



PLTW Virtual Learning

6th Grade Intro to Tech

May 22, 2020



6th Grade Intro to Technology Lesson: May 22 (Part 10 of 10)

Objective/Learning Target:

Students will develop knowledge of the fundamentals of the coding process through a blocky code language (or a text-based language if they choose a more advanced challenge).

Warm-Ups:

Raise your hands in the air.

What I did was declare an event. When I wrote "raise your hands in the air", you (hopefully) responded by raising your hands. In coding, you would declare this by saying something like "when I type 'raise your hands,' you raise your hands".

You can also think of cities as declaring events. There are laws that say "when there is a green light, cars move through the intersection".

You will also be working with behaviors again today, like you did in the sprite Swimming Fish lessons. Can you remember what one of those behaviors you could have the sprite do was?

Lesson Introduction/Background Information:

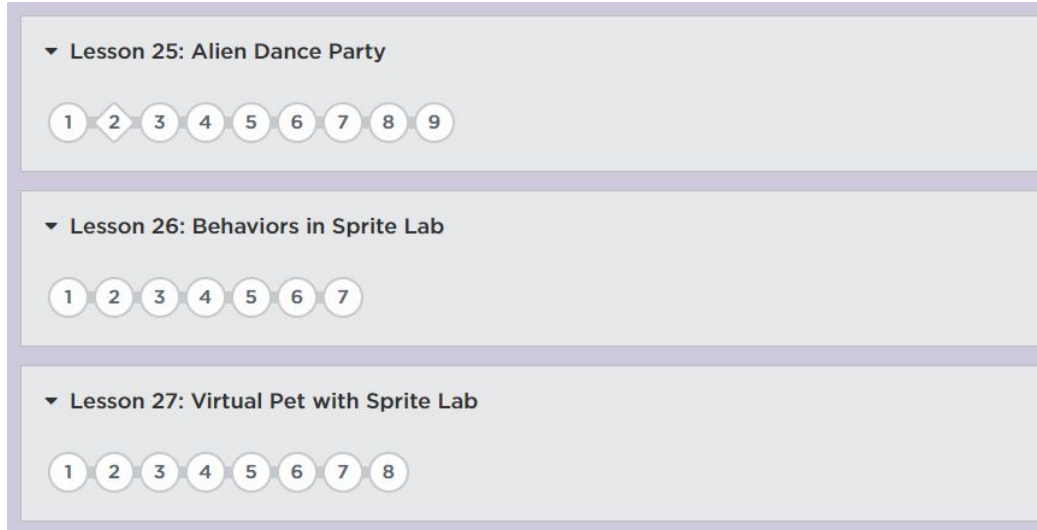
Regardless of your previous experience (or lack of) with coding, you are going to be spending the next two weeks working through structured coding lessons and learning some fundamental concepts of writing code that apply whether you are doing blocky (drag and drop) coding or you are doing text-based coding. Coding can be used from everything to making games, designing websites, creating apps, and programming robots (which you will be doing next year if you take Automation and Robotics).

Practice (Signing-In):

- Go to code.org
- This is not required, but if you want to save your progress on this FREE site, click the turquoise “Sign In” button in the top right corner.
- Click the red “Continue with Google” button on the right side.
- Click your school email (or any Google account) to continue.
- Watch [this video](#) to see these steps in action to get logged in (which is optional!)

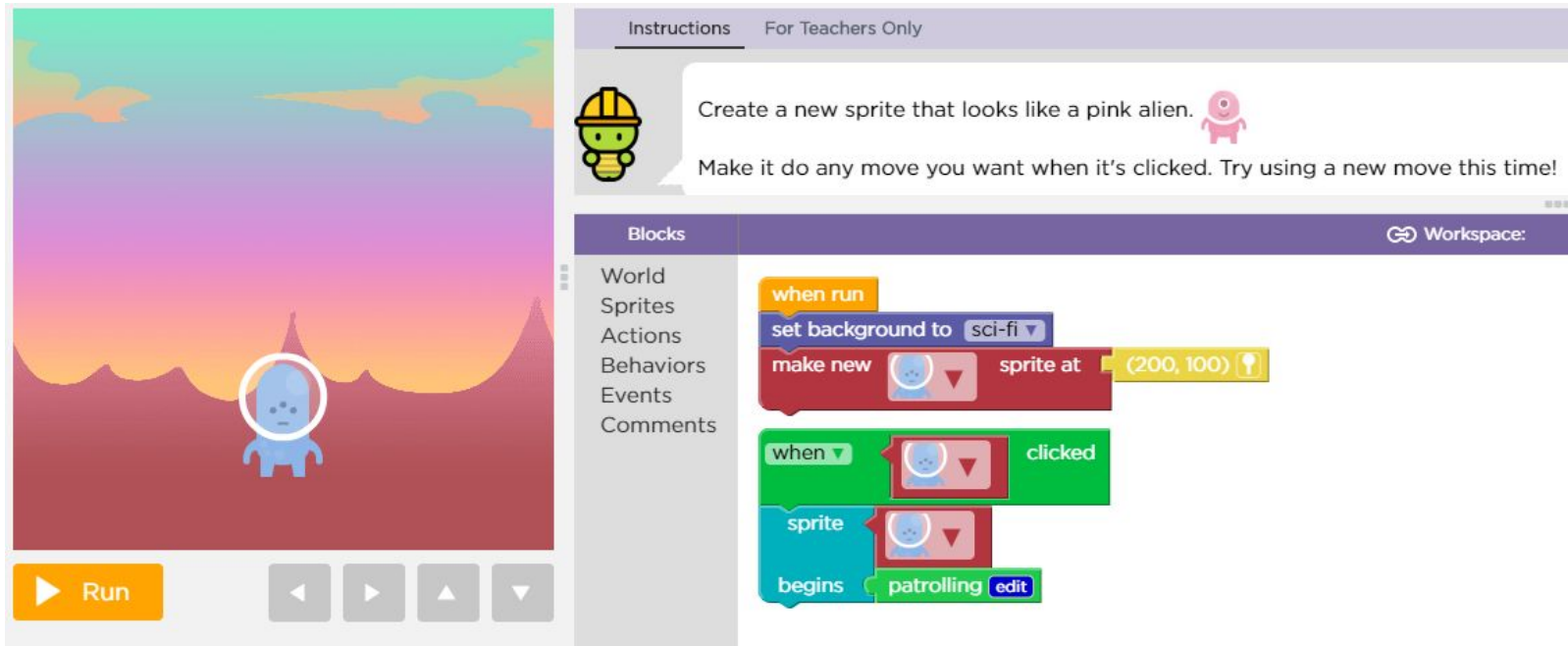
Practice:

- Navigate through the course catalog to the Express Course, or follow this link: <https://studio.code.org/s/express-2019>
- Today you are going to be introduced to events and behaviors, all while you play around in the Sprite Lab in lessons 25-27.



Practice:

- These are the last lessons of the Express Course, so have fun with them! Show off what you've learned about events, behaviors, and sprites along with your own creativity.



The screenshot displays the Scratch Express workspace. On the left is the stage with a sci-fi background and a blue alien sprite. The right panel contains the 'Instructions' section with a task: 'Create a new sprite that looks like a pink alien. Make it do any move you want when it's clicked. Try using a new move this time!'. Below this is the 'Blocks' section with a menu and a workspace containing the following code blocks:

- when run
- set background to sci-fi
- make new sprite at (200, 100)
- when clicked
- sprite begins patrolling

Self-Assessment:

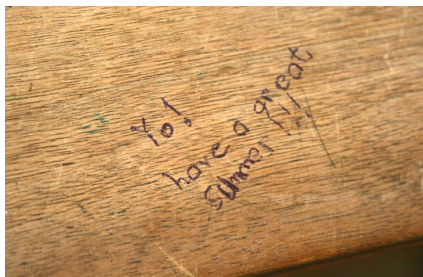
Each lesson will check your work as you go, so you get immediate feedback!

Did you use more blocks than recommended on a level? Go back and see if you can complete it while staying under the block maximum.

Extend Your Learning/Continued Practice:

Extend your learning in the following ways:

- Go back and view the videos or check out some of the text-based coding websites I linked in previous lessons
- Watch the rest of the [videos about computer science on Code.org](#)
 - Complete the End of Course Project, Lesson 28



*But don't write on desks ;)