Virulent

Middle School - Initial Infection

TERM

2013

LOCATION

G+L+S

PROGRAM VideoGames and Learning

Overview of Lesson

In the first level of Virulent level, entitled "We Arrive", the player is informed that the virus (his or her Viron character) has entered the body and is trying to spread an infection. Students will be asked to model the processes by which viruses spread amongst a group of people, and also how scientists trace outbreaks back to the source, by participating in this classroom activity.

**Materials Needed** 

Paper strips (three red, the rest white)
An envelope for each member of the class
White board and a dry erase marker

Content of Lesson

Students will each begin with an envelope containing a strip of paper - three of them will be holding those that contain a red strip, and the rest white. Have students look into their folders to identify which color they possess, but instruct them not to share this information with anyone around them

Set a timer for 30 seconds, and have the students mill about the room. When the timer goes off, the students whisper either "red" or "white" to the classmate(s) standing closest to them. Any student who has heard the word "red" is now 'infected' and must whisper "red" for the remainder of the game.

After each round, have the students who were newly infected with "red" virus continue to play with the uninfected students, but have those who were infected two rounds previous sit down. These students have effectively succumbed to the virus.

Once several rounds of the game have been played (around five should prove the point), ask the last remaining standing students which of them are currently infected with "red" and which are not. Using the dry erase marker and the white board, begin a tree/map of the infection by writing the names of those infected on the board. Then, ask these students and the rest of the class to help trace the origin of the virus step by step by connecting the names of those infected with the names of students they made contact with in the previous round. Once the class believes the map is complete, ask the students who originally had red strips in their envelopes to stand. Do the names at the root of the tree/map match the names of these students?

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Follow up this activity with a discussion on how this might mirror the process that scientists use to locate the source of an outbreak. What famous viruses have the students heard or learned about? Do the students think that scientists used a different method to determine who caused that virus to spread?

Vocabulary

Infection

Virus

Source

**Learning Objectives** 

Students will gain an understanding of how scientists trace the source of a viral outbreak.

Students will be able to better comprehend the way in which a virus spreads.

## **Educational Standards**

(RST.6-8.4.) Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics

- (RST.6-8.7.) Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)
- (RST.6-8.9.) Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic