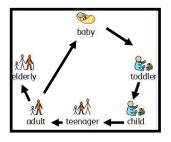
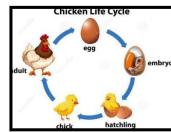
Science Knowledge Organiser Living things and their habitats Year 5 Main Foci: Biology

What will I know by the end of the unit?	
Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	 I know that some animals go through complete and incomplete metamorphosis. I can explain the life cycle of a mammal, an amphibian, an insect, and a bird. I know who Dame Jane Goodall was and can explain some of the work and research she undertook.
Describe the life process of reproduction in some plants and animals.	 I know that reproduction is one of the 7 life process. I can explain how some mammals reproduce. I can explain how some birds reproduce. I can explain how some plants reproduce.
What is reproduction?	Reproduction is when an animal or plant produces one or more individuals similar to itself:
How do plants reproduce?	Male gametes can be found in the pollen. Female gametes can be found in the ovary (they are called ovules). Pollination occurs when pollen from the anther is transferred to the stigma by bees and other insects. The pollen then travels down and meets the ovule. When this happens, seeds are formed - this is called fertilisation. Seeds are then dispersed so that germination can begin again. Some plants, such as daffodils and potatoes, can also produce offspring using asexual reproduction
What are examples of life cycles?	 The life cycles of mammals, birds, amphibians and insects have similarities and differences. One difference is that amphibians and insects go through the process of metamorphosis. This is when the structure of their bodies changes significantly as they grow (for example, from tadpole to frog or caterpillar to butterfly).

	Vocabulary
anther	the part of a stamen that produces and releases the pollen
bulb	a root shaped like an onion that grows into a flower or plant
cell	the smallest part of an animal or plant that is able to <u>function</u> independently
dispersed	scattered, separated, or spread through a large area
dissect	to carefully cut something up jp_order.to examine it scientifically
embryo	an unborn animal or human being in the very early stages of development
fertilisation	male and female gametes meet to form an embryo or seed
flower	the part of a plant which is often brightly coloured and grows at the end of a stem
flowering	trees or plants which produce flowers
function	a useful thing that something does
gamete	the name for the two types of male and female cell that join together to make a new creature
germination	if a seed germinates or if it is germinated, it starts to grow
life cycle	the series of changes that an animal or plant passes through from the beginning of its life until its death
mature	When something matures, it is fully developed
metamorphosis	a person or thing develops and changes into something completely different
ovary	a female organ which produces eggs
ovule	a small egg
petal	thin coloured or white parts which form part of the flower
plant	a living thing that grows in the earth and has a stem, leaves , and roots
pollen	a fine powder produced by flowers. It fertilises other flowers of the same species so that they produce seeds
pollination	To pollinate a plant or tree means to fertilise it with pollen . This is often done by insects
reproduction	when an animal or plant produces one or more individuals similar to itself
seed	the small, hard part from which a new plant grows
stigma	the top of the centre part of a flower which takes in pollen
structure	the way in which something is built or made





Year 5 Spring 2

What I should already know:

- Identify and name a variety of common plants and their structure.
- Identify and name a variety of common animals.
- Explore and compare the differences between things that are living, things that are dead and things that have never been alive.
- Identify common habitats and microhabitats.
- Identify and describe functions of different parts of flowering plants.
- Explore the requirements of plants for life and growth, and how water is transported.
- Life cycle of plants, including pollination, seed formation and dispersal.
- Recognise how living things can be grouped.

