



Extremophiles

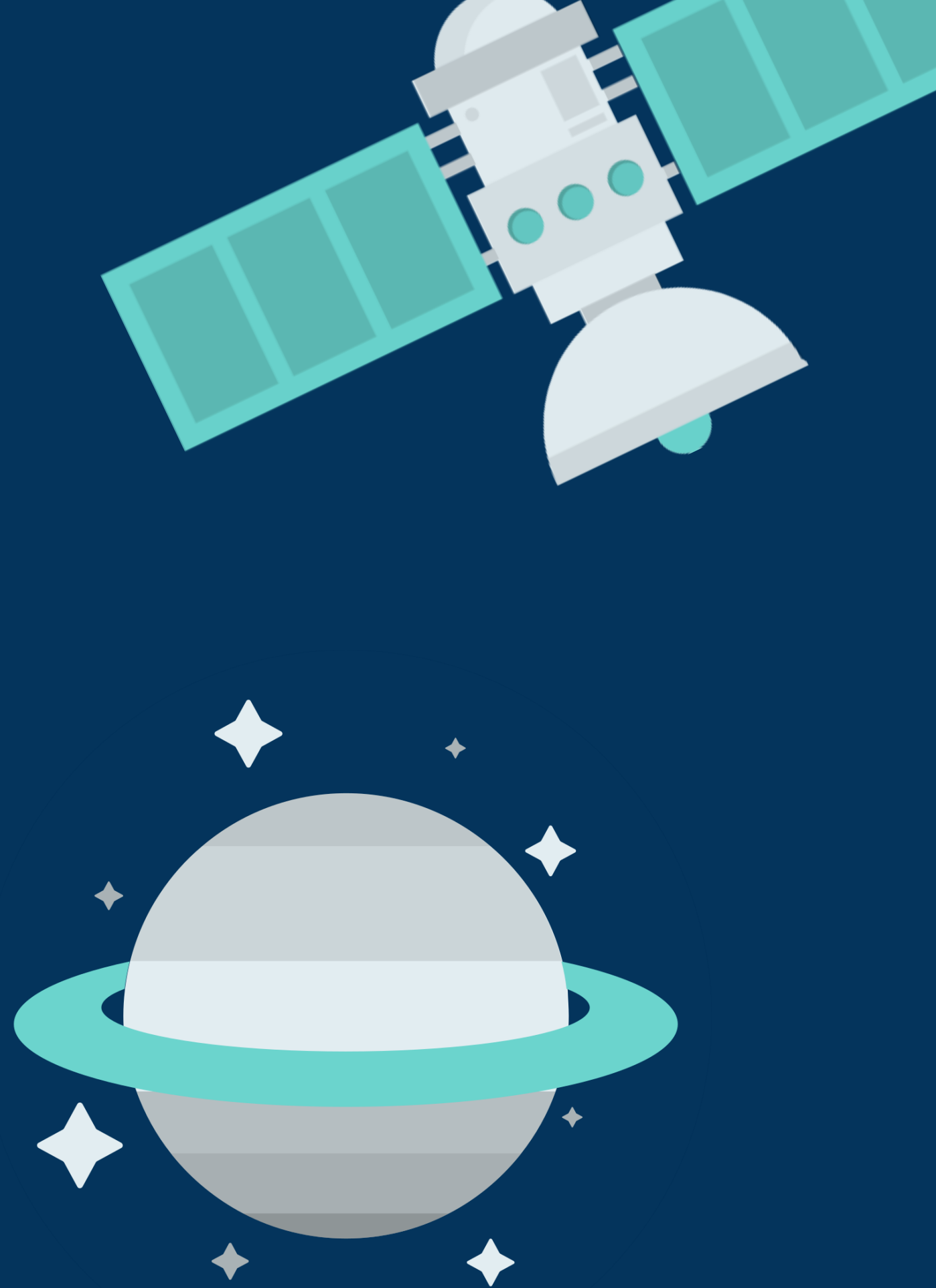
Life in Extreme Environments



Objectives

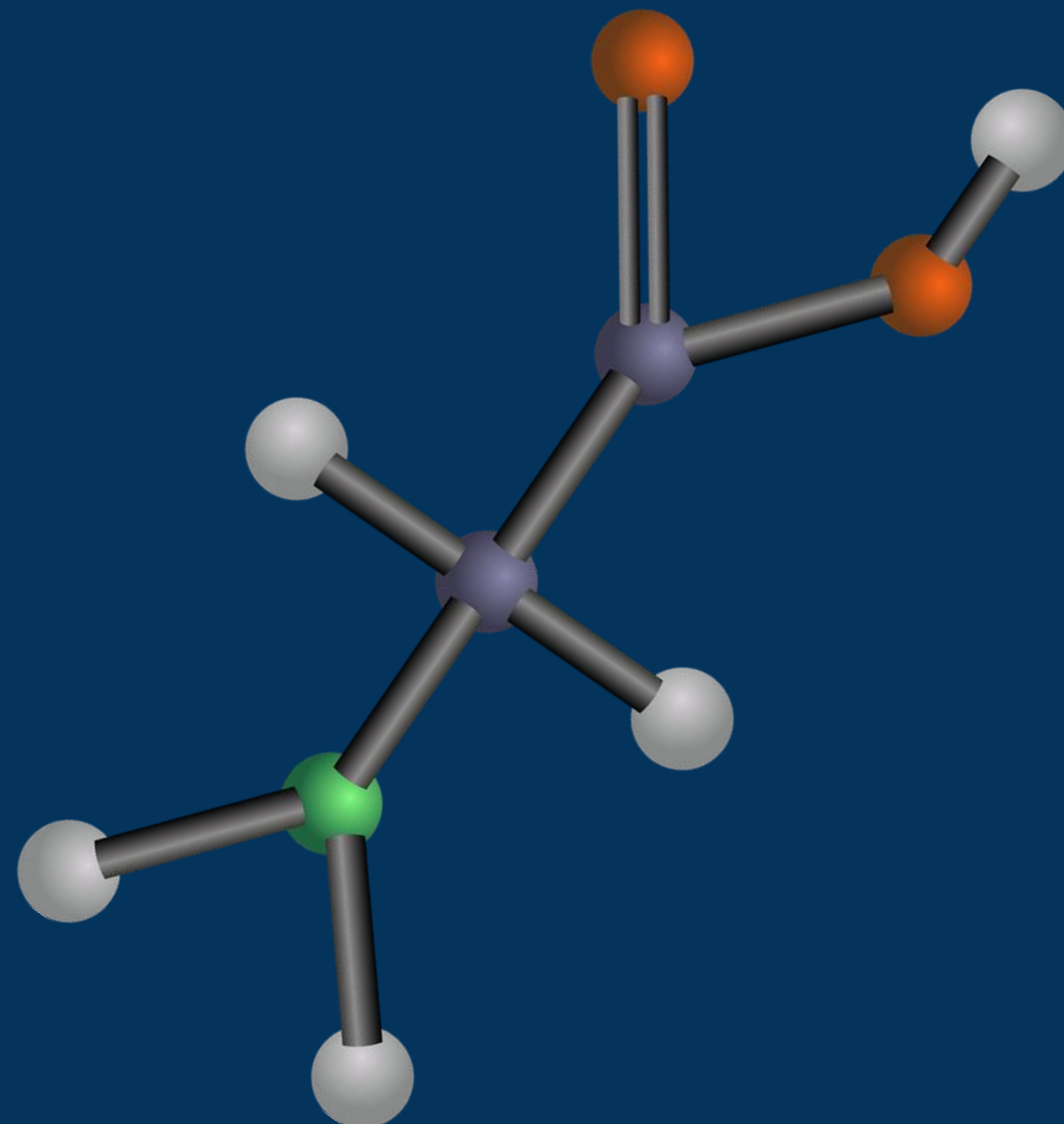
By the end of this lesson you will be able to:

- Understand that cells can change to adapt to extreme environments
- Explain the function of a cell membrane
- Assess how stresses on Mars might affect its habitability





What is an extreme environment?

