

**6th Grade Life Science  
Classification  
Implementation Guide**

**Grade Level Expectation**

**Systems**

1.1.6 Understand how to classify organisms by their external and internal structures.  
1.2.6 Understand that specialized cells within multicellular organisms form different kinds of tissues, organs, and organ systems to carry out life functions.  
1.2.7 Understand that organisms pass on genetic information in their life cycle and that an organism's characteristics are determined by both genetic and environmental influences.  
1.3.9 Understand how the theory of biological evolution accounts for species diversity, adaptation, natural selection, extinction, and change in species over time.

**Inquiry**

2.1.1 Understand how to generate a question that can be answered through investigation  
2.1.2 Understand how to plan and conduct scientific investigations  
2.2.1 Apply curiosity, honesty, skepticism, and openness when considering explanations and conducting investigations  
2.2.5 Understand that increase comprehension of systems leads to new inquiry

**Application**

3.1.1 Analyze common problems or challenges in which scientific design can be or has been used to design solutions.

**Disciplinary Understanding**

There are a variety of ways that organisms can be categorized including similarities/differences in physical characteristics, genetic characteristics, and geographic distribution. Categorizing is done in order to help understand relationships between different organisms. Using different ways of categorizing may result in different groupings of organisms.

**Essential Questions**

What things can we use to show organisms are similar and different from each other?  
What do the similarities/differences between organisms tell us?  
What makes you "you"?

**Student Performance**

Describe how organisms can be classified using similarities and differences in physical and functional characteristics (both external and internal).