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?

- Nucleus
- Cytoplasm
- Cell Membrane
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?