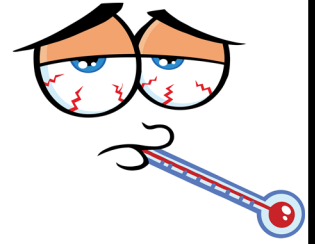


Name _____ COVID-19



What is the Coronavirus COVID-19?

COVID-19 is a novel (new) coronavirus that first appeared in Wuhan, China at the end of 2019. The CO stands for corona, VI stands for virus, and D stands for disease. The 19 represents when the virus first appeared.

COVID-19 is a major concern because of its ability to rapidly spread and infect people. Scientists believe it is able to do this because the spike protein on the surface of the virus that fits and locks into a receptor in human cells. The unique structure of COVID-19, as opposed to SARS, makes it 10 times more likely to bind to the surface of a human organ. Furthermore, this spike protein is activated by an enzyme called furin, which is found in several human organs, like the liver, the lungs, and the small intestine. Because furin is found in so many human tissues, it's possible for the COVID-19 virus to attack more than one human organ at the same time. Common symptoms of COVID-19 include fever, cough, and shortness of breath.

There are many different kinds of coronaviruses. Most of them affect only mammals. Bordetella is a coronavirus that affects dogs but which cannot be transmitted to humans. Similarly, there are coronaviruses that only affect cats. The most common coronavirus that affects humans is the common cold. The flu is also a coronavirus. It is very rare for a coronavirus that infects animals to also begin infecting and spreading between people, but it has happened several times in the past twenty years. In 2002, the severe acute respiratory syndrome (SARS) is believed to have originally been an animal virus, perhaps in bats, that spread to other animals (in particular, civet cats) before starting to infect humans in the Guangdong province of southern China in 2002. The Middle East respiratory syndrome (MERS) coronavirus originated in Saudi Arabia in 2012 and there is scientific evidence to suggest that the disease may be carried by dromedary camels and may have passed to humans from that source.