



PLTW Virtual Learning

6th Grade Intro to Tech

May 12, 2020



6th Grade Intro to Technology Lesson: May 12 (Part 2 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:

Let's do a literal warm-up today. Open up two of your dances from yesterday and do them along with your digital dancers! Bonus points if you can get family members to join in with you.

Lesson Introduction/Background Information:

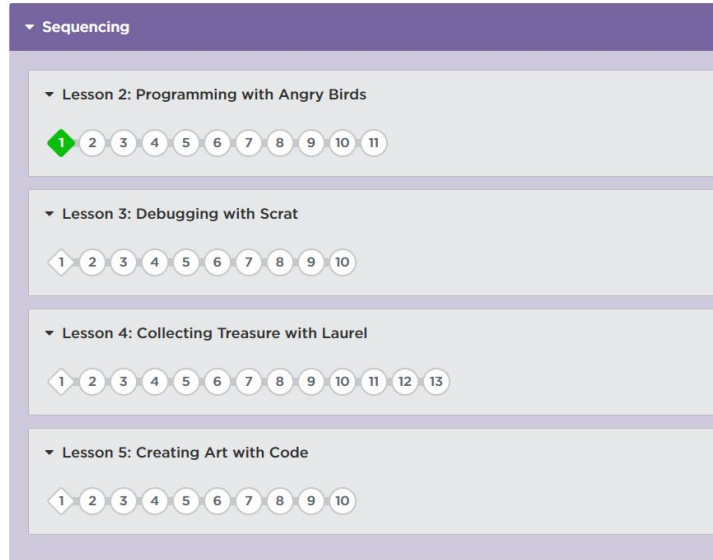
Regardless of your previous experience (or lack of) with coding, you are going to be spending the next two weeks working through structured coding lessons and learning some fundamental concepts of writing code that apply whether you are doing blocky (drag and drop) coding or you are doing text-based 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 work through the concept of Sequencing, or putting your code in the correct order, in Lessons 2-5.



Practice:

- Order matters in coding just like it matters in giving instructions. If I was teaching someone how to tie their shoes and I started with the third step, they wouldn't meet their end goal, would they? Explore this concept with today's lessons, featuring Angry Birds, Ice Age, Laurel the Adventurer, and the Artist!

Instructions

"Keep calm and help me find the bad pig. Otherwise I might get angry!"
Get the bird to the pig and avoid the TNT.

Blocks

Workspace

move forward

when run

turn left ↶

turn right ↷

repeat ??? times

do

Run Step

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:

Code.org also has some great videos about computer science.
Check out two of them below!

[Introducing How Do Computers Work?](#) (with Bill Gates)
[What Makes a Computer a Computer?](#)