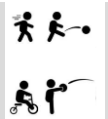
Year 5, Animals including Humans.
How do humans develop as they move through their lifecycle?

Key Vocabulary		
adolescence/ adolescent		The stage where a human develops from a child into an adult.
adulthood		The stage where a human is fully grown or developed.
development		Gradual growth or change
fine motor skills		Controlling movements in areas such as hands, fingers, mouth and eyes.
foetus		Human offspring in stage of development before birth.
gestation		The period of development inside the womb between conception and birth.
gross motor skills		Skills that require whole body movement and the large core muscles.
independence		Living without the support of others.
milestones		An important step in a baby or child's development.
placenta		Temporary organ that provides foetus with nutrients & oxygen from mother.
puberty		Time when adolescents reach the point where they can reproduce.
sexual reproduction		Male and female gametes fuse to produce an offspring.
umbilical cord		Cord attaching the foetus to the placenta during gestation.

Key Knowledge:

The human lifecycle is the process of changing and developing from birth through to old age.

There are seven main stages of the human life cycle – with each stage having its own characteristics.

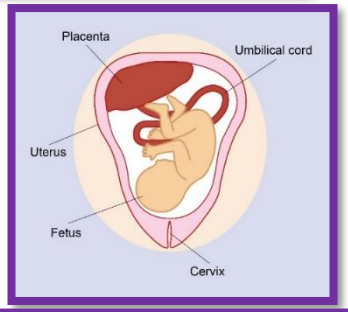
Some of the significant changes include: physical changes, levels of independence and brain development.

Humans reproduce sexually. The male gamete (sperm) fuses with the female gamete (egg) to produce a similar but not identical offspring.

Humans are placental mammals so the foetus spends 40 weeks in the womb developing rapidly.

Baby and toddlerhood is also a time of very rapid change supported by significant brain development (at age 5, a child's brain is already 90% of its adult size).

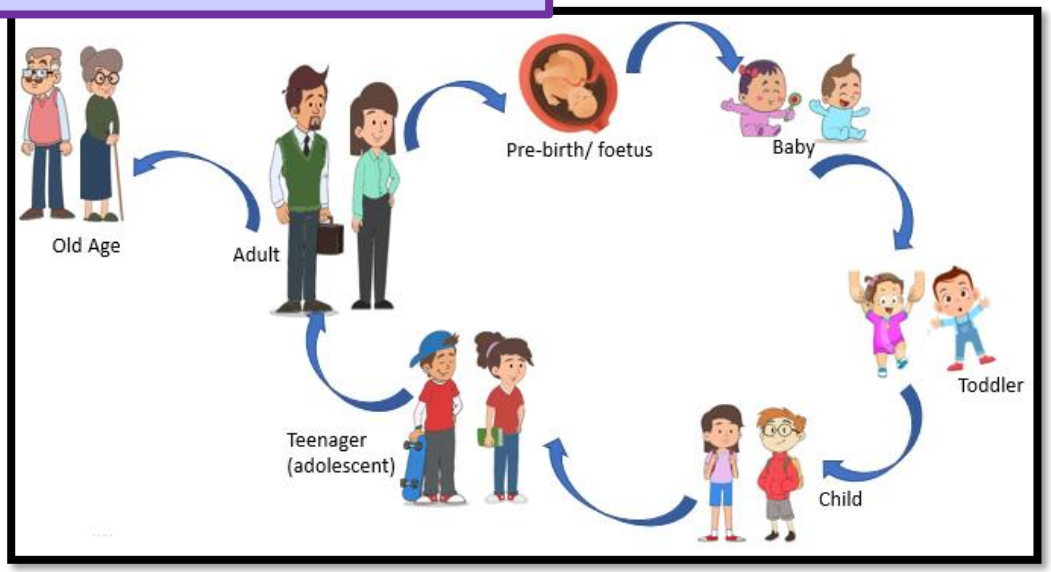
Young children reach milestones in their development – different children will reach them at different times but the milestones will always be achieved in the same order.



The foetus develops in the mother's womb.

By **week** 4, the foetus has a heartbeat.
By **week 8**, the brain is well formed.
By **week 12**, fingers and toes are fully formed.
By **week 16**, the foetus will suck its thumb, yawn and stretch.
By **week 20**, muscles are developing and being exercised.
By **week 24**, the foetus can open its eyes.
By **week 28**, hearing is fully developed.
By **week 32**, the lungs are really the only organs that still need to develop.
By **week 36**, the foetus can respond to sounds, light and touch.
By **week 40**, the foetus is ready to live outside of its mother's womb.

The 7 Stages of the Human Lifecycle:

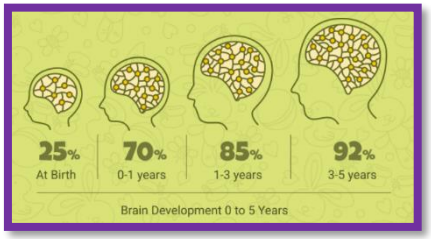


Stage:	Significant Milestones:
Baby:	Humans quickly gain control of their muscles allowing them to move with more independence. They no longer rely on milk as their only food source.
Toddler	Humans start to speak and use an increasing number of words (up to 1,000 at the end of the stage).
Child	Humans – now able to walk, run, climb and talk – start to become more independent from their parents or carers. The brain is developing quickly, allowing them to master new skills such as reading, speaking in full sentences, riding a bike, playing a variety of games.
Adolescent	The human body now changes rapidly in shape and appearance as it prepares to reproduce.
Adult	Fully independent, humans may now choose to reproduce.
Old Age:	At this point, the body takes longer to repair itself & the signs of aging become more obvious: hair turns grey, bones weaken, skin wrinkles and joints are stiffer.

Baby/ Toddler Development:

By **one year of age**, humans can hold and move objects from one place to another. Most will be walking independently and understand the names of everyday objects.

By **two years of age**, they will be able to draw a straight line as well as running and jumping with confidence. They will understand and say simple phrases.



Gross motor skills develop:

Working Scientifically:

What patterns are there in the growth rate of boys and girls as they become adults?