

Final Outcome: We are working towards writing a balanced argument on the pros and cons of selective breeding. Children should draw on their knowledge of evolution and inherited traits.

Component 7: Writing lesson – balanced argument

What we will know after this sequence:

- Children will have a clear understanding of the benefits and disadvantages of selective breeding. They will be able to explain what these are through the writing of a balanced argument that incorporates all of their learning from this block. They will be able to use scientific language to make and support their points. They will also understand what their own opinions are on a very divisive topic.



Vocabulary:

selective breeding, artificial selection, evolutionary advantage.
SEND: to have been pre-taught key vocabulary and focus on specific adaptations of an animal/plant based on their interests to keep them engaged and to record outcome in method of their choice.

Component 6: Adaptation, Evolution and Human Intervention

What we will know after this sequence:

- Children will be able to explain how adaptations can result in both advantages and disadvantages.
- Children will understand that some living things have developed more adaptive traits than others.
- Children will be able to identify advantages and disadvantages of specific interventions.

Vocabulary:

Intervention, adaptation, advantage, disadvantage, existing, inheritable,
How will this feed into my next learning: Children will be able to demonstrate understanding of the issues raised by human intervention in the evolutionary process.

SEND: to have been pre-taught key vocabulary and focus on specific adaptations of an animal/plant based on their interests to keep them engaged and to record outcome in method of their choice.

Component 4: Evidence for Evolution

What we will know after this sequence:

- Children will be able to examine the evidence demonstrating how plants have evolved and show their understanding.
- Children will be able to examine fossil evidence and demonstrate their knowledge as to why this is so important.

Vocabulary:

Fossil, adaptive trait, inheritance, evolution, natural selection, sedimentary, lava, endo and exoskeletons
How will this feed into my next learning: Children will use this information to give one side of selective breeding in their final, written arguments.
SEND: to have hands on practical fossils to examine as well as pictorial representations/physical ones of plant adaptations

Component 5: Evidence for Evolution in Humans

What we will know after this sequence:

- Children will understand how human beings have evolved.
- Children will be able to identify adaptive traits in humans as a species.
- Children will be able to compare modern humans with members of the same genus and family and understand why they are the same genus and family.

Vocabulary:

related, offspring, adaptive traits, adaptation, ancestor, genus
How will this feed into my next learning: Children will need to understand how adaptive traits develop in humans.
SEND: to have been pre-taught key vocabulary and focus on how humans have evolved if lesson is too tricky

Component 3: Theory of Evolution

What we will know after this sequence:

Children will be able to identify the key ideas of the theory of evolution.

- Children should be able to demonstrate understanding of how ideas about evolution developed over time and remember key evolutionists and their theories.



Vocabulary: suited, evolution, survival, mutation, ancients, middle ages, species, similarities, differences, evolved

How will this feed into my next learning: Children will be able to transfer their learning of evolution into the next stage of their learning when they look for evidence of evolution and how different species have evolved over time.

SEND: to have pictorial representations of key points/events based on Theory of Evolution.

Component 2: Adaptation

What we will know after this sequence:

- Children will be able to demonstrate understanding of the scientific meaning of adaptation.
- Children will understand that adaptations are initially mutations.

Vocabulary:

Variation, environment, habitat, suited, evolution, survival, mutation

How will this feed into my next learning:

Children will look at how animals have used adaptation to evolve and maximise their own success as a species.

SEND: to have an ordering activity to support their understanding of adaptations. To have watched video on adaptation from BBC bitesize prior to lesson.

Component 1: Inheritance

We should know:

That children sometimes look the same as their parents (e.g. same eye colour). That not all siblings look alike. That there are different species of animals/ different breeds of the same animal. Some may have heard of the theory of evolution/ know that animals evolve.

What we will know after this sequence:

- Children will be able to explain the scientific concept of inheritance and give examples of things that they have inherited.
- They will be able to identify inherited characteristics that are passed on from parent to offspring and recognise which characteristics are inherited, adaptive or acquired.
- Children can explain how inherited characteristics can lead to variation, and use members of their own families to give examples.

Vocabulary:

Cells, inheritance, DNA, trait, characteristic, genes, adaptation, evolution, offspring, variation, parent

How will this feed into my next learning:

Pupils will build their initial understanding to look deeper into the aspect of adaptation within inheritance.

SEND: to have a sorting activity identifying which characteristics are inherited and which aren't. To have pre-taught the vocabulary and pictorial representations of key vocabulary.

