

Year 5 Science: Animals including humans

What I should already know:

That animals, including humans have offspring which grow into adults.

The basic human needs of animals, including humans for survival.

The importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

The simple functions of the basic parts of the digestive system in humans, including the different types of teeth.

At the end of this topic, I will know:

The changes as humans develop to old age and be able to describe these.

The changes humans experience during puberty.

The human gestation period and compare this with other animals.

Key Facts:

The human life cycle has six main stages:

Every human goes through the same life stages in the same order.



Stage	Details
Pregnancy	All humans start life as a foetus inside the mother's womb where they grow bigger, develop organs and prepare for birth. The foetus grows from a fertilised egg cell.
Baby / Infancy (0-1 year)	Grow quickly; learn to sit, crawl, babble; depend on adults for survival including food, warmth and comfort. You are called new-born in the first few months and then an infant up to 1 years old.
Early Childhood (2-5)	Learn to walk, talk, play; develop social skills and independence.
Childhood (5-11)	Learn reading, writing, hobbies; gain confidence; form friendships.
Adolescence / Puberty (10-16 years old)	An adolescent is the phase where a child transitions to an adult. During this time, teenagers go through puberty which are a set of changes the body goes through to prepare humans for reproduction. Key changes that happen to females during puberty include the start of periods, growth of underarm and pubic hair, growth of breasts, spots and hips widen. Key changes that happen to males during puberty include growth of body hair, growth of the penis and testicles, shoulders broaden, spots and deepening of the voice. Teenagers also experience big emotional changes and may have mood swings. After puberty, humans can reproduce.
Adulthood (From 18 years old onwards)	Adulthood is the longest stage of life. Adults are fully grown and physically at their peak. They are independent and take on responsibilities like careers, managing money, starting families and looking after a home.
Old Age (From approximately 65 years old)	The final stage of life. During this stage, many adults retire and enjoy time with family and hobbies. Older adults may slow down physically but their wisdom and experience increases. Physical changes include: muscles weaken; hair may turn grey; skin loses elasticity resulting in wrinkles; height may decrease; eyesight and hearing decline;

Humans are mammals because they are warm-blooded, give birth to live young and feed their offspring on milk. Gestation is the period that a foetus develops in its mother's womb. Mammals have different gestation periods. The gestation period of a human is approximately nine months.

Mammal	Gestation Period	Notes
Mouse	20 days	Short, babies small and undeveloped
Cat	65 days	Babies born small, need care
Dog	63 days	Similar to cats
Sheep	5 months	Babies born able to move soon
Cow	9 months	Newborn calves can stand and walk quickly
Human	9 months	Babies born less developed; need care
Horse	11 months	Foals can stand and walk soon
Elephant	22 months	Babies born large and quite developed

Vocabulary

life cycle	The stages of growth and change in a living thing.
womb	The organ in mammals in which a baby develops. Also known as a uterus.
foetus	An unborn baby growing inside the mother's womb
gestation	The length of time a foetus grows in the mother's womb.
offspring	The young of a living animal.
reproduce	To produce offspring
baby	The general term for a very young child.
infancy	A baby from birth to 1 years old.
toddler	A young child who is between 1 and 3 years old.
childhood	A young human below the age of puberty.
adolescent	The stage between childhood and adulthood, from around age 11 to 17.
puberty	The process when children's bodies change into an adult body, preparing humans for reproduction during the adolescent stage.
hormone	A chemical released by the body that causes physical and emotional changes during puberty.
menstruation	Normal bleeding from the woman's vagina that is part of a female's monthly cycle. Also known as having a period.
adult	A fully grown person from 18 onwards. The longest stage of life.
old age	The later stage of life when the body changes again. You are classed as an elderly adult from 65+
development	Changes in growth, skills, emotions and thinking.
independent	able to do things by yourself.
stereotype	An idea that is not always true about a group of people.
immune system	Protects the body from illness.
milestone	A significant event in a person's life.