

Science Knowledge Organiser

Southwold Primary School



Topic: Animals including Humans

Year: 5

Strand: Biology

What should I already know?

- Adult animals have offspring which grow up into adult and have offspring themselves. This is called a lifecycle.

What will I know at the end of the unit?

- How the human body changes over time when growing older.
- The human body changes due to hormones during puberty and becomes capable of **reproduction**
- Older people lose their ability to do certain things because their body changes. Repair processes are not as good and hormonal changes take place.

Gestation

Gestation is the period it takes for a baby to develop. Human babies take around 40 weeks to develop.

Stages of Fetal Development



Other animals might have shorter or longer gestation periods.

Humans (main stages of a lifecycle)

- Embryo
- Foetus
- Baby
- Child
- Adolescent
- Young adult
- Middle aged adult
- Old age

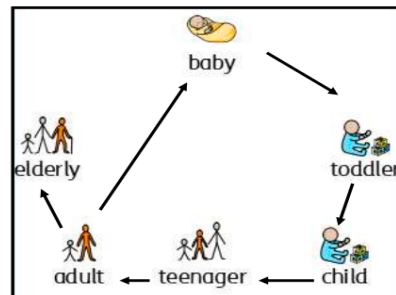
It takes a **foetus** (unborn baby) about 40 weeks to develop inside the womb. During that time the fertilised egg becomes an **embryo**, and then a foetus.

When a **baby** is born, it is completely helpless. It grows steadily and becomes a more independent **child**.

The child then experiences **puberty**, where they become an **adolescent** who is capable of **reproducing** themselves.

As adults gets older, and enter middle age, they become noticeably weaker.

At the end of middle age, females are no longer able to reproduce. The last stage of a human's life is old age, when they might increasingly dependent on support from others.



Vocabulary

embryo	The unborn, or unhatched offspring in its first stage of its development.
foetus	The unborn, or unhatched offspring in its later stage of its development.
gestation	The period it takes for a baby to develop in the womb. For humans this is 40 weeks.
hormones	Chemicals released in animals, transported through the blood stream which play an important role in different processes like puberty and reproduction.
lifecycle	The life process of being born, growing up, reproduction and death. The offspring, or babies, start a new cycle.
puberty	The period during which a child changes into a Adolescent. The body undergoes changes due to hormones.
reproduction	To have offspring, or babies.
womb	The organ inside (most) female mammals where the baby develops until birth.

Puberty

- 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, hair growth on arms and legs, under the armpits and on genitals, and growth in parts of the body such as male genitals and breasts.
- Females begin to menstruate

SCARF LINK

Parts of this Science Unit is taught through the SCARF Program.