

How do living things adapt to their habitats?

Skills

What is a life cycle and how do animals reproduce?

To generate questions and research how animals reproduce.

Compare how animals reproduce to plants.

What are the differences in the life cycle of a mammal, amphibian, insect or bird?

To generate questions and carry out research about how classes of animals are different.

How do humans develop into old age?

To research and ask questions about how humans age.

Knowledge

Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird

Describe the life process of reproduction in some plants and animals

Describe the changes as humans develop to old age (Animals, including humans objective)

To carry out secondary research.

Year 5 Science Knowledge Organiser: How do living things adapt to their habitats?

Essential vocabulary	
Life cycle	the series of changes in the life of an organism including reproduction.
Reproduce	produce offspring by a sexual or asexual process.
Sexual reproduction (animals)	the production of new living organisms by combining genetic information from two individuals of different types (sexes).
Sperm	the male reproductive cell including the male gamete.
Fertilises	the action or process of fertilising an egg or a female animal or plant, involving the fusion of male and female gametes.
Egg	the female reproductive cell in animals and plants.
Live young	giving birth to a young who don't hatch from an egg.
Metamorphosis	(in an insect or amphibian) the process of transformation from young to an adult form.
Asexual reproduction	Asexual reproduction is a type of reproduction by which offspring arise from a single organism.

Question	Essential Knowledge
1. How do humans develop?	Humans develop inside their mothers and are dependent on their parents for many years until they are old enough to look after themselves.
2. How do mammals reproduce?	Mammals reproduce through sexual reproduction. The male sex cell (the sperm) fertilises the female sex cell.
3. Can you name types of monotremes and how are the different to other mammals?	Platypuses and Echidnas are monotremes. These mammals lay eggs rather than give birth to live young.
4. Name an amphibian and how does it reproduce?	A frog is an amphibian. They are laid in eggs and once hatched go through metamorphosis before they become an adult.
5. Name an insect and how does it reproduce?	Butterflies are insects and they reproduce by laying eggs. Like most insects they go through a metamorphosis as they develop.
6. How do birds reproduce?	Birds are hatched from eggs and are often looked after by their parents until they are able to live independently.



Bridging backwards:
Year 4 – Living things and Habitats



Bridging forwards:
Year 6 – Living things and Habitats.