and create an interactive project.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand the concept of animal sounds and how they can be represented in a coding project.
- Learn how to create a new project on Scratch and add sprites to the project.
- Develop the ability to add backdrops to a Scratch project to enhance its visual appeal.
- Gain skills in coding sounds to sprites, enabling them to play unique sounds when clicked.
- Experience the process of testing and debugging a Scratch project to ensure it functions as intended.
- Enhance creativity and problem-solving skills by exploring different ways to use sounds and sprites in Scratch.

BEFORE THE LESSON

- Open and test <https://scratch.mit.edu> on pupil devices and check the school filter allows it.
- Ensure devices have working sound, or that headphones are available for each pupil or pair.
- Decide whether pupils will sign in to Scratch to save work, or work as guests for this lesson.

Animal Sounds

HOW THE LESSON RUNS

Introduction to Animal Sounds

Create a new Scratch project

Add the Background

Add a Background

Add a dog and give it a sound

Add a parrot and give it a sound

Add a horse and give it a sound

Wrap Up

TEACHING MOVES

1. Introduction to Animal Sounds. Tell pupils they will build a clickable animal soundboard in Scratch. Preview that each animal will play its own sound when clicked.
2. Create a new Scratch project. Guide everyone to scratch.mit.edu and a new project. Stress that they must keep the cat sprite, not delete it.
3. Add the Background. Show the Choose a Backdrop button at the bottom right. Have pupils find and select Blue Sky, then check every screen shows it.
4. Add a Background. Ask pupils to drag the cat onto the ground. Model snapping when this sprite clicked above start sound meow, then have them click the cat to test.
5. Add a dog and give it a sound. Help pupils add Dog 2, place it bottom left, and attach when this sprite clicked with start sound dog1. Test with a click.
6. Add a parrot and give it a sound. Add the Parrot sprite, place it bottom right, and code when this sprite clicked with start sound bird. Confirm the chirp on click.
7. Add a horse and give it a sound. Add the Horse sprite with when this sprite clicked and play sound horse gallop until done. Invite the class to click every animal and listen.
8. Wrap Up. Celebrate the finished soundboard. Ask briefly which sound blocks they used and what else they might try with sounds in Scratch.

WHAT TO WATCH FOR

- Students may think: Pupils put the sound code on the wrong sprite, so clicking an animal does nothing or another animal reacts. What to do: Check the sprite thumbnail selected above the blocks area before coding. Select the correct animal first, then add its blocks.
- Students may think: Pupils choose the wrong sound from the dropdown, or expect audio when device sound is off. What to do: Open the sound menu together and match meow, dog1, bird and horse gallop. Confirm volume or headphones before testing.
- Students may think: Pupils treat start sound and play sound until done as the same, and think the horse is broken when it waits. What to do: Explain that until done finishes the gallop before stopping. Click the horse once, wait, then compare with the cat meow.

DIFFERENTIATION

- Emerging: Sit with the pupil and add one sprite together, modelling how to select the sprite then snap when this sprite clicked above the sound block. Pair them with a partner who can point to the Choose a Backdrop and sprite library buttons while they click.
- Developing: Prompt them to test after each animal before moving on, and to say which sound name they selected. If a click is silent, ask them to check which sprite is selected and whether the blocks are snapped together.
- Proficient: Challenge them to reposition the animals neatly on the ground and retest every click. Ask them to explain to a classmate why the horse uses play sound until done while the others use start sound.