



Artificial vs natural selection

Artificial selection is also known as **selective breeding**.

It is a human process in which humans breed animals and plants for particular **characteristics**.



Example of Selective Breeding in Cattle



Brahman cattle: good resistance to heat, but poor meat



English shorthorn cattle: good beef, but poor heat resistance



When selecting to breed these 2 animals we get a Santa Gertrudis cattle

Result = good beef AND resistant to heat

Look carefully at images of mixed-breed dogs and their parents. Can you identify the characteristics they have **inherited** from their parents?

Draw a diagram to explain the dog's family tree, with notes about the characteristics they have inherited and those they have not.
CHOOSE AT LEAST TWO CROSS BREEDS.

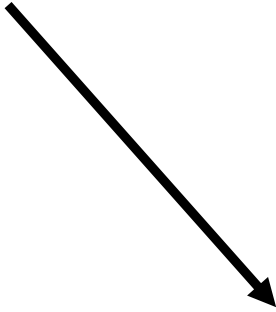
Remember, characteristics could be both **physical** and **behavioural**.

Example:

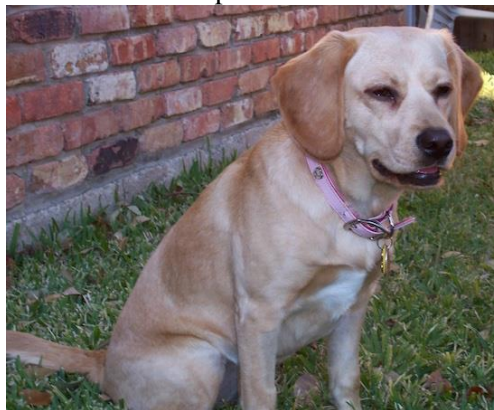
Parent dog:
Labrador



Parent dog:
Spaniel



Mixed Breed Dog
Spanador



To find out about breed characteristics:

<http://www.thekennelclub.org.uk/services/public/breed/Default.aspx>

<https://www.pets4homes.co.uk/dog-breeds/>

<https://www.dogbreedinfo.com/a-z.htm>

Further Reading:

1) What information can you find out about selective breeding in other plants and animals?

<https://www.slideshare.net/hannahreed/selective-breeding-powerpoint>

<https://sites.google.com/site/selectivebreedingofplants/>

2) Do you think creating 'artificial evolution' is the right thing to do?

<https://biologyselectivebreeding.weebly.com/benefits-and-risks.html>