

CONCEPT CARDS

Fitness	Genes	Genetic Variation
Mutation	Natural Selection	Artificial Selection
Population	Selection Pressure	Trait

<p>The ability of an individual to survive and reproduce viable offspring in its specific environment</p>	<p>Genes are coded DNA instructions that control the production of proteins within the cell.</p>	<p>Differences in the alleles of genes between individuals in a population</p>
<p>Mutations are any changes in the genetic material of an organism.</p>	<p>Process by which individuals who are better suited to their environment survive and reproduce most successfully</p>	<p>Selection by humans for breeding of useful traits from the natural variations of an organism</p>
<p>A group of individuals of the same species that live in the same area; the bacteria in the petri dish make up a population</p>	<p>Any element in a population's environment that makes certain traits more beneficial than others</p>	<p>A specific characteristic that varies from one individual to another; antibiotic resistance and slow reproduction speed are traits different bacteria may hold</p>

Antibiotic	Strain	DNA
Antibiotic Resistance	Adaptation	

<p>Antibiotics are chemical compounds that block the growth and reproduction of bacteria.</p>	<p>A variation in a particular species that possesses minor differences but still remains distinguishable</p>	<p>The molecule that carries the genetic instructions used in the development and function of all known living creatures</p>
<p>A trait developed through mutation that allows bacteria to resist the effects of medication used to treat them</p>	<p>A trait that improves the fitness and survival of a species within its environment</p>	