L2 BIOLOGY

Infectious Disease Research Project

(modified from biologycorner.com)

Ring around the roses  
Pocket full of posies  
Ashes, ashes  
We all fall down

A popular children's rhyme has darker origins. A rhyme that told a grim tale for those who had been infected with bubonic, or Black Plague. The word "roses" referred to a red rash that was often the first symptom of infection. Posies were flowers that were put in the pockets that were thought to protect you from the disease. In other interpretations, the posies covered up the horrible smell of those with the disease and all of the corpses that piled up in the streets. "Ashes" could have referred to cremated bodies or it may have originally been "a-choo" to represent sneezing. Obviously, "we all fall down" refers to the deaths of those who had been infected. In London, at the time of the outbreak in the 1600's, the death rate was over 60%.

Humans have always been under assault from pathogens. Until the development of the germ theory, and aseptic techniques, people did not understand why you got sick or how to effectively treat diseases. Epidemics could cause the breakdown of society when lawmakers, doctors, and police all fell ill. A plague could turn away armies, end wars, and cause a complete change in a government or culture. Plagues could even wipe out whole groups of people and destroy cultures.

Process

1. Once youhave been assigned your disease, you will begin by writing the following questions on note-cards.
   1. What is the history of the disease, where was it first discovered?
   2. What are the symptoms of the disease? How is it diagnosed?
   3. How does a person contract/aquire the disease?
   4. What is the prognosis for the patient? (How long will they remain sick, will they die, are they contagious, will there be lingering effects.)
   5. Can the disease be treated? If so, how? Are there antibiotics? If not, why not and what steps are we taking towards discovering a cure or treatment?
   6. How can the disease be prevented? Are there vaccines?
   7. What is the future of this disease, are we likely to ever cure it?
   8. Interesting facts or trivia about the disease, interesting cases or famous (infamous) people related to the disease. Is the disease/pathogen useful in some other way?
2. Next, you will research to find the answers to the questions and write your answers on the notecards. (be sure to include the source(s) you are using on each notecard)
3. Once the notecards are complete, you will use them to create your narrative/paper electronically in a word document. This will be submitted to turn-it-in so it is imperative that you use your own words and cite everything that is not common knowledge.
4. Using your narrative, you can create your final project using prezi.com. You will need at least one image for each notecard.

<http://prezi.com/a_qjsj0tek0u/case-studies-in-south-agrica/>

communicable disease lessons including scavenger hunt on page 31

<http://sspw.dpi.wi.gov/files/sspw/pdf/k_12communicable.pdf>

College project:

<http://web.clark.edu/tkibota/240/Disease/Disease_Project.pdf>

Bubonic plague prezi with all questions:

<http://prezi.com/fwx1aidnirte/infectious-disease-assignment/>

Another

<http://prezi.com/ubfsnfo1cb0g/infectious-disease-portfolio-assignment/>