

How Might Life Evolve on Other Worlds? Grades 5 - 6

Mission 1. Your SETI Academy Medical File
Introduction only

Mission 2. Using a Microscope
NSES Grades 5- 8 Inquiry: Use appropriate tools and techniques to analyze and interpret data

Mission 3. Ancient Life Forms
NSES Grades 5- 8 Life Science: All organisms are composed of cells – the fundamental unit of life. Most organisms are single cells, other organisms, including humans, are multicellular.

Mission 4. Who Changed Earth's Atmosphere
NSES Grades 5- 8 Earth and Space Science: Living organisms have played many roles in the Earth system, including affecting the composition of the atmosphere, producing some types of rocks, and contributing to the weathering of rocks.

Mission 5. Fossils! Layers of Ancient Life Buried in the Earth
NSES Grades 5- 8 Earth and Space Science: Fossils provide important evidence of how life and environmental conditions have changed.

Mission 6. Natural Selection Who Will Survive?
AAAS BSL Grades 6 – 8 Evolution of Life: Individual organisms with certain traits are more likely than others to survive and have offspring. Changes in environmental conditions can affect the survival of individual organisms and entire species.

Mission 7. A Timeline for the Evolution of Life
NSES Grades 5- 8 Life Science: Biological evolution accounts for the diversity of species developed throughout gradual processes over many generations. Species acquire many of their unique characteristics through biological adaptation, which involves the selection of naturally occurring variations in populations

Mission 8. Tracing Family Trees
AAAS BSL Grades 6 -8 Diversity of Life: Similarities among organisms are found in internal anatomical features, which can be used to infer the degree of relatedness among organisms. In classifying organisms, biologists consider details of internal and external structure to be more important than behavior or general appearance.

Mission 9. What Organism Do You See?
NSES Grades 5- 8 Life Science: Millions of animals, plants and microorganisms are alive today. Although different species might look dissimilar, the unity among

organisms becomes apparent from an analysis of internal structure, the similarity of their chemical processes, and the evidence of common ancestry.

Mission 10. Inventing Life Forms

NSES Grades 5- 8 Inquiry: Think critically and logically to make the relationship between evidence and explanations.

Mission 11. Creating Your Extraterrestrial's Family Tree

NSES Grades 5- 8 Life Science: Biological evolution accounts for the diversity of species developed throughout gradual processes over any generations. Species acquire many of their unique characteristics through biological adaptation, which involves the selection of naturally occurring variations in populations

Mission 12. Mission Complete?

NSES Grades 5- 8 Inquiry: Think critically and logically to make the relationship between evidence and explanations.