



Vaccine production coding Lesson plan

Created by the Delightex Edu team

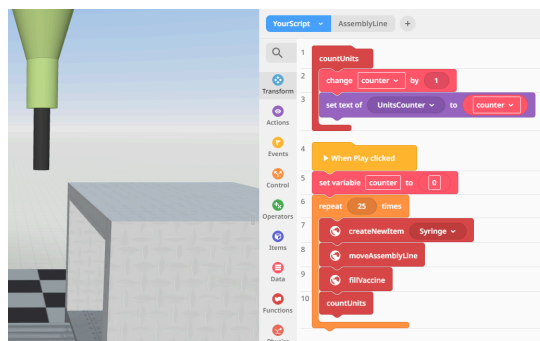
** A Delightex Edu Pro account is needed for this activity.*

Education level: Middle school

Subject: STEAM, Computer science

Format: Individual (online) activity

Duration: 1 hour or less



Introduction and lesson objectives:

In this lesson, students will learn to code by fixing the broken machinery of a vaccine production assembly line. They'll learn basic coding skills and make the machine work again by inserting the functions provided in the right order into a given CoBlocks script.

To go further, students can also write code to fix an incomplete function counting the number of vaccines produced.

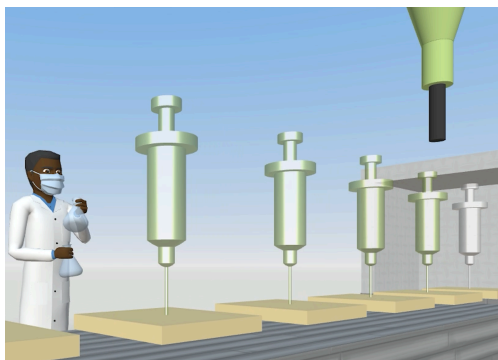
You don't need to be an advanced coder to teach this lesson! Simply use the materials provided and familiarize yourself with the solution provided.

Learning goals and student benefits:

- Develop coding skills
- Learn how to use functions
- Learn how to code loops
- Develop computational thinking

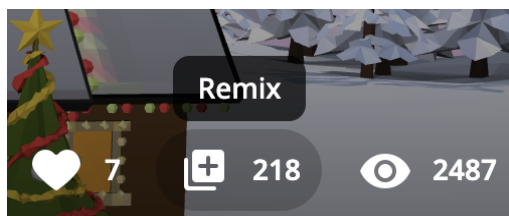


Activity preparation:



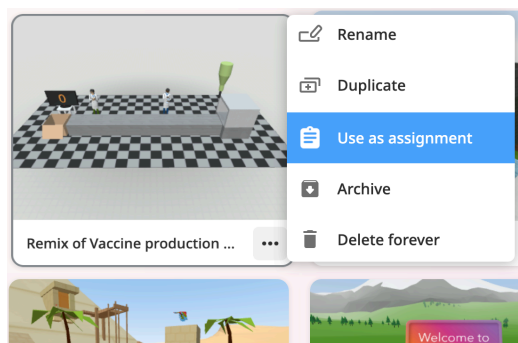
Visit the **Vaccine production coding** master Project using one of these methods:

- Share code: **PVJ-WUN**
- Share link: edu.delightex.com/PVJ-WUN



Remix the Project to get your own copy. *

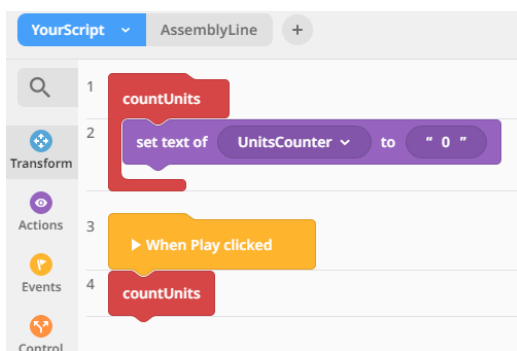
* A Pro account is needed to Remix.



Open your own copy of the Project under your **Projects**.

Set it up as an assignment for your students by clicking **Use as assignment**.

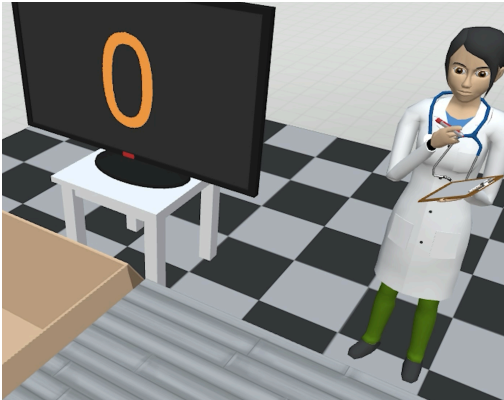
Students will be able to work independently on their CoBlocks scripts. Assess their work using the solution provided on the next page.



In order to make the assembly line work again, students should insert the functions provided in the **Functions** category into the given script.

To go further, they can also fix the incomplete **countUnits** function to count the number of vaccines produced.

Extension idea:



In addition, students can also write their own code in order to fix the incomplete `countUnits` function.

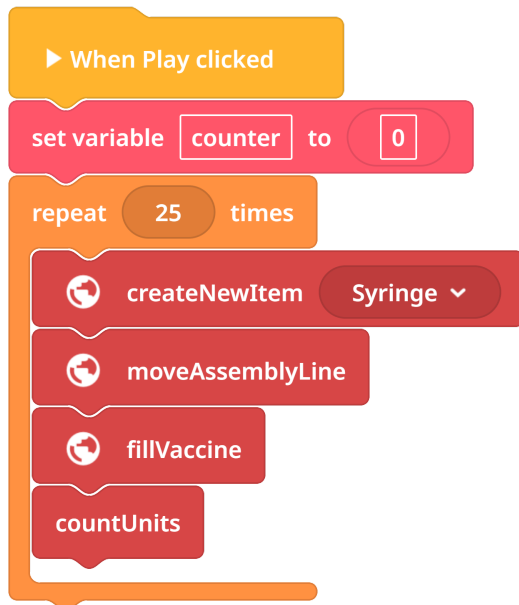
The objective of the `countUnits` function is to count the number of vaccines produced.

Seeing the counter work will be a nice reward!

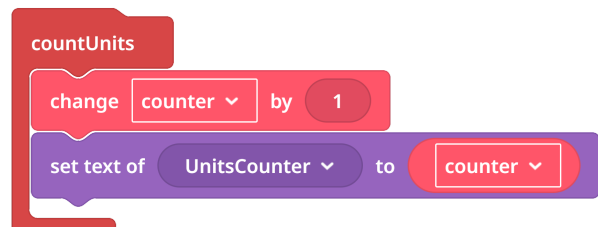
Solution and assessment suggestions:

- Were your students able to complete the script by adding the functions in the right order? Did the assembly line work successfully again?
- Did your students manage to fix the counter?

Assembly line solution:

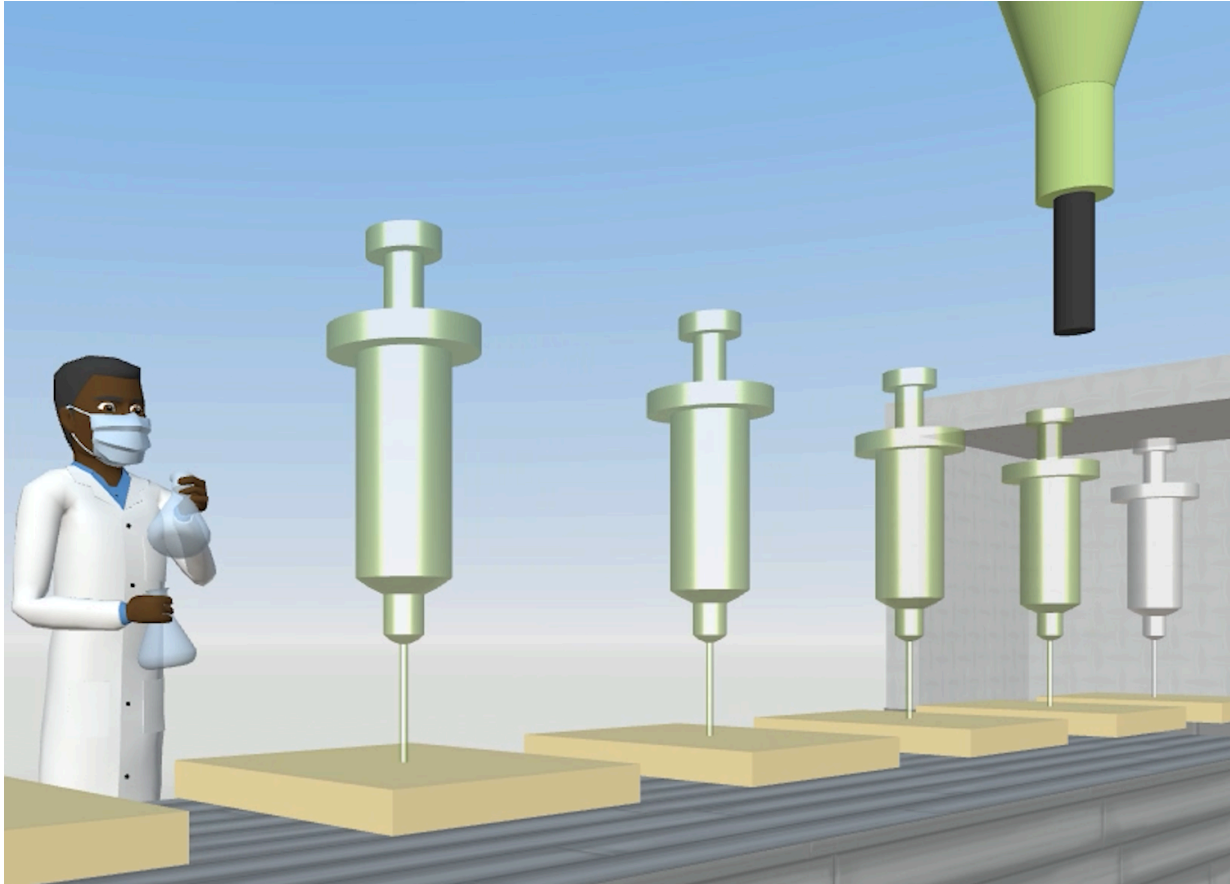


Possible counter solution:





Example Project to remix



Vaccine production coding

edu.delightex.com/PVJ-WUN