



Science

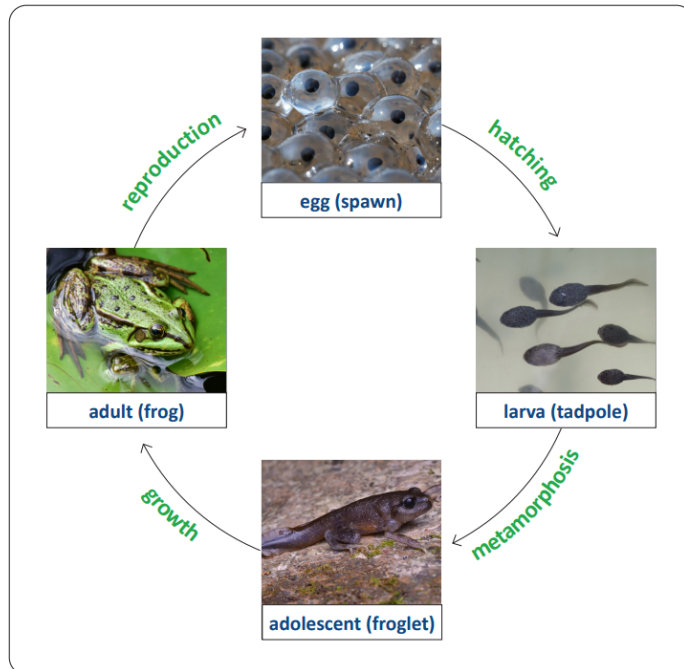
Human Reproduction & Ageing - Lent 2

Human Reproduction and Ageing

Reproduction is the process of producing offspring, which is vital for the survival of all plant and animal species. All living things go through a series of changes during their life cycle, where they grow, mature, reproduce and age. As living things age, they gradually decline and then die

Life cycles

A life cycle is a series of changes that happen to a living thing during its lifespan. The events happen in a set order as the animal or plant grows and develops. A life cycle is presented on a circular diagram to show the main developmental stages of a plant or animal's life and the processes between these stages. All living things eventually die, but reproduction starts the life cycle again.



Life cycle of the common frog.

Mammals

Mammals are a group of vertebrate animals, which means they have a backbone. Mammals have several characteristics that make them different from other vertebrates. These include: producing milk to feed their young, being warm blooded, giving birth to live young, having fur or hair and breathing air with lungs



brown bear



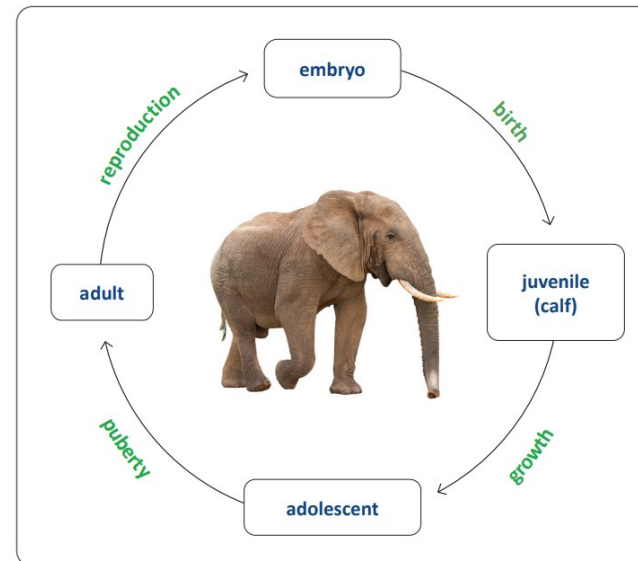
Bengal tiger



human

Mammalian life cycle

There are four stages and four processes in the mammalian life cycle.



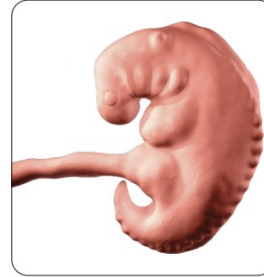
The length of each stage varies for different animals. For example, the European hamster has a 2–3 week juvenile stage, but the same stage is 10 years for an African elephant.

Human life cycle

The human life cycle has the same stages and processes as other mammalian life cycles.

Embryo

The embryo stage takes around 40 weeks. This is called the gestation period.



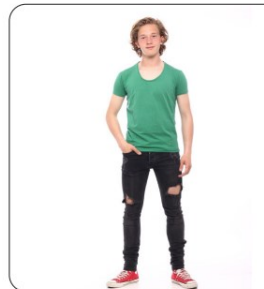
Juvenile

During the juvenile stage, the child grows and develops rapidly until around 12 years old.



Adolescent

The adolescent stage ends at around 19 years old. The process of puberty enables an adolescent to develop into an adult and be able to reproduce.



Adult

A person is a fully developed adult at around 20 years old and may choose to reproduce, which starts a new human life cycle.



Glossary

Life cycle

The series of changes in the life of an organism including reproduction.

Reproduce

Produce offspring by a sexual or asexual process.

Mammals

A warm-blooded vertebrate animal of a class that is distinguished by the possession of hair or fur, females that secrete milk for the nourishment of the young, and (typically) the birth of live young.

Vertebrates

An animal of a large group distinguished by the possession of a backbone or spinal column, including mammals, birds, reptiles, amphibians, and fish.

Invertebrates

An animal lacking a backbone, such as an arthropod or mollusc.

Adult

A person who is fully grown or developed.

Embryo

An unborn or unhatched offspring in the process of development

Adolescent

The adolescent stage ends at around 19 years old. The process of puberty enables an adolescent to develop into an adult and be able to reproduce