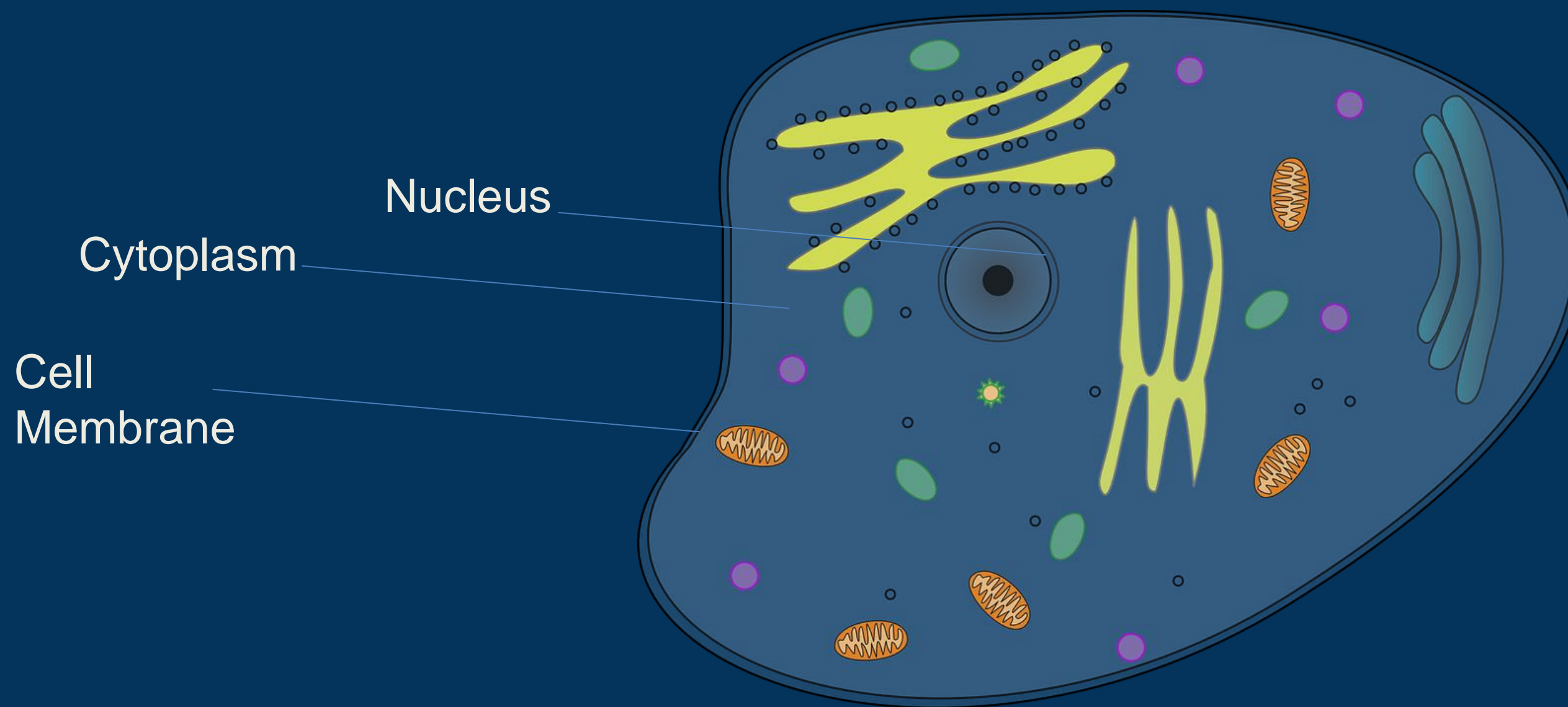


Examples of Extreme Environments on Earth



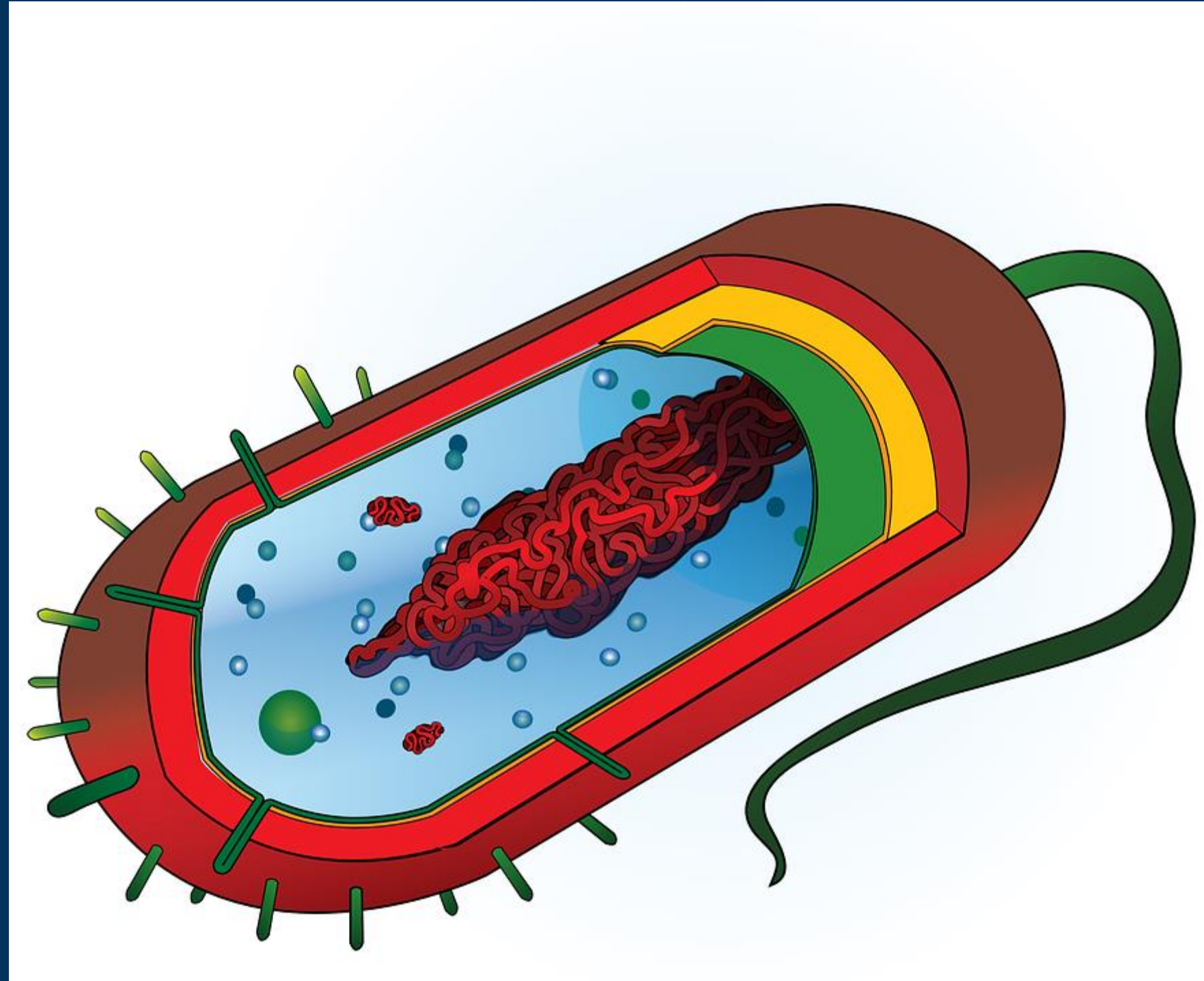


What are cells made of?





Cell membrane importance



What is a semi-permeable membrane?

Click button below to link to video:





What might happen to cells under
Mars-like conditions?



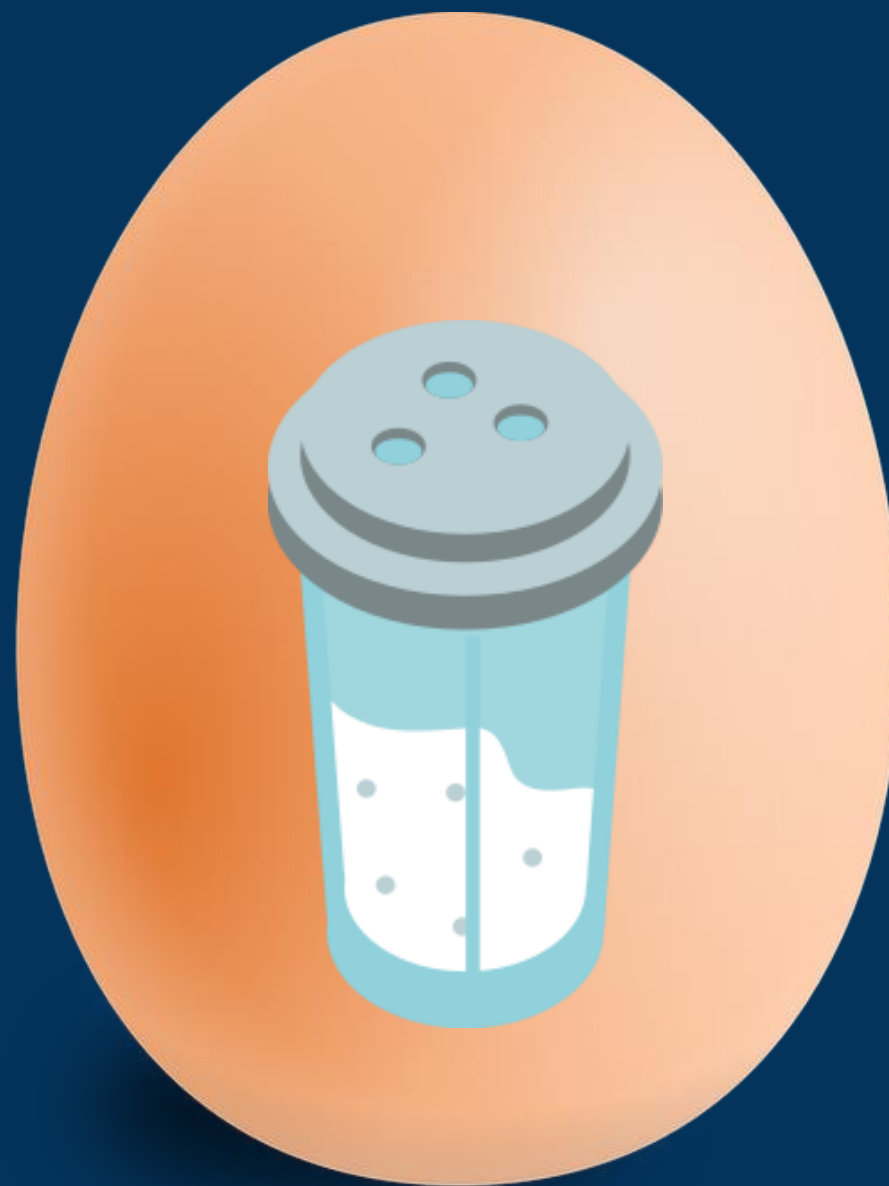
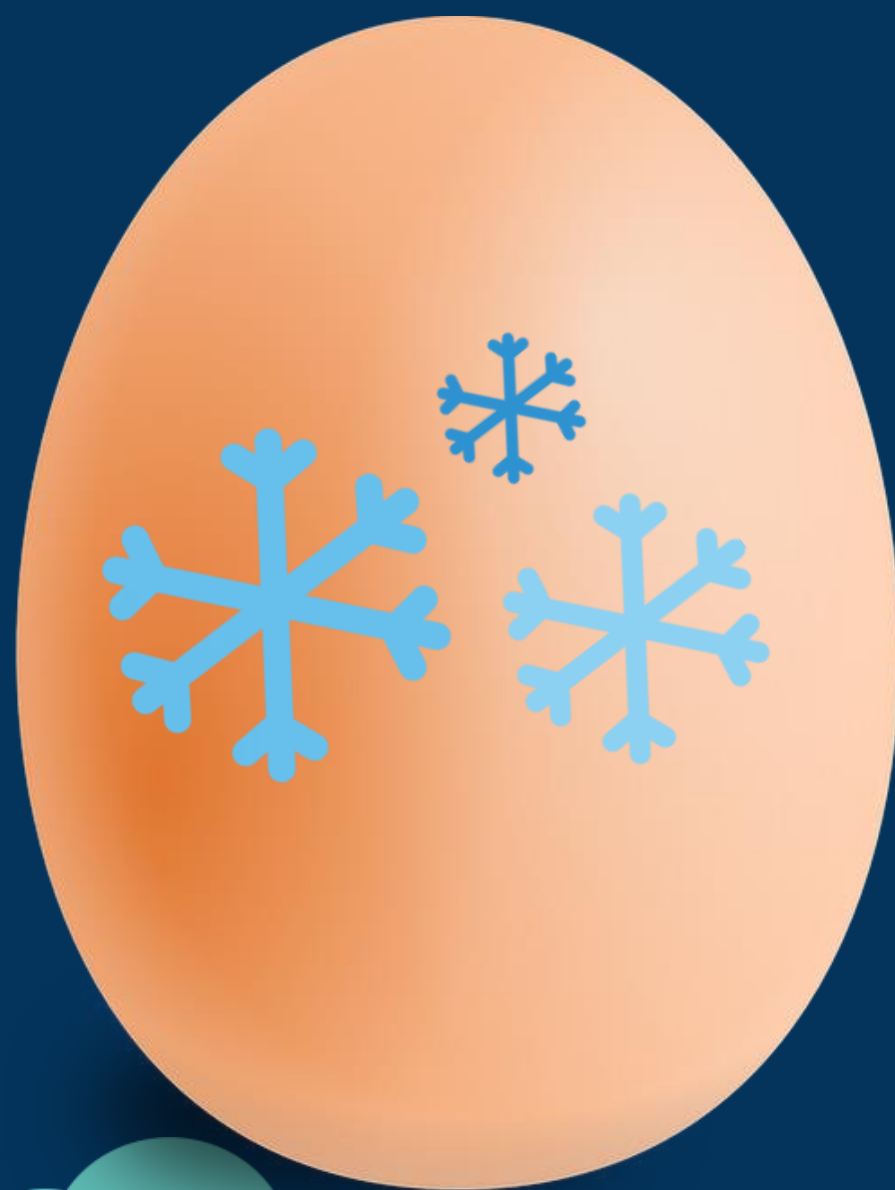
Egg Membrane Experiment

Click button below to link to video:

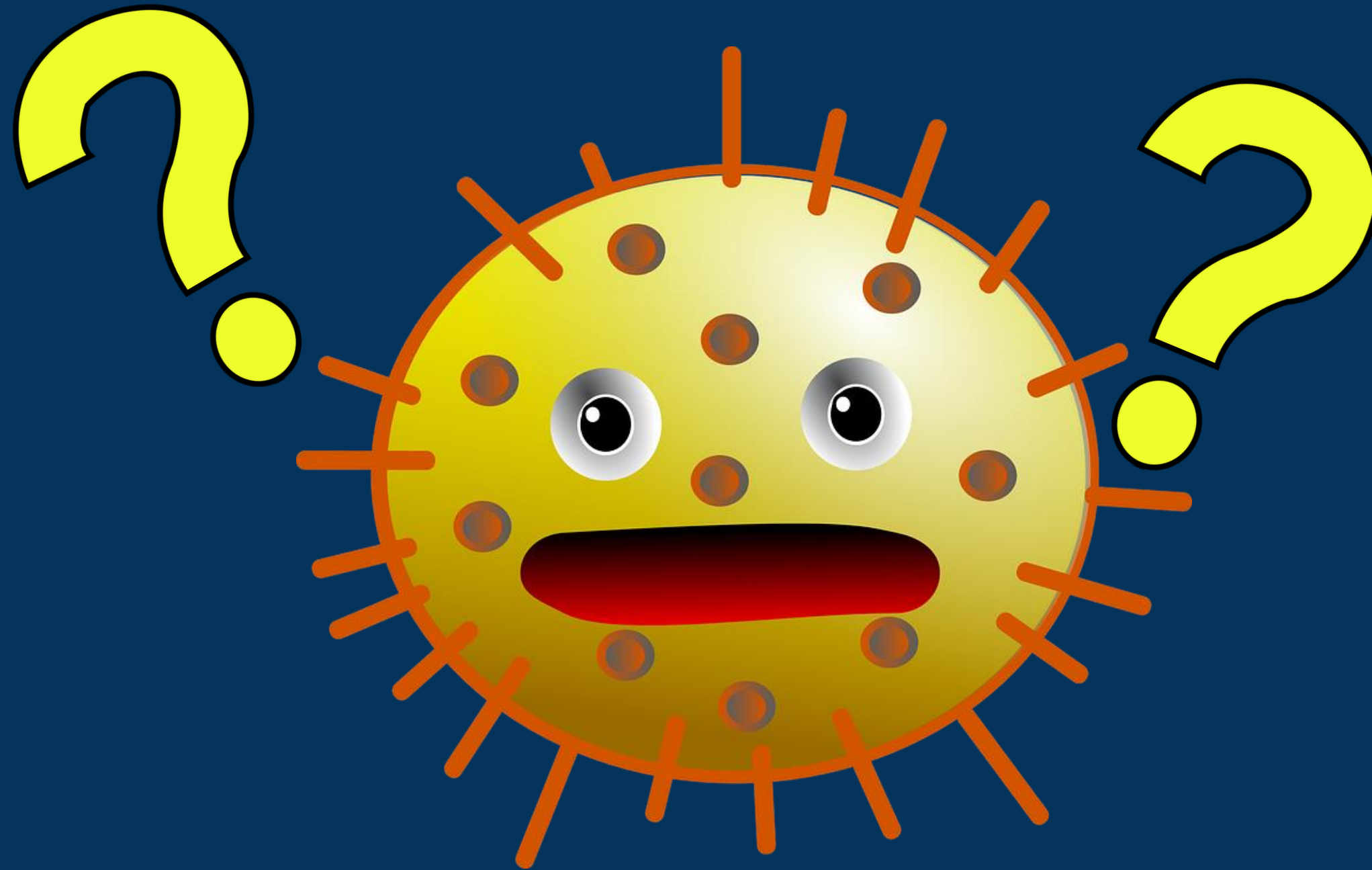


What happened? Why?

Discuss in groups

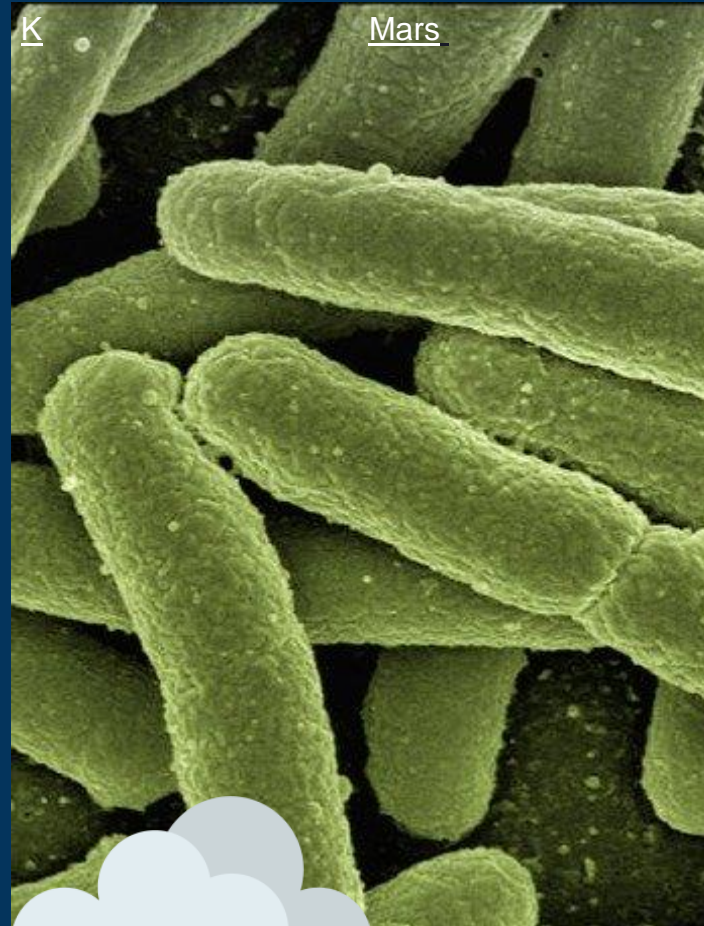


How do you think this might affect habitability?



Recap

Answer these questions
from what you have
learned today:



1

What can cells do
to adjust to an
extreme
environment?



2

Why is a cell
membrane
important?



3

How could the
extreme
conditions on
Mars affect cells?