

Name \_\_\_\_\_

## Plague Inc. Project

### Can You Destroy Humanity?



Human history has been guided by the effects of disease. Two examples are the Black Plague (killed almost 1/3 of the entire human population) and the Spanish Flu (killed 5% of the human population).

Plague Inc. is a strategy-simulation game in which you are an infectious agent which infects an individual. Your goal is to infect and kill the whole human population by evolving and adapting to various environments. However, there is a time pressure to complete the game before humans develop a cure against you.

#### Play Game #1:

- Go to your App Store and search for Plague Inc. (\$0.99)
- Download and open the game
- Select “How to Play” for an overview of how to play the game
- Select “Play” to start the game.
- Select “New Game”
- Select “Bacteria” as your Plague Type.
- Select “Casual” as the game difficulty.
- Name your plague and select “Start” to begin the game.

Look at the upper right corner of your screen. This is the date of the initial infection. The small arrow under the date allows you to pause the game.

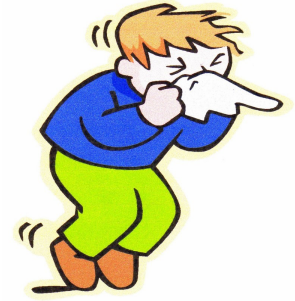
Select a country to begin the plague.

Which country did you select? \_\_\_\_\_

- Begin collecting DNA Mutation Points by popping DNA bubbles.
- Once you accumulate enough points, tap on “Disease” to mutate yourself according to Transmission, Symptoms, or Abilities.
- Take notes of your game mutation strategy to infect and kill humanity in the area below.

**Result of Game #1**

1. What was the result of your game?



2. How many “Days” did your game last?

3. What was your score?

4. Did you have an initial strategy of how you would use your DNA points to mutate and kill humanity? If so, what was your strategy?

**Before you play again, consider the following...**

All of the decisions you make have a trade-off. Picking a wealthy country as your first target is difficult to spread disease the quickly but allows you to score many DNA points, helping you get some valuable upgrades before people begin to take notice. It's also easier to spread sickness around the globe from a country like the US since there are a lot of land and sea trade routes to other locations, versus a country like Algeria, which can only spread your disease to neighboring countries. Islands are also really tough infect but that can also be an advantage. Infecting an island in the beginning can guarantee everyone has it before you spread outward, effectively guaranteeing that any ships or planes departing your newly conquered nation will help your cause. You should also consider the country's environment (warm, cool or temperate).

1. Which country did you use in Game #1? \_\_\_\_\_

2. Which country will you start with in Game #2? \_\_\_\_\_

3. Why?

### Use DNA Points for Mutations

After selecting your initial country, your “patient zero” will then start to infect other humans. As your disease spreads, you get DNA points through clickable bubbles that let you add new symptoms or traits to your fledgling microorganism. Each of these decisions carries with it certain costs and benefits. You can choose to use your DNA points on;

Transmission: How it is transmitted from person to person.

Symptoms: How it affects the person’s health.

Abilities: How it avoids destruction due to environmental or scientific research.



Some choices increase "infectivity," making it easier to spread your disease throughout the world in certain conditions, whereas others add symptoms to weaken hosts and destabilize civilization a bit faster.

These upgrades also draw attention from humans, ultimately leading to your discovery and a race to find a cure. From that point on, the populace tends to respond appropriately to your choices. For example, picking up tissue necrosis and hemorrhagic fever as symptoms causes people to die en masse in some of the most horrible ways imaginable. The game incentivizes this by rewarding you with even more DNA points to spend on further upgrades. However, that pairing of symptoms is so horrific that the general population mobilizes every available scientist and doctor to work out a cure.

4. What was your strategy regarding the use of your DNA points in Game #1? (Was your priority Transmission, Symptoms, Abilities?)
  
5. Did your strategy work in Game #1? Explain
  
6. What will be your strategy for Game #2? Explain

Human health can be remarkably fragile, but they are not without defenses. Once doctors recognize the infection and figure out how to eradicate your disease, funding towards a cure will ensue and the plague could be eradicated in a matter of days or weeks. You have to be able to infect humanity without killing them too quickly. Killing humanity too quickly will not allow you to infect others.

**Start Game #2**

Initial Country \_\_\_\_\_



1. What was the result of Game #2?

2. Did your strategy work to kill off humanity in Game #2? Why?

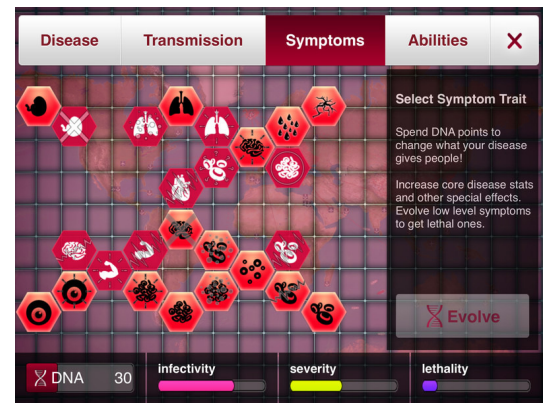
3. Did your strategy change throughout the game? If yes, how?

4. How many "Days" did Game #2 last?

5. What was your score?

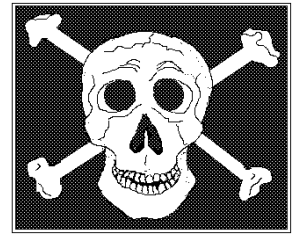
## Final Questions Regarding the Plague Inc. Game

1. Describe three “Transmission” modalities and how these may infect people.



2. Describe three “Symptoms” and how severe/lethal it is to people.

3. Describe three “Abilities” and how these are advantageous to the survival of the pathogen.



### **The Black Plague**

1. When did this pandemic occur?
2. How many people did it kill?
3. What kind of organism caused the infection?
4. How was it transmitted?
5. What were the symptoms and why was this fatal?

### **The Spanish Flu**

1. When did this pandemic occur?
2. How many people did it kill?
3. What kind of organism caused the infection?
4. How was it transmitted?
5. What were the symptoms and why was this fatal?