

Science: Animals including Humans Year 2

Definition: Animal (noun) a living organism that feeds on organic matter, typically having specialized sense organs and nervous system and able to respond rapidly to stimuli.

"wild animals adapt badly to a caged life"

Biology definition: biology is the study of life

POS:

- ♣ notice that animals, including humans, have offspring which grow into adults
- ♣ find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- ♣ describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Prior Learning:

To know that vertebrates are divided into five groups.
To identify, name, label and draw the basic parts of the human body.
To explain which part of the body is associated with each sense.
Lifecycle of chick, frog and butterfly in EYFS

Links to other science topics:

Living things and their habitats Y2 – where the animals get their food
Evolution and inheritance Y6 How living things change over time

Disciplinary concepts:

Process – what do animals need to do to survive?

Growth – how do humans grow healthily?

Common misconceptions: A flame appears to exhibit many of the life processes: • Nutrition - it uses fuel • Growth – fires become larger • Movement – flames flicker • Reproduction – flames can leap from one place to another • It produces 'waste' – ash and smoke • It needs oxygen Of course, a flame is not living as it is not made up of cells and it is not growing, reproducing, or producing waste in a biological sense. This can form the basis of a very interesting discussion.

Core Knowledge:

Animals including humans have offspring which grow into adults. In humans and some animals these offspring will be young, such as babies or kittens, that grow into adults. In other animals, such as chickens or insects, there may be eggs laid that hatch to young or other stages which then grow to adults.

All animals including humans have basic needs of feeding, drinking and breathing that must be satisfied in order to survive, but to grow