What is SARS-CoV-2

Teacher instruction

Duration: 45 minutes

Life Science, Biology



In this lesson, we will explain what a virus is, what it consists of, and how the new coronavirus SARS-CoV-2 looks like. We will compare viruses with bacteria in terms of treatment of infections they cause and finally, we will try to think of what a completely new virus could look like.



1. Introduction: What is a virus
2. The origin and structure of the new coronavirus
3. The difference between a virus and a bacterium or why antibiotics  
   do not work on COVID-19



virus, coronavirus, reproduction, infection, bacteria, antibiotics



Students will be able to:

* give examples of how individuals can protect themselves from COVID-19
* give examples of protection strategies at national level
* evaluate the possible economic and social impacts of the pandemic

## Introduction: What is a virus

In the introductory part, students will find out what properties viruses share with living organisms and in which they differ.

A picture containing sitting, table, umbrella, large

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* What are viruses?
* Are they alive?
* What body parts do you think they need for their survival?

This is followed by a description of what a **virion** is and its structure:

A close up of a logo

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## The origin and structure of the new coronavirus

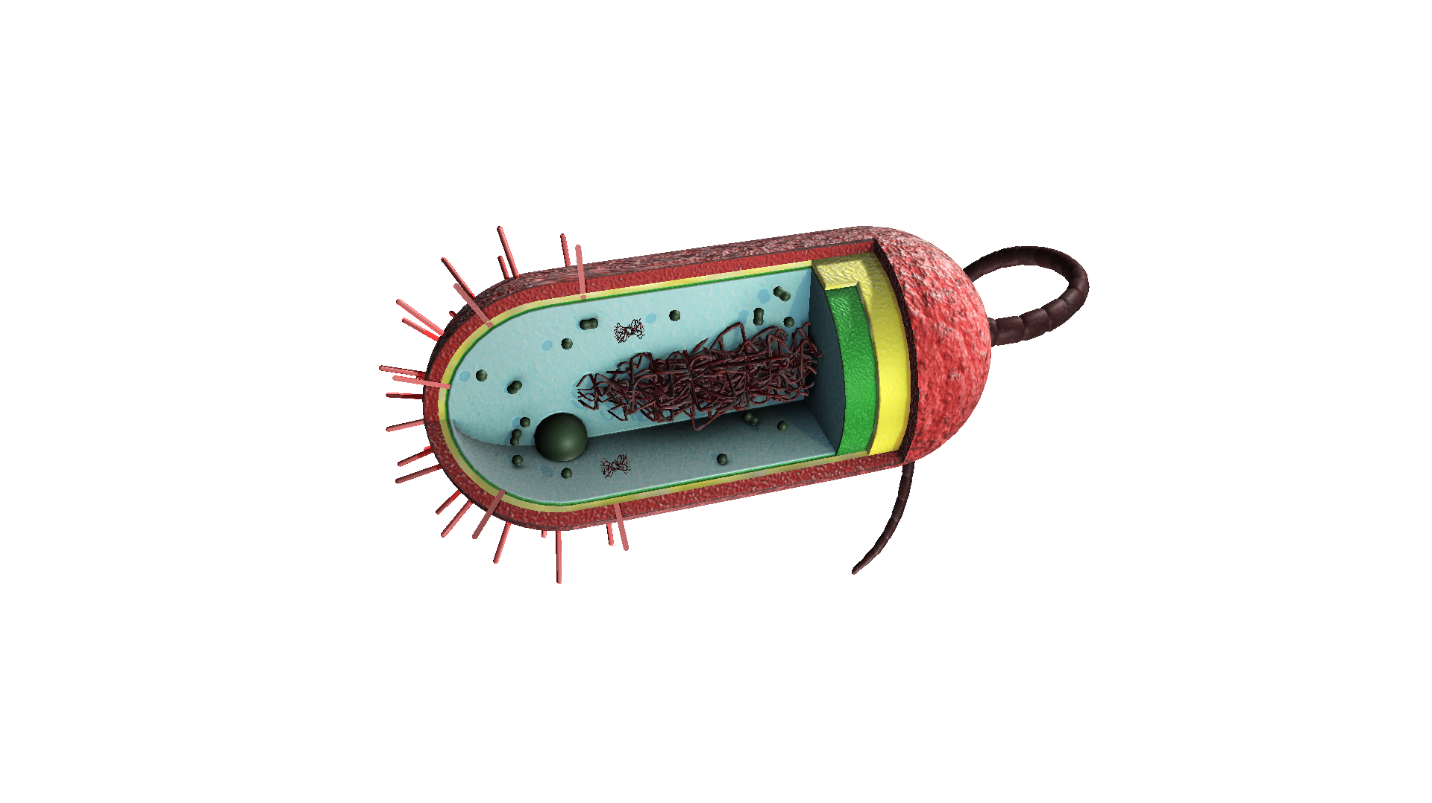
In the second part, students will work with the [coronavirus 3D model](https://online.lifeliqe.com/student/Wsabn3). They will explore it, study the theory in the ***Introductory*** section, and observe the inner structure of the virus with additional description available.

[A picture containing decorated, flower, colorful, table

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## The difference between a virus and a bacterium and why antibiotics do not work on COVID-19

The last part is a description of [bacteria](https://online.lifeliqe.com/student/pDPMVW) and their comparison with viruses.

[](https://online.lifeliqe.com/student/pDPMVW)**[](https://online.lifeliqe.com/student/pDPMVW)**



* Why aren’t antibiotics working on viruses?
* Do antibiotics endanger a patient's health?
* What are bacteria and how do they differ from viruses?
* Could you tell us what the disadvantages come from the overuse of antibiotics?

## Learning activity

Invent and draw a completely new virus and name the important parts it must contain.

There is no need to go into great detail, but think about how such a virus can arise, how and whom it chooses as its host, and how the host can protect itself against infection.