Start on Green Flag Block, End Block, and Choosing Characters

### **Summary**

In this lesson, students will learn to use the start on green flag and end blocks, as well as how to choose new characters. Through various interactive activities, children will learn how to incorporate the green flag and end blocks into their programs, and will also become familiar with how to program more than one character using the green flag.

Objectives Students will learn that	Objectives Students will be able to
<ul> <li>A green flag goes at the beginning of a sequence of programming blocks</li> <li>A red end block goes at the end of a sequence of programming blocks</li> <li>Multiple programs can take place at once</li> </ul>	<ul> <li>Program a character to start when the green flag is touched</li> <li>Use the end block to signify the end of a program</li> <li>Choose a new character</li> <li>Program multiple characters to start when the green flag is touched</li> </ul>

# **New Programming Blocks**

- Start on Green Flag
- End

Materials/Resources: Green flag card, red stop sign card, iPad for each child

#### Schedule

### **Review (5 minutes):**

- Can someone tell me what we learned during our lessons last week?
- What was your favorite activity that we played? What did you learn from it?
- Can you tell me what a program is?
- What were some of the ScratchJr blocks you learned about?

### Kindergarten

Instruction Stations (10 minutes): Split the class into four groups and assign them to four different stations. Each station will correspond to an instruction to follow (e.g. clap your hands, stomp your feet, jump up and down, tap your hands on your head). When the teacher raises the green flag card, students follow the instruction at their station. They stop when the teacher raises the red stop sign card. Students should then rotate to a different station. Repeat this activity until all students have moved through each station once. The teacher should explain how the green flag signifies the start of a program, while the red stop sign signifies the end of a program. *Materials: Green flag card, red stop sign card* 

**Program the Teacher (10 minutes):** Students should program their teacher to arrive at a particular destination in the classroom. In order for the teacher to begin following directions, students must hold up the green flag card. When the teacher is finished following instructions, students should hold up the red stop sign card.

Materials: Green flag card, red stop sign card

#### 1st and 2nd Grade

**Program the Teacher(s) (20 minutes):** Begin by programming the teacher as has been done in prior lessons. Begin with an easy program (have the teacher arrive at a nearby location). Then program the teacher to arrive at a location that is farther away and has obstacles to move around. Afterwards, have students program two teachers to arrive at two different locations. Introduce the idea of the green flag and red blocks. Then have both teachers follow their program when the green flag card is held up, and end their program when the red stop sign card is held up. *Materials: Green flag card, red stop sign card* 

# All

**Choosing Characters (2.5 minutes):** Demonstrate to children how to choose a new character from the character library. Also make sure to teach them how to delete a character (by holding a finger on the character until an "x" appears).

Materials: iPad for each student

**Programming with ScratchJr (15 minutes):** The teacher should write a program for students to copy onto their own iPads. Begin with a simple warm up program that does not introduce new blocks. Then create a program for children to copy that uses the start on green flag and end blocks. Lastly, create a program for children to copy that involves programming two different characters. Now encourage students to write their own programs for two different characters. *Materials: iPad for each student* 

**ScratchJr Exploration (15 minutes):** Allow students to explore the ScratchJr iPad application. Encourage them to experiment with programming more than one character at a time. *Materials: iPad for each student* 

**Wrap Up (2.5 minutes):** Make sure that everyone saves their projects. Ask students what they learned today. Also ask students what the purpose of the start on green flag is. Collect materials.