Incorporating Code into Interdisciplinary STEM

Student Work and Links

Equivalent Ratios: Below are examples of ratio tasks that students created:

Sample 1:

TASK 1

start at the purple tape then go forwards for 4 rotations then do a 720 then go to 3 equivalent of the ratio of 6:87 then go backwards 3 rotations and then go to the green tape and there will be obstacles, do not touch or cross the black tape, if your do you must restart then display what you feel about your teacher Mrs. Landry, then go to an equivalent ratio of 6: 87, then go back to the purple tape and display anything related to China and say how long ago it was made and exit the program.

TASK 2

Start at the blue tape with the cube in the "Arm", go to the ratio of 6:87, then go to the equivalent ratios of it (order does not matter). Then let go of the cube and go backwards 40 inches, then go display how you feel about your teacher Mrs. Landry, Then go to a picture that connects to ancient China. And exit the program.

Sample 2:

Start at the starting point and display 5:6. go to a black tape and display a

Equivalent ratio that is under 100, and do a 360. Then go to another black tape and display another equivalent ratio(CAN NOT REPEAT SAME RATIO!!!!!!!!!!) then display a anger face. Repeat the steps above but with different equivalent ratios two more times. Then turn around and go back to your starting point and solve this problem 36 right newtons +16 right newtons and display the correct answer on the screen.



Net Forces:

Student Sample: https://scratch.mit.edu/projects/598992851/



Small Basic:

Use this tutorial from TheFishiVersity to help you learn more about coding with Small Basic! <u>https://youtu.be/XqyWGzSzvKw</u>

This tutorial will guide you on how to create a Mad Lib: https://edpuzzle.com/media/5ed528de674d463f1fdc6890

Samples:

Click here for samples of Mad Lib codes that can be pasted into Small Basic: <u>Simple</u> <u>Basic Mad Lib Examples.docx</u>

Nutrient Movement:

- Sample 1: https://scratch.mit.edu/projects/609357459/
- Sample 2: https://scratch.mit.edu/projects/609179897/

Courtesy of Regena Landry, via Edutopia