Begin by watching the video titled “How Soap Kills the Coronavirus” at the top of the page.

<https://www.vox.com/science-and-health/2020/3/11/21173187/coronavirus-covid-19-hand-washing-sanitizer-compared-soap-is-dope>

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| 1. Draw a diagram of the coronavirus (0:25). Label the following *structures*:  * Protein * Fat * Genetic material |  |
| 1. What part of a virus keeps it from being washed away by plain water? What property of this structure allows this to happen? |  |
| 1. Draw a diagram of a soap molecule (1:10). Label the following *structures*:  * Hydrophilic portion (attracted to water) * Hydrophobic portion (attracted to fat) |  |
| 1. Draw a diagram that helps show how the *structures* of a soap molecule can help serve the function of helping oil mix with water (1:23). Label the following *structures*:  * Soap molecule * Oil * Water |  |
| 1. What happens when soap comes in contact with a virus such as the coronavirus? |  |
| 1. Why is it important to make sure you wash your hands for 20 seconds? |  |
| 1. What advantages does soap have over hand sanitizer? |  |

**Defend the following claim:** Washing your hands for 20 seconds with ordinary soap is an effective way of combating COVID-19.

Be sure to discuss

* The important *structures* of viruses
* The *structure* of soap molecules and how helps them carry out their *function* of destroying the *structures* of a virus