

In this lesson, students will learn to create an animated character using the education coding app ScratchJr.

Learning Objectives

Using ScratchJr, students will create an animated character.

Materials and preparation

- iPad or tablet loaded with [ScratchJr](#)
- Ideally students will work in pairs (one device for two students)
- ScratchJr is a free educational app. Students can use ScratchJr to learn how to create animated characters and stories using "drag and drop" block code.
- Online resources for teachers can be found at [here](#) (interface guide) and [here](#) (activities).

Key terms

- **character:** in a story, a person or animal who has particular features or qualities
- **animation:** the process of taking something that does not move, like a drawing or a model, and making it appear to move on film or in a video
- **default:** a pre-set or pre-determined feature
- **tool:** a thing that is used to accomplish a task or do work

Introduction (5 minutes)

- Ask students, "Have you ever wanted to create your own cartoon character?" and "What kind of character might you create?"
- Explain that they are going to learn to create their own animated character using the ScratchJr app.

Explicit Instruction/Teacher modeling (5 minutes)

- Divide students into pairs and pass out devices.
- Show students how to turn on the devices and open the ScratchJr app.

Guided Practice (5 minutes)

- Explain that the ScratchJr app comes with many characters that have already been created for you. For example, the ScratchJr cat is always the first character you see when you open the app. The cat is the default character for this app. When you click on the plus sign, you can also see a whole menu of different characters, such as farm animals, human figures and silly creatures.
- Explain that ScratchJr also has a tool that allows you, the computer programmer, to create your own character. You can access that option by clicking on the paintbrush icon at the top right of the screen.
- Invite students to open the paint editor by clicking on the paintbrush
- For reference, a guide to the paint editor tool can be [found here](#)

Independent working time (20 minutes)

- Invite the pairs of students to take turns using the device until both students have had a turn.
- Invite students to experiment with the different tools on the screen, such as the shape tool, the line width tool, the color tool, and the fill tool.
- Once students have had a chance to experiment, ask students to focus on one tool, such as the line tool or shape tool, and use that tool to begin creating a character.

Related books and/or media

*You can find many YouTube videos created by children, demonstrating their ScratchJr projects. Here are a few examples:

- [Student Scratch Jr. Project - Dance Party](#)
- [PBS Kids Scratch Jr Student Created Game](#)
- [Story in Scratch Jr](#)

Differentiation

Enrichment

- Students who have experience with coding in ScratchJr can be encouraged to create a more detailed character or multiple characters. They can also be invited to program their character to speak or make sounds.

Support

- For students who may be overwhelmed by the many tools and choices in ScratchJr, have them focus on using the fill tool to simply change the colors on an existing character.

Assessment (5 minutes)

- Circulate around the room and observe each pair of students working together.
- If your students have not had much experience using ScratchJr, they may need more than one session in order to create a new original character. Measure student success by whether or not each student is able to use at least one of the tools in an intentional way (beyond trial and error).

Review and closing (5 minutes)

- Ask students to reflect on their coding experience.
- Discuss by asking questions like: "What tools did you use?" "How did you figure out what works and what doesn't work?"
- Invite peer-to-peer feedback by asking, "How did your partner help you learn?"

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