# **High School AP Biology Essential Skills and Concepts**



## I Can...

# **High School Life Sciences From Molecules to Organisms: Structures and Processes**

- model how cell division, interacting systems, and feedback mechanisms produce and maintain functions necessary for life.
- explain that DNA contains genes that regulate the structure and function differently in organisms.
- describe and create models to explain how energy is transformed within ecosystems and living things.

## High School Life Sciences Ecosystems: Interactions, Energy, and Dynamics

- use and analyze math to describe how ecosystems function and evaluate solutions to reduce human impact on the environment.
- describe and create models to explain how energy is transformed within ecosystems and living things.

### High School Life Sciences Heredity: Inheritance and Variation of Traits

- explain that DNA contains genes that regulate the structure and function differently in organisms.
- use probability to explain the causes of genetic variation among organisms.

#### High School Life Sciences Biological Evolution: Unity and Diversity

• use and analyze math to describe how ecosystems function and evaluate solutions to reduce human impact on the environment.