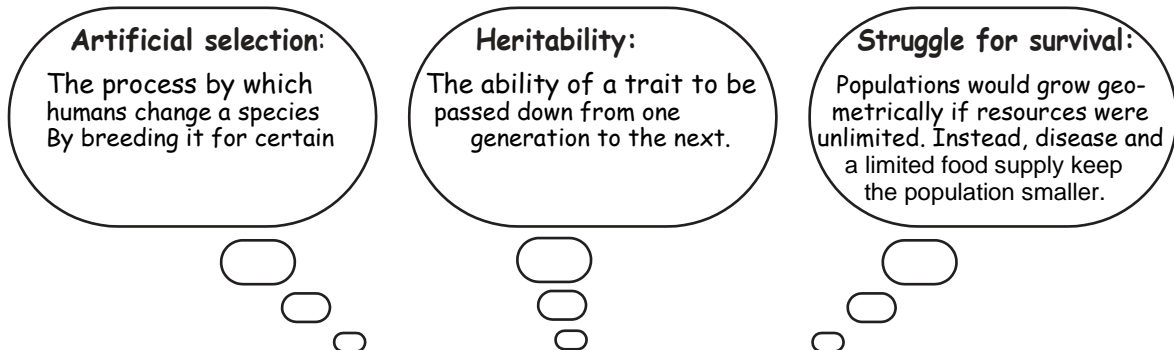


SECTION  
10.3

THEORY OF NATURAL SELECTION  
**Power Notes**



Key insights led to Darwin's theory.

Natural Selection Explains How Evolution Can Occur.

**Natural Selection is:**  
A mechanism by which individuals that have inherited beneficial adaptations produce more offspring on average than do other individuals.

The 4 main principles of natural selection are:

**Variation:**  
The heritable differences that exist in every population are the basis for natural selection.

**Overproduction:**  
Having many offspring increases the chance of survival but also results in competition for resources.

**Adaptation:**  
A certain variation that allows an individual to survive better than other individuals it competes against.

**Descent with Modification:**  
Heritability of adaptations. More individuals will have the trait in every following generation, as long as the environmental conditions remain beneficial for the trait.