## **CONCEPT:** COVID-19 VIRUS (SARS-CoV-2)

•In	, Chinese doctors reported cases of severe lung issues caused by a novel <i>coronavirus</i> named <b>COVID-19</b> .			
	$\hfill \Box$ Also named <b>SARS-CoV-2</b> because its genome is $\_$		to the SARS-CoV virus of 2003 outbreak.	
	$\hfill \square$ Shortly after, cases were reported across the		& countries required citizens to quarantine at home.	
◆COVID-19 is an envelopedRNA virus categorized by <i>spikes</i> on its surface having a crown-like appearance.				
	□ Corona means "			
□ Infects the tissue of lungs in the host organism & can be transmitted via coughing & improper hygiene.				
	□ Leads to an	infection that can cause d	eath or the virus i	s eliminated <i>entirely</i> in up to 14 days.
to the horizontal diag	deaths top 630 covids have covered to covid to c			

**PRACTICE:** SARS-Cov-2 virus (Covid-19) is a (+) ssRNA virus. Which of the following answers is *true* about SARS-Cov-2?

d) ssRNA ; Persistent.

- a) To replicate the viral genome the replicase enzyme must be transported into the cell within the viral particle.
- b) The viral genome can be directly translated by the host cell's ribosomes.

**PRACTICE:** COVID-19 is a \_\_\_\_\_\_ virus that causes \_\_\_\_\_ infections.

a) dsRNA; Acute. b) ssRNA; Acute. c) ssDNA; Latent.

- c) The host cell's DNA polymerase is used to replicate the viral genome.
- d) The viral genome cannot be directly translated by the host cell's ribosomes and must be modified.

**PRACTICE:** SARS-Cov-2 virus (Covid-19) is an enveloped virus. Enveloped viruses are easier to deactivate because soaps and disinfectants easily damage the viral envelope. Why does damaging the viral envelope make SARS-Cov-2 not infectious?

- a) SARS-Cov-2 cannot attach to the host cell without its viral envelope.
- b) SARS-Cov-2 cannot replicate its genome without its viral envelope.
- c) SARS-Cov-2 cannot synthesize viral proteins without its viral envelope.
- d) SARS-Cov-2 cannot assemble inside the host cell without its viral envelope.