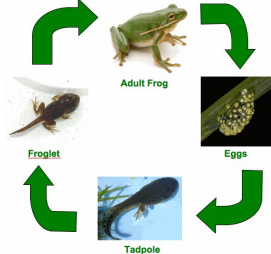
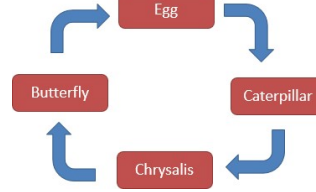
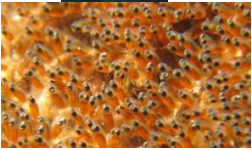
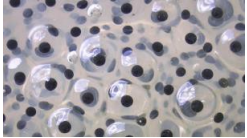


St Neot Primary School Knowledge Organiser		Year Five Science	Spring 2	Living things and their habitats
		Life cycles involving metamorphosis		Fertilisation
reproduction	the action or process of copying something.	Life Cycle of a Frog  Frogs start off life as a big mass of eggs called frogspawn. The eggs then hatch into tadpoles. The tadpoles gradually grow a set of back legs, and then a set of front legs. They lose their gills, and their tail shrinks. They can now begin to live on land. A butterfly starts its life cycle as an egg. This hatches into a caterpillar. Eventually, the caterpillar forms a chrysalis around itself. Inside the chrysalis, it changes dramatically, undergoing metamorphosis, before emerging from the chrysalis as an adult butterfly. 		https://www.bbc.co.uk/bitesize/topics/zgssgk7/articles/z9xb39q
bulb	a rounded underground storage organ present in some plants, lying dormant over winter.			Male animals produce sperm.
pollination	the transfer of pollen to a stigma, ovule, flower or plant to allow fertilisation.			These have half of the information needed to make a whole new animal.
fertilisation	the action or process of fertilising an egg (in a plant or animal) involving the fusion of male and female cells to form a whole new offspring.			Female animals produce eggs. These also have half of the information needed to make a whole new animal.
sexual reproduction	the production of new living organisms by combining information from two individuals of different sexes.			When a sperm meets an egg they join together.
asexual reproduction	a type of reproduction where the offspring obtain all of their information from just one individual (one parent).			The egg now has all the information needed to make a new baby animal.
larva	the active, immature form of an insect.			This is called fertilisation
gestation	the process of developing inside the womb between conception (fertilisation) and birth.			
metamorphosis	the process of transformation from an immature form to an adult form in two or more distinct stages (in insects and amphibians).			
sperm	cells inside the male reproductive fluid, semen, which contain one half of the information required to make a new offspring of that species.			
ovum / egg	the cell inside a female containing half of the information required to make a new offspring of that species.			
life cycle	the series of changes in the life of an organism including reproduction.			
I can:		Internal fertilisation		Fertilisation in mammals
- 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.		Chickens, like all birds, lay eggs. Inside an egg that has been fertilised, a chick will grow and eventually hatch. The eggs of female birds, mammals and most reptiles (plus some species of fish) are fertilised inside the female's body. The fertilised eggs are laid, where they are guarded in a nest or left buried under the ground to be kept safe from predators. Birds often sit on and turn the fertilised eggs to keep them warm.		https://www.bbc.co.uk/bitesize/topics/zgssgk7/articles/zwn6mnb - Life cycles. https://www.bbc.co.uk/bitesize/topics/zgssgk7/articles/z2msv4j - Human life cycle. - In mammals the fertilised egg stays inside the mother. - It develops in a special area, in a female of the species, called the womb. The baby is called an embryo while it is still very young. - The embryo is joined to the mother by a placenta, and it gets its food and oxygen through this. - The air breathed in by the mother, is passed to the baby through the placenta. - Similarly, the food eaten by the mother is absorbed in the mother's digestive system and passed to the baby through the placenta. - Once the baby is developed enough, it is ready to be born. - In most mammals, the baby is born able to stand, move and feed for themselves within hours. - However, human children have much more development to undergo before they are ready for this.
External fertilisation		 Tortoise (reptile)  Robins (bird) Fun fact: reptile eggs must not be turned; they instead must be kept in the same position in which they were laid.		
Fish and amphibians both fertilise the eggs with sperm outside of the body. The sperm fertilise the eggs. The eggs are gathered and kept as safe as possible from predators while the young animals grow inside the egg until ready to hatch fully formed.    				

Images obtained from Rising Stars Switched on Science scheme, BBC Bitesize and Google advanced image search. ** For extra information on plant reproduction, see year 3 summer 1 knowledge organiser**. Please also refer to Year 1 (animals, including humans), Year 2 (living things and their habitats) and year 3 Summer 1 (plants).

Quiz

Question 1

Reproduction is ...

- A. the series of changes in the life of an organism.
- B. the process of developing inside the womb between conception and birth.
- C. the action or process of copying something.
- D. the process of transformation from an immature form to an adult form in two or more distinct stages

Question 2

Gestation is ...

- A. the production of new living organisms by combining information from two individuals of different sexes.
- B. the process of developing inside the womb between conception (fertilisation) and birth.
- C. transfer of pollen to a stigma, ovule, flower or plant to allow fertilisation.
- D. the fusion of male and female cells to form a whole new offspring.

Question 3

Which of the following would not require pollination to reproduce?

- A. Dandelion
- B. Sunflower
- C. Honey bee
- D. Grass

Question 4

Which of the following would not have undergone metamorphosis?

- A. Lizard
- B. Frog
- C. Butterfly
- D. Wasp

Question 5

Which of the following would not have eggs fertilised internally?

- A. Elephant
- B. Human
- C. Chicken
- D. Newt

Question 6

Which of the following does not lay eggs?

- a) Reptiles
- b) Amphibians
- c) Fish
- d) Mammals