

# Year 5: Animals, including Humans

## Reproduction in Animals and Humans:

**Gestation is the first stage in the human life cycle:**

Animals reproduce sexually, meaning that two people (male and female) are required to create new life.

Sperm from a male and an egg from a female is required for a new life to occur.

Mammals, including humans, give birth to live young.

The time period between conception and birth is known as gestation.

Different animals have different gestation periods.

This can range from a few weeks to almost 2 years (squirrels 44 days, pigs 112 days, humans 280 days & giraffes 425 days)

| Animal Gestation Periods                                                          |             |            |
|-----------------------------------------------------------------------------------|-------------|------------|
| Animal                                                                            |             | Gestation  |
|  | HAMSTERS    | 15-17 days |
|  | RATS        | 21 days    |
|  | RABBITS     | 31 days    |
|  | KANGAROOS   | 32-39 days |
|  | SQUIRRELS   | 44 days    |
|  | DOGS        | 60-63 days |
|  | CATS        | 60-63 days |
|  | SHEEP/GOATS | 151 days   |
|  | PIGS        | 115 days   |
|  | COWS        | 280 days   |
|  | HORSES      | 336 days   |
|  | ELEPHANTS   | 624 days   |

**Child growth from pre-birth to puberty:**

All people start off as a foetus in their mother's uterus.

A foetus grows in the womb, where it gets nutrition through a tube called the umbilical cord.

When a woman has a foetus growing inside her, we say she is pregnant

After around 9 months, the mother gives birth. From birth to around 2 years old, we say the child is a baby.

Babies are dependent on adults, and need to be fed (with milk at first, then later with food from around 6 months old.

After the age of 3, children become more independent than babies, and they continue to become more independent as they get older; they begin to eat food that is given to them and dress themselves.

Children develop into adolescence from approximately age 10 to age 19. During adolescence, children will undergo puberty.

**Children change through puberty:**

Puberty is the stage of development between childhood and adulthood.

Physical growth occurs so that the body changes to that of an adult.

These changes allow people to reproduce.

At this stage of development, hormones promote growth in height and growth of hair.

In boys, the larynx grows to form an 'Adam's apple' and the voice becomes deeper; sweat glands produce more sweat; hair grows under the armpits and pubic hair starts to grow; the scrotum, testes and penis develop; the body becomes taller and muscles develop.

In girls, the larynx grows; sweat glands produce more sweat; hair grows under the armpits and pubic hair starts to grow; breasts begin to develop; menstruation begins; the body becomes taller as all parts grow.

**Our bodies change as we develop into adulthood and old age:**

In adulthood, the body reaches its peak strength between the ages of 18 and 39.

People often choose to reproduce during their adult years.

As we get older, the cells of our bodies are not as efficient at replacing themselves and this leads to aging.

As we get older, our muscles can become smaller and our bones and joints more easily damaged, making physical activity harder.

As we age, our hair often turns grey, our eyesight may become worse, our memory may decline and various other parts of the body decline in their ability to perform as they once did.

Aging is a process that takes time and changes differ from person to person.

We can stay healthy in our old age by adopting a healthy diet and maintaining a good level of exercise.

Old age is the final stage of development for humans.

## KEY VOCABULARY:



**ADOLESCENCE:** the stage between childhood and adulthood



**ADULT:** the fully grown form of a species



**CONCEPTION:** the point at which an egg is fertilised



**EGG:** oval or round object laid by a female bird, fish, reptile or invertebrate



**FOETUS:** an unborn offspring of a mammal



**GESTATION:** the process or time when prenatal development takes place before birth



**MENSTRUATION:** the monthly discharge of blood from non-pregnant women after puberty



**PREGNANT:** having a child or young develop in the foetus



**PUBERTY:** the physical stage of development between childhood and adulthood



**REPRODUCTION:** a process where two parents - one male and one female - are required to produce new life



**SPERM:** the male reproductive cell



**UTERUS:** the hollow, pear shaped organ in a woman's pelvis



**WOMB:** also known as a uterus - where the foetus develops and grows