



## Year 5 Science Knowledge Organiser: (Animals Including Humans)



### Subject Specific Skills

- I can describe the changes as humans develop to old age.

### Prior Learning

- Describe the simple functions of the basic parts of the digestive system in humans
- Identify the different types of teeth in humans and their simple functions
- Construct and interpret a variety of food chains, identifying producers, predators and prey

### Key Knowledge:

- The length of time that a person is expected to live is known as their life expectancy. Average life expectancy varies considerably around the world, ranging from 30 to 90 years. When calculating average life expectancy, many pieces of information are taken into consideration, including living conditions, death rates in the local population, how much money people have and what kind of community they live in.
- Scientists believe that because of improvements in living conditions and better healthcare, the human population as a whole is living longer than ever.
- As we get older, our bodies gradually deteriorate. Our cells die and our joints and organs stop working properly. However, there are ways to slow down or fix some of this deterioration. It is possible to replace some joints with artificial ones made from metal or plastic, and some organs can be transplanted if a suitable donor is found.

### Key Vocabulary

**Adolescence** The period that follows the start of puberty, during which a child develops into an adult.

**Egg** The female sex cell in plants and animals. Egg cells are produced by the ovaries.

**Fertilisation** The joining of male and female sex cells to produce offspring.

**Oestrogen** The female sex hormone. Oestrogen causes the changes in a girl's body during puberty.

**Puberty** The period during which an adolescent's body goes through a number of changes to become an adult capable of reproduction.

**Reproduction** The process by which a species produces a new organism (offspring).

**Sperm** The male sex cell. In animals, sperm is produced by the testes.

**Testosterone** The male sex hormone. Testosterone causes the changes in a boy's body during puberty.

### Key Individual: Robert Winston



### Key Knowledge:

- Puberty is the phase in the human life cycle when a child's body develops into an adult body that is capable of reproduction. It is triggered by the release of hormones – testosterone in men and oestrogen in women. Girls show the first signs of puberty around 11 years old and boys at around 13 years old. 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.

