

High School Science Virtual Learning

Forensic Science Corona Virus

May 7, 2020



High School Forensic Science Lesson: May 7, 2020

Objective/Learning Target:

Students will understand how the corona viruses are spread and how they affect host organisms.



1. What virus is causing the pandemic of 2020?

2. What other viruses do you know of that have caused significant responses by governments and health agencies?



- 1. Covid-19, a type of coronavirus
- 2. West Nile, Ebola, Zika, Spanish Flu,



Lesson Activity:

Directions: First, lets learn about coronaviruses in general. Read this article by the National Institute of Allergy and Infectious Diseases. Then write a quick summary about why the NIAID is interested in studying these viruses.



Practice

You will use the information from the activity on slide 5 to write a summary about coronavirus symptoms, and their interest by health institutions like the NIAID



Example of summary information

Coronaviruses are a large family of viruses, name for their crown-like shape. They can be found in many mammal species. They usually cause upper respiratory infections, with symptoms similar to the common cold.

These viruses are of great interest of study because of what is called "spillover events". This is where the virus 'jumps' from one species to the next. Some of the most recent outbreaks of deadly viruses have been form the coronavirus family. This includes SARS-CoV in 2004, MERS in 2012, and currently Covid-19.

Studying how these past viruses jumped, infected, and were treated can help scientists to develop a plan of action and treatments for current and future outbreaks of a similar nature and stucture.



More Practice

Now let's look at the current situation of COVID-19.

Use the <u>Johns Hopkins Resource Center</u> to help you answer questions on the following slide.

(Keep in mind, some answers may change over time, depending on when you are completing this assignment)



More Practice Questions

- 1. Using the world map, how many total cases of Covid-19 are confirmed?
- 2. Which countries have had the highest number of cases and deaths?
- 3. On the US map, use the drop down list to look for information in your county. How many cases and deaths have been confirmed in Jackson County, Missouri?
- 4. Which states have tested the most people for Covid-19?
- 5. According to the Hubei Timeline, what date did the first government agency start tracking Covid-19 activity?



More Practice Questions Answer Key

- Using the world map, how many total cases of Covid-19 are confirmed? 3,231,701 cases
- Which countries have had the highest number of cases and deaths? United States, Italy, UK, Spain, France
- 3. On the US map, use the drop down list to look for information in your county. How many cases and deaths have been confirmed in Jackson County, Missouri? 313 cases, 13 deaths
- 4. Which states have tested the most people for Covid-19? New York, California, Florida, Texas
- 5. According to the Hubei Timeline, what date did the first government agency start tracking Covid-19 activity? December 30th, Wuhan city officials began tracking cases



Additional Learning

Centers for Disease Control resources

World Health Organization resources

Analysis of social distancing from NPR