Artificial Selection Fill-In Notes

Complete in PRESENT MODE! Click HERE for your notes presentation.

_selection_process where traits are selected for (survive) or against (die) resulting in these traits becoming __more_____ or _less_____ abundant in a species population.

__artificial_selection__: (also known as _selective breeding_) is the process by which __humans_____ breed (___select_____) certain organisms in order to produce __desiriable traits in the offspring. (_decreases genetic diversity____)

Animal Examples:

What traits were selected for these three animals?

Cow	Chicken	Horse
Legs Produce offspring	Legs Produce offspring	Legs Produce offspring

__charles_____ ___darwin_____, author of *On the Origin of Species,* was very familiar with selective breeding/artificial selection. He thought that perhaps nature could produce similar results. He called this _natural selection__.

Artificial Selection Fill-In Notes

Example: Cows

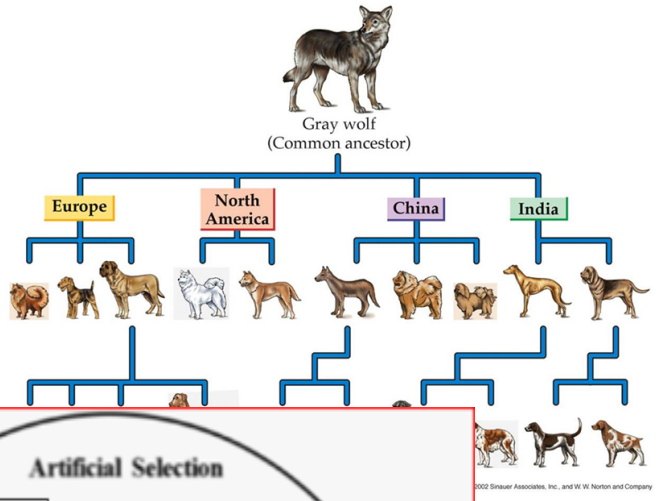
What traits were selected for these three animals?

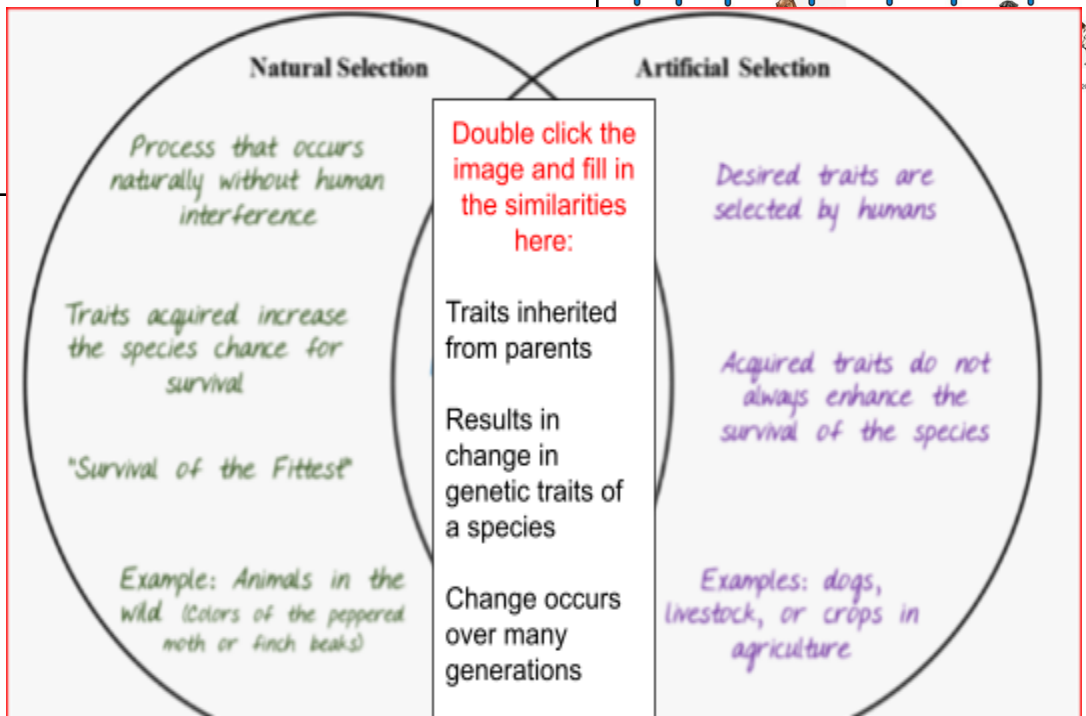
Holstein	European Oxen	Texas Longhorn
Black spots	Short horns	Long horns

Example: Dogs

Watch this VIDEO. Summarize the video below in a paragraph. (3-5 sentences)

Dogs are one species. They come from wolfs. Even though they look different they are all one species and they are also changed with artificial selection and domestication.



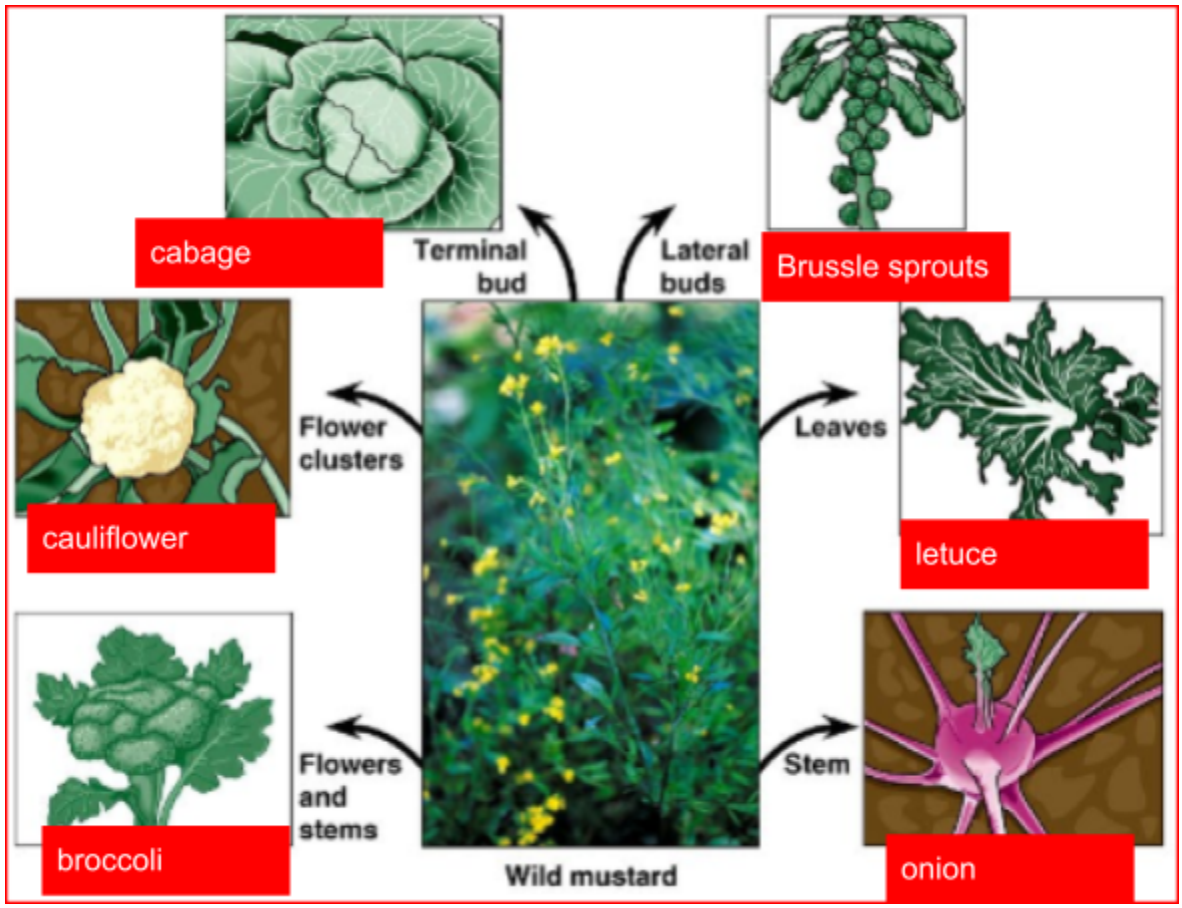


Artificial Selection Fill-In Notes

Plant Examples:

Example: Wild Mustard

What plants were selectively bred from the wild mustard plant? Double click the picture below and complete the **red** blanks.



Example: Bananas

What traits were selected for this plant?

Slight curve yellow outer layer

Example: Wheat

What traits were selected for this plant?

Long stems with fuzz at the top

Example: Corn

What traits were selected for this plant?

Yellow

Methods

Artificial Selection Fill-In Notes

_inbreeding_____: production of offspring from mating/breeding parents that are genetically closely related.

Watch this VIDEO. Summarize the video below in a paragraph. (3-5 sentences)

Selective breeding is a process where humans make 2 things reproduce a new thing. Humans have done it for a long time. We used these to make more food. This made a larger population.

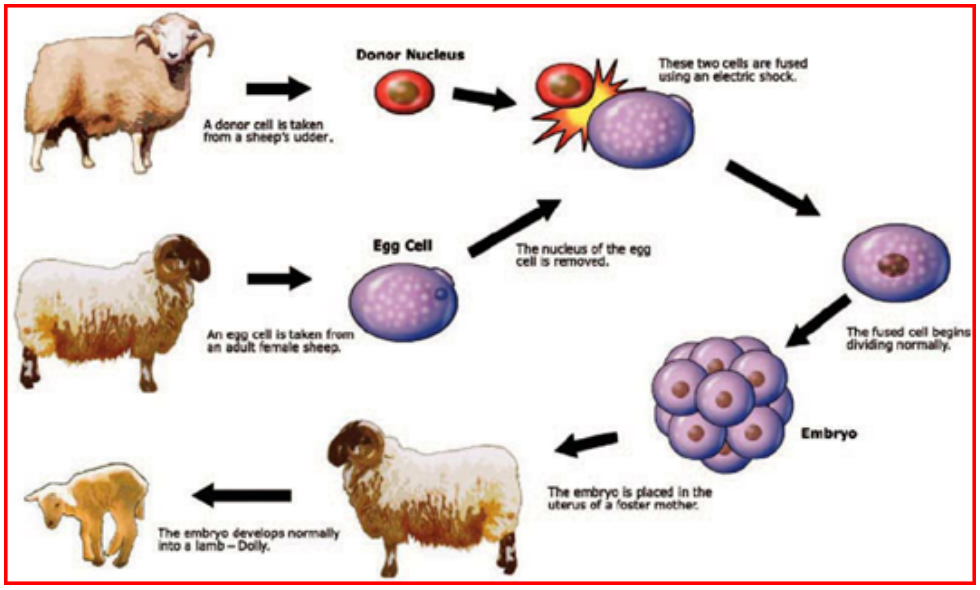
crossbreeding: production of offspring from mating/breeding parents from __mating/ breeding parents from 2 different genetic lines (called _purebreds_____) to get specific traits from one or both breeds.

___hybridization_____: hybrids are produced from the mating of _geneticaly different parents.

Examples of hybrids:

1. __liger_____
2. __mule_____
3. _dolly the sheep _____

__cloning_____: refers to the process of creating clones (copies) of organisms that have ___exactly_____ the same _genes_____ as the organisms from which they are produced.



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__line breeding_____: is a type of inbreeding where offspring are produced from mating/breeding with _closely_____ _related_____ __genetic_____ lines.

___outcrossing_____: production of offspring from parents that are _not_____ closely genetically related. (____increases genetic diversity____)

Inducing Mutations: since mutations are an ultimate source of __genetic_____ _diversity_____, sometimes breeders will induce mutations in order to ___increase_____ diversity in a population.

Watch this VIDEO. Summarize the video below in a paragraph. (3-5 sentences)

Selective breeding is evolution by human selection. It is to breed animals to have certain traits. The result of 2 animals is cross breed.

Genetic Engineering: __genes_____ from one organism are __transfered_____ into the __dna_____ of another organism. (Includes gene therapy.)

Glofish- Glow in the Dark fish have been inserted with a bioluminescent gene.