

National CofE Junior School - Knowledge Organiser

Science Focus:

Living things and their habitats

Year 5

Summer 1 and 2

What? (Key Knowledge)

Life Cycles

Life Cycle	A life cycle shows how things are born, how they grow and how they reproduce.
Life Cycles of a mammal, insect, bird and an amphibian	
Life cycle of a mammal	<ul style="list-style-type: none"> • Live young born • Grow from babies to adults • Reproduce • Live young born
Life cycle of an insect	<ul style="list-style-type: none"> • Egg • Growth to adult or transformation to adult • Reproduce • Egg
Life cycle of a bird	<ul style="list-style-type: none"> • Egg • Growth to adult • Reproduce • Egg
Life cycle of an amphibian	<ul style="list-style-type: none"> • Egg in water • Growth to adult • Reproduce • Eggs in water

Reproduction

What is reproduction?	Living things creating other living things. Animals have babies. Plants have seeds which turn into new plants.
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Reproduction in plants

Sexual reproduction (Two parents)	When the Pollen from one flower joins the Egg of the new flower and a seed or many seeds are formed.
Asexual reproduction (One parent)	This is when a small part of a plant breaks off and it starts to grow until it is the same size as the plant it came from and this is repeated. (Flowers are not needed)

Examples of plant reproduction

Sexual	<ul style="list-style-type: none"> • Sunflower
Asexual	<ul style="list-style-type: none"> • The Spider Plant

Reproduction in animals

Usually sexual	Reproduction in animals is most commonly sexual involving two parents.
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Examples of animal reproduction

Sexual	<ul style="list-style-type: none"> • Lion
Asexual	<ul style="list-style-type: none"> • Starfish

Scientists we need to know about

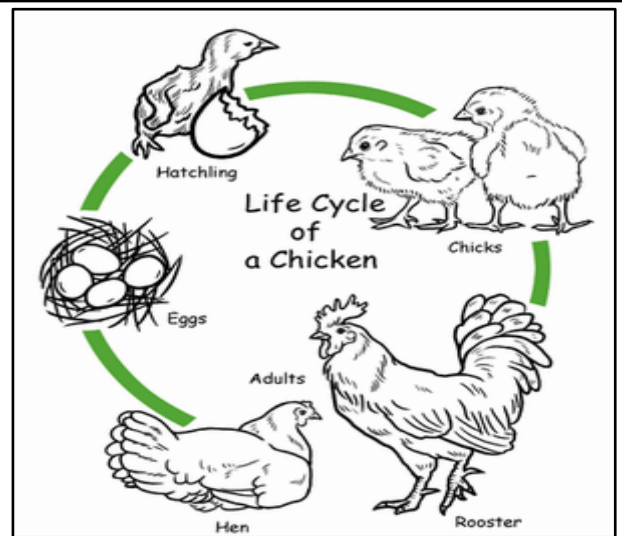
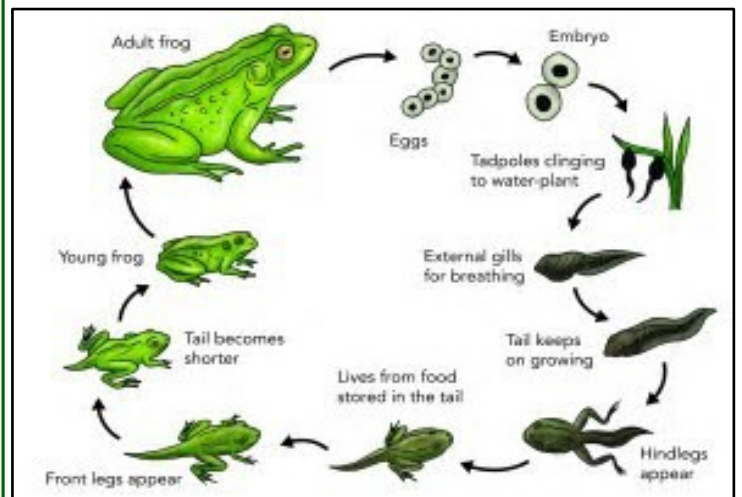
5 facts about David Attenborough	<ul style="list-style-type: none"> • Born on 8th May 1926 • British • Famous wildlife film maker • Knighted in 1985 • He is the only person to have won BAFTAs for programmes in each of black and white, colour, HD, and 3D.
5 facts about Jane Goodall	<ul style="list-style-type: none"> • Born on 3rd April 1934 • British • Considered to be the world's foremost expert on chimpanzees • Has studied chimpanzees for 45 years in Gombe Stream National Park which is located in Tanzania • Goodall is the author of a number of books that have earned her tremendous fame globally.

What? (Key Vocabulary)

Spelling	Definition/Sentence
clone	Cells which are genetically identical to the parent.
metamorphosis	(in an insect or amphibian) the process of transformation from an immature form to an adult form in two or more distinct stages
asexual	Creating offspring without fertilization from another plant.
tuber	a swollen underground stem or root of a plant from which new plants can grow, as in the potato

Diagrams and Symbols

Detailed Life Cycle of an Amphibian (Frog)



Prior Knowledge

- Identify and understand that environments can change and pose dangers.
- Identify and understand the structure and function of different plants.
- Compare and understand the differences between living and dead things.
- Be aware that living things can be grouped and classified.

