

Lesson 5 (Mar. 29th) : Ecosystems Lesson 2: Overfishing Simulation

Goals:

- Students can understand learned functions (“Movement”, “Events”, “Repeating”).
- Students can understand how to use “Conditional” functions.
- Students can construct their ideas of integration between coding and the representation of ecosystem problems (Good coder students).

Introduction (15 min):

- Improvement of specific coding functions.
 - Pass students Understanding Confirmation Sheet (below).
 - This sheet includes two parts: two quizzes and two sentences.
 - Quiz: Illustration of some blocks and ask about these blocks’ functions (“Movement”, “Events”).
 - Keynotes: Key understanding for students where they fill in the blank about “Repeating” and “Conditional”.
- Each student will prepare their Chromebook.
 - Students will log in to individual classroom accounts.

Coding Lesson (25 min):

- Students will continue their coding lessons.
 - When they are puzzled about their facing levels, they can use the answer sheet to compare correct coding and their coding.
 - Some fast progress students will plan their design about ecosystems by coding.

Wrap up (5 min):

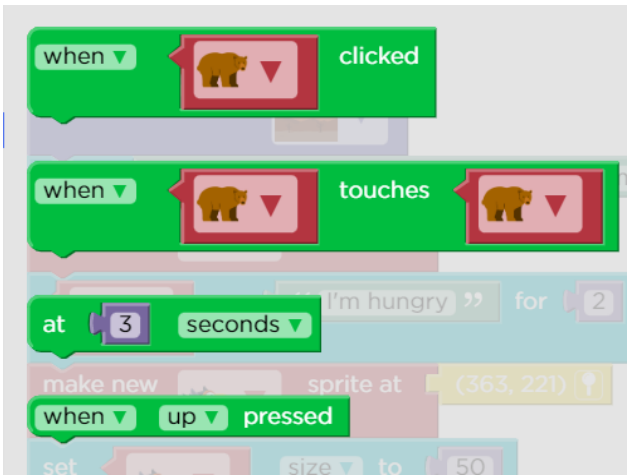
- Iterate Understanding Confirmation Sheet (below).

Understanding Confirmation Sheet

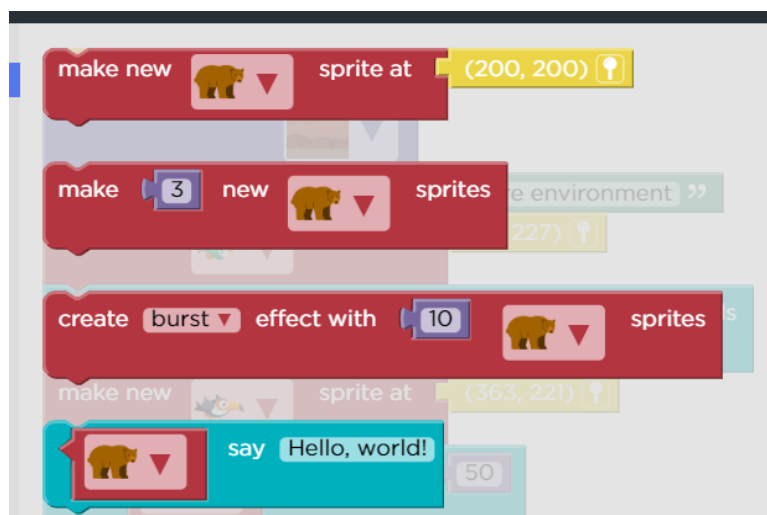
1. Quiz

Are these following blocks “Sprites Movement” blocks? Or “Event” blocks?

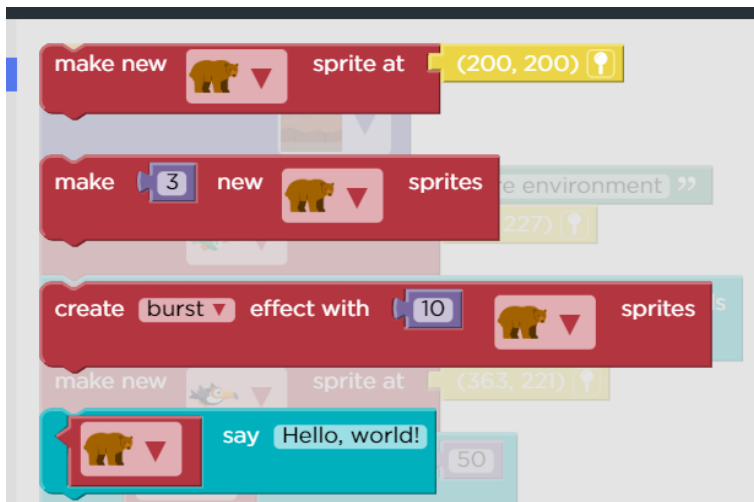
(Make a circle to your answer)



Sprites Movement / Event



Sprites Movement / Event



Sprites Movement / Event



Sprites Movement / Event

2. Keynotes

- Sprite Movement blocks

“Sprite Movement” blocks can control sprites’ (characters) settings.

- Making new sprites
- Setting size, population
- Behavior (Moving, Speaking)

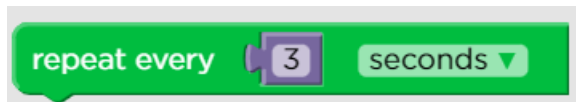
- Event blocks

“Event” blocks can listen for something to happen and react right away.

- Recognizing players’ button input
- Touch between two sprites

- Repeating blocks

“Repeating” blocks can iterate some blocks’ functions



- Conditional blocks

“Conditional” blocks can check the condition, such as the number of sprites. If the state is true, then inside blocks of a conditional block will be conducted.

