

Colney Heath School - Science

Topic: Animals including Humans
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Year: 5

Biology

What should I already know?

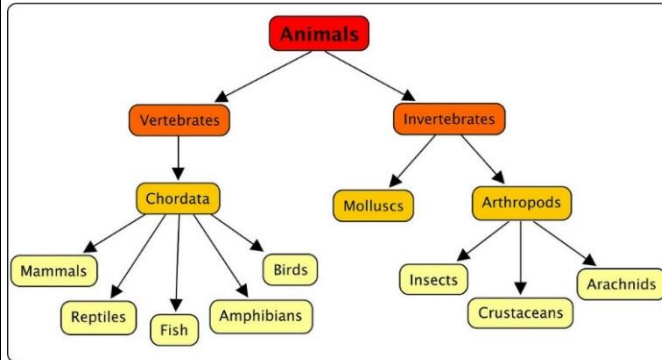
- Animals can be grouped into vertebrates (and then further into fish, reptiles, amphibians, birds and mammals).
- Some examples of life cycles (including those of plants and humans).
- Reproduction and growth are two of the seven life processes.
- How to live a healthy lifestyle.

Vocabulary

Gestation	The process or period in which babies grow inside their mother's body before they are born.
Foetus	An unborn animal or human being in the very early stages of development.
Adolescence	The period of your life in which you develop from being a child into being an adult.
Puberty	The change that happens in late childhood and adolescence where the body starts to change because of hormones.
Mature	When a child or young animal matures, it becomes an adult.
Teenager	A person aged between 13 and 19.
Hormone	Hormones are special chemicals your body makes to help it do certain things – like grow up.
Development	The gradual growth or formation of something.

Diagrams

Classification of Animals

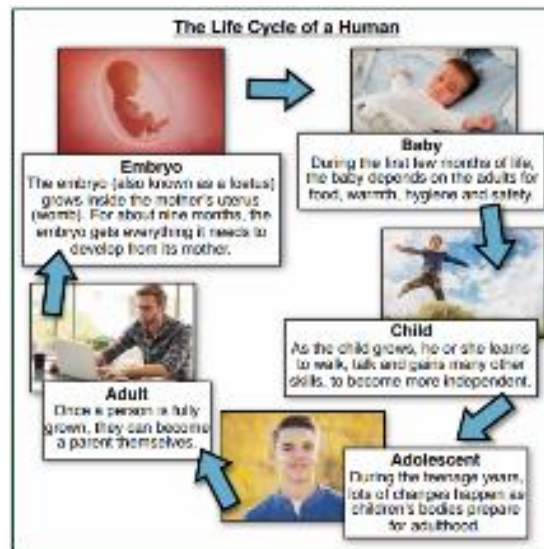


Animal Life Cycles

The life cycles of different types of animals can look very different.

While some animals (such as cats, dogs and humans) begin life looking like small versions of the adult, other animals (for example butterflies) go through distinct stages which are so different that it can be difficult to believe that they are the same animal.

The length of lifespan varies greatly from species to species. Some animals move through their life cycle very quickly! Other animals have extremely long lifespans.



Vocabulary

Mammal	A warm-blooded vertebrate animal, distinguishable by the possession of hair or fur, females secreting milk for young and typically giving birth to live young
Reproduction	The production of offspring by a sexual or asexual process
Sexual reproduction	This requires male and female parts and happens in both plants and animals. The offspring has some of the characteristics from both parents.
Offspring	A person's child or children / an animal's young.
Metamorphosis	The process of transformation from an immature form to an adult form in two or more distinct stages.
Lifespan / Life expectancy	The length of time for which something is alive.
Egg	A round object that contains a growing embryo.
Embryo	An animal that has not been born (or hatched) yet.
Hatching	When an egg breaks to allow a young animal to come out.

The Big Picture

Puberty

What is puberty?








-Puberty is when a child's body begins to grow, change and develop as they become an adult.

-In humans, puberty normally begins around age 11-12, however it can take place anytime from age 8-14. Puberty happens when the pituitary glands begin to release hormones.

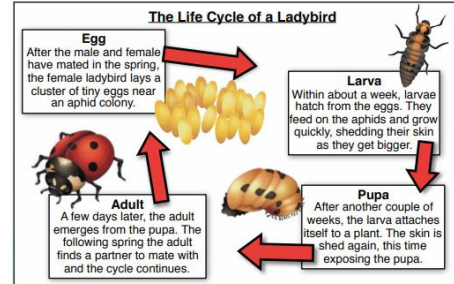
Fetal Growth From 8 to 40 Weeks



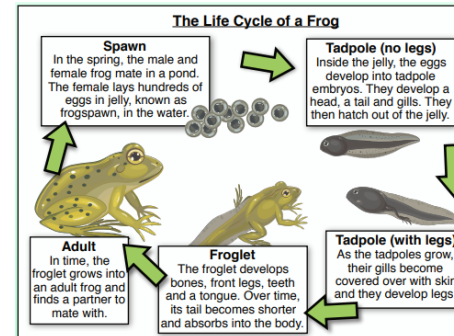
Growth and Development of Animals

Humans	House Mice	African Elephants	Saltwater Crocodiles	Blue Whales
Gestation Period: 9 months	Gestation Period: 20 days	Gestation Period: 22 months	Gestation Period: 2-3 months	Gestation Period: 10-12 months
Sexual Maturity: 11-17 years	Sexual Maturity: 4-6 weeks	Sexual Maturity: 10-12 years	Sexual Maturity: 10-12 years	Sexual Maturity: 10 years
Life Expectancy: 80 years	Life Expectancy: 1 year	Life Expectancy: 60 years	Life Expectancy: 70 years	Life Expectancy: 90 years
				

The Life Cycle of a Ladybird



The Life Cycle of a Frog



By the end of our project we will know that

The life cycle of a living thing is a series of stages of development starting with a fertilized egg in animals or a seed in many plants. In most mammals (e.g. dogs) a fertilized egg develops in the womb into an embryo and is then born and fed on milk before it is weaned onto the food that is adapted to eat; it then develops to maturity in a period called adolescence after which it can reproduce and the cycle can begin again.

Puberty is the change that happens in late childhood and adolescence where the body starts to change because of hormones. Some changes include growth in height, more sweat and hair growth on arms, legs and under the armpits

Biology

B1: Living things are special collections of matter that make copies of themselves, use energy and grow.

B2: Living things on Earth come in a huge variety of different forms that are all related because they all came from the same starting point 4.5 billion years ago.

B3: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.

Human Ageing Timeline

