

## Module 2 Lessons

### Lesson 5

#### Speed

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#### *Summary*

In this lesson, children will be introduced to the concept of speed in the ScratchJr iPad application. Through interactive activities, students will acquire an understanding of this concept and how to apply it in ScratchJr. During the lesson, students will be able to create their own projects using concepts learned in this and prior lessons. The lesson will conclude with an opportunity for students to share their projects.

<b>Objectives</b> <i>Students will learn that...</i>	<b>Objectives</b> <i>Students will be able to...</i>
<ul style="list-style-type: none"><li>• The speed of characters can be changed</li><li>• Different characters can be programmed to move at different speeds</li></ul>	<ul style="list-style-type: none"><li>• Program characters to move at different speeds</li></ul>

#### **New Programming Blocks**

- Speed

*Materials/Resources: iPad for each student*

#### *Schedule*

#### **Review (2.5 minutes):**

- Last time we worked on ScratchJr, we created collages. Can you tell me what a collage is?
- What are two blocks you used in your collage?

**Programming Block Review (7.5 minutes):** During this activity, the teacher should place the Scratch cat on the screen and say, “I would like my cat to jump up and down. Which block would make the cat do this?” The children should then describe the block and how to find it in the program. This should be repeated for all of the blocks learned until now.

*Materials: iPad for teacher*

**Jungle Speed (10 minutes):** During this activity, students will work as a class to order groups of animals or insects based on how fast they move (from fastest to slowest). Write groups of animals on the board for students to verbally put in order of speed of movement. Examples of groups of animals may include:

1. Cheetah, snail, rabbit, hamster
2. Dog, ant, lion, guinea pig
3. Turtle, zebra, cat, monkey

4. Jaguar, lobster, snake, centipede

A discussion should follow that discusses how characters in ScratchJr can be made to move at different speeds. The teacher should introduce the speed programming block and demonstrate how to use it on the ScratchJr application.

*Materials: iPad for teacher*

**Can I Make Characters Race (15 minutes)?** The teacher should project her iPad onto the board and explain that the class will be making three ScratchJr characters race. She should ask students to help her add and delete characters and choose a background. As a class, students should decide at which speed characters will move in this race, and where on the screen/background the characters should move. The class should suggest different blocks to use to make each character move. *Remember to highlight how the green flag is essential when programming more than one character!* When each character is programmed, show the class the race they created!

*Materials: iPad for teacher*

**Race Design (15 minutes):** Allow students to design their own races in ScratchJr. They should choose backgrounds and two or three characters. *Make sure that students are using the speed block.*

*Materials: iPad for each student*

**Project Sharing (7.5 minutes):** Have students share their races with the class by projecting them onto the board. Ask students to explain their races and which blocks they used.

*Materials: iPad for each student*

**Wrap Up (2.5 minutes):** Make sure that everyone saves their projects. Collect materials.