



# WHAT IS A VIRUS?

Viruses are one of the many germs that make us sick.



Viruses use living things like animals and people, **to make copies of themselves.**

Viruses are made up of: **genes**, **proteins**, and **envelope**.

Let's go through each part.

## GENES

All viruses have genes, **just like us.**

These genes contain the information to make more virus copies.

## PROTEINS

All viruses have proteins, **just like us.**

Proteins come together to create a **shell**. This shell, or capsid, protects the genes from damage.

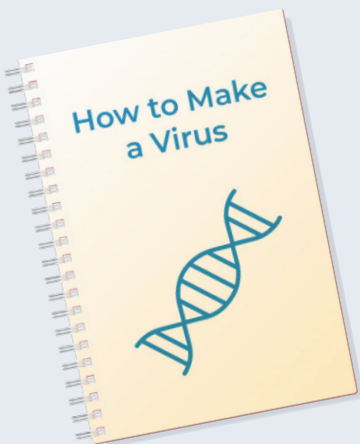
## ENVELOPE

Some viruses, like SARS-CoV-2 which causes COVID-19, have an **envelope**.

The envelope is located outside of the shell and protects the genes inside of it.

Think of genes as a virus instruction booklet or blueprint.

Genes, **or the blueprint**, needs to be read to make more viruses.



Some proteins stick out from the shell.

Other proteins stay inside the shell and only come out to make more virus copies.

These special proteins allow the virus to: **travel around the body and travel from one person to another.**



Similar to the shell, the envelope has proteins sticking out of it.

The virus envelope, similar to a mail envelope, is made up of **fats and proteins** to protect the genes inside it, similar to how a mail envelope protects a letter.



The envelope is important when it comes to hand hygiene & environmental cleaning because cleaning **destroys** the envelope protecting the virus.



**Congratulations!** Now, you know what a virus is and its key parts.

Use this information to **better understand how viruses spread** to make us sick.