

Year 5 – Term 6

**Has the time come to trust machines more than humans?  
SCIENCE**



**National Curriculum Links:**

Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.  
Describe the life process of reproduction in some plants and animals.  
Describe the changes as humans develop to old age.

**Essential Prior Learning:**

Group living things into insects, birds, mammals, amphibians according to their characteristics.  
Living things age and die; during the aging process, different stages of life take place and physical changes occur.  
Living things reproduce.

**Progression in Skill:**

Use and develop classification keys to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment.  
Read, spell and pronounce simple scientific vocabulary correctly.  
Plan different types of scientific enquiries (research/ secondary sources, classify, pattern seeking, modelling) to answer scientific questions.

**Long-term Memory Knowledge:**

Life cycles vary, depending on the class of the animal, for example, birds are hatched, and mammals are born; all reproduction in animals is sexual.  
Reproduction in plants can be sexual or asexual.  
Describe the life cycle of some common animals and plants, e.g. butterfly, frog.  
Name some of the changes that happen to humans during puberty: e.g. hair growth, menstruation, scrotum, testes and penis develop.  
Demonstrate how to use a classification key.

**Key Vocabulary**

<b>lifecycle</b>	a sequence of stages that a living thing or object undergoes from its beginning to its end
<b>puberty</b>	the period during which adolescents reach sexual maturity and become capable of reproduction
<b>hormones</b>	the body's "chemical messengers" that control changes during puberty.
<b>pituitary gland</b>	a tiny gland located in the brain that acts like a "master controller" regulating testosterone and oestrogen production
<b>natural environment</b>	all living and non-living things occurring naturally in a particular place
<b>class</b>	animals that all share the same physical internal and external characteristics
<b>reproduction</b>	production of offspring
<b>aquatic</b>	living or growing in water
<b>terrestrial</b>	living on or in the ground
<b>sexual reproduction</b>	form of reproduction in which genetic material from two individuals of opposite sexes mixes to create offspring

<b>pollination</b>	transfer of pollen from a male part of a plant to a female part of a plant to produce seeds
<b>gestation</b>	the time a baby (or other animal) grows inside its mother's body before it's born
<b>menstruation</b>	"having a period," is when girls and women's bodies shed the lining of the uterus (womb) through the vagina
<b>adolescent</b>	the period of life when a young person is transitioning from being a child to becoming an adult, typically between the ages of 10 and 19

**Progression in Resources:**

Branching databases & classification keys  
Age-appropriate diagrams and images  
BBC Bitesize

**Relevance**

<b>Now</b>	Every living thing goes through stages in their life cycle. Changes that happen to us are usually normal and if children have any concerns they should talk to a trusted adult.
<b>Future</b>	Knowing that living things are dependent on each other, be able to make decisions that will conserve rather than harm environments. Show respect for all ages and stages of life
<b>Aspiration</b>	Pursue a career in environmental/conservation studies/in the health service. Be able to clearly explain changes to humans to their children.