



## ***Plague Inc & COVID-19 – VEGA Teaching Scenario***

**Topic:** COVID-19 and pandemics

**Subject(s):** Environmental Science, Biology

**Age / Grade:** 5th/6th grade and above (Note: topic can cause anxiety to some students)

### **Learning outcomes:**

**Knowledge** - Understanding what pandemic means, how viruses work and mutate, why pandemic countermeasures are important

**Skills** - Collaboration, critical thinking

**Short description of the game (*incl. time, pictures, links to tutorials*):** 45-minute (efficient) / 60-minute class - Plague Inc is a game where the player tries to eradicate humanity by creating a pathogen and mutating it. This scenario is not meant for first-time Plague Inc players. Play a tutorial lesson first. Plague Inc is available to all devices.

**Introduction to the scenario (*incl. possible applications, alternatives, risks, and possible challenges*):**

See [Scenario 1 for Plague inc](#) for first-timer experience.

**Curriculum:** No curriculum has Covid specific learning objectives however, due to the current pandemic all teachers should address the pandemic in one way or another to help students understand the global situation.

**The number of students: Duration (estimated time/number of lessons):** 2 students per device, notation tools, 45 minutes

**Prerequisites (necessary materials and online resources):** Plague inc game installed to devices. Notation tools for students.

Needed links:

Covid symptoms:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19#:~:text=symptoms>

Covid map with pandemic spread and daily cases: <https://coronavirus.jhu.edu/map.html>

**Before the program begins (preparatory work for teacher):**

Make sure the game works - set up the devices in a way that two students can see one screen and they have some table real-estate for notation tools.

# The main part of the scenario

## Part one - warm-up and vocabulary

**Preparations:** Screen / projector -> open the presentation here:

<https://docs.google.com/presentation/d/1Qa071LHurm1zZChHmNzkUGZB1vh3I4ANyZ0TWwlrVc/edit#slide=id.p>

### Discuss the topics on the slide show

To achieve a 45-minute class, you should only spend 5 minutes on this first part. This can be quick, but you can leave the symptom list open and let students ask while playing.

Note: some students might feel uneasy to play this game, please be mindful of that.

## Part two - let's play the game

Students can now start playing. First, give the following instructions found from slide 4 (let's play headline)

**There are two rules:**

- Select VIRUS
- Only Covid symptoms allowed

Transfer and other abilities are not restricted, only symptoms.

**TAKE NOTES** on how the virus mutates automatically (create a list) and what humans are doing

Tip to teacher: circulate in class and encourage students to take notes. Troubleshoot when needed.

**After 10 minutes: remind about note-taking and encourage taking notes also on humanities countermeasures**

**Encourage students to change seats at the 10-minute mark.**

**Allow around 20 minutes total for gameplay.**

## **Part three - debriefing**

Discuss the last two slides in the slideshow

Ask students to go to: <https://coronavirus.jhu.edu/map.html> and compare their results on the actual COVID pandemic so far. Allow a couple of minutes for the cross-referencing.

Spend the rest of the class discussing the topics listed on the slides.

**If you have time, you can allow students to finish the game and see how they did overall.**

## ASSESSMENT

Student evaluation rubric				
Knowledge content	1	2	3	4
Information recall	Student can't recall information covered in game	Student can recall some information covered in game	Student can recall most information covered in game	Student can recall all the information from the game well
Transfer	Student can't connect the information in game to information on books or in other medias	Student can transfer some information from the game to other medias	Student can transfer majority of information from the game to other medias	Student can connect the information in game very well to contents in other medias
Skills	1	2	3	4
Problem-solving	Student did not try to solve problems in game / during activity	Student was somewhat active in solving problems during the activity	Student worked rather actively on solving problems during class.	Student worked very actively on solving problems during class
Collaboration	Student was not able / willing to collaborate with others.	Student participated, but was not particularly active in collaboration.	Student was actively collaborating while working.	Student was very actively collaborating while working.
Creativity	Student did not actively consider / provide creative solutions to tasks or challenges	Student provided some creative ideas and solutions during the activity	Student actively considered / provided creative solutions to tasks or challenges	Student very actively considered/provided creative solutions to tasks or challenges
	1	2	3	4
Exercise completion	Student was not able to complete the tasks in the game	Student was able to complete some of the tasks in the game	Student was able to complete most of the tasks in the game	Student was able to complete all (or nearly all) tasks in the game
Engagement	Student was not engaged during the class	Student was slightly engaged during the class	Student was engaged during the class	Student was very engaged during the class

**For students** - more for evaluating the game itself. Most useful when experimenting

<b>Student self-assessment rubric (includes game/scenario assessment)</b>				
	1	2	3	4
Clear goals	I didn't understand what I was supposed to do in the game.	I somewhat understood what I was supposed to do in the game.	I knew what to do in the game.	I knew exactly what to do in the game.
Challenge level	The game was so hard that I felt frustrated.	My skill and game's difficulty were in balance.	The game didn't provide me with too much challenge.	I felt bored, the game was too easy.
Feedback	The game didn't provide me any feedback	The game provided me some feedback	The game provided me a lot of feedback	The game provided all the feedback I needed.
Concentration	I wasn't able to concentrate on the game.	I was able to somewhat concentrate on the game.	I was able to almost fully concentrate while playing.	I was able to fully concentrate while playing.
Completion	I wasn't able to complete the tasks in the game.	I was able to complete some tasks in the game.	I was able to complete almost all tasks in the game.	I was able to complete all the tasks in the game.
Learning	I didn't learn anything.	I did learn something from the game.	I feel that I learned quite a few things from the game.	I feel that I learned a lot from the game.
Fun	I didn't like playing the game.	I had some fun playing the game.	Playing the game was fun.	Playing the game was a lot of fun.