

**ADW Grades 6-8  
Life Science Standards  
2017**

<b>Structure and Function of Organisms</b>	<b>Standard</b>
<b>SC.6-8.LS.1-1</b>	Investigate and observe cells in living organisms and collect evidence to support the claim that all living things are made of cells.
<b>SC.6-8.LS.1-2</b>	Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.
<b>SC.6-8.LS.1-3</b>	Construct explanations for how cells in multicellular organisms repeatedly divide to make more cells for growth and repair.
<b>SC.6-8.LS.1-4</b>	Research and describe the relationships between various cell types, tissues, and organs in human body systems.
<b>SC.6-8.LS.1-5</b>	Develop a model to describe how food molecules are produced during photosynthesis and rearranged through chemical reactions to release energy during cellular respiration.
<b>SC.6-8.LS.1-6</b>	Investigate how viruses and bacteria affect the human body.
<b>Inheritance and Variation of Traits</b>	<b>Standard</b>
<b>SC.6-8.LS.2-1</b>	Obtain, evaluate, and communicate information describing the relationship between genes, chromosomes, and inherited characteristics.
<b>SC.6-8.LS.2-2</b>	Construct explanations for how genetic information is transmitted from parent to offspring through reproduction.
<b>SC6-8.LS.2-3</b>	Create and analyze Punnett squares to calculate the probability of specific traits being passed from parents to offspring using different patterns of inheritance.
<b>SC.6-8.LS.2-4</b>	Explore and predict the evolutionary relationships between species looking at the anatomical differences among modern organisms and between modern and fossil organisms.
<b>SC.6-8.LS.2-5</b>	Gather and synthesize information about how humans alter organisms genetically through a variety of methods.
<b>Ecosystems: Interactions, Energy, and Dynamics</b>	<b>Standard</b>
<b>SC.6-8.LS.3-1</b>	Develop and use models to describe the cycling of matter and the flow of energy among living and nonliving parts of an ecosystem.
<b>SC.6-8.LS.3-2</b>	Examine traits of individuals within a species that may give them an advantage or disadvantage to survive and reproduce in stable or changing environments.
<b>SC.6-8.LS.3-3</b>	Analyze and interpret data from observations to compare characteristics of organisms used to classify organisms into domains and kingdoms.
<b>SC.6-8.LS.3-4</b>	Develop and use models to explain how organisms interact in a competitive or mutually beneficial relationship for food, shelter, or space.
<b>SC.6-8.LS.3-5</b>	Analyze and interpret data to predict how changes in the number of organisms of one species or the introduction of a new species in an environment impact the balance of an ecosystem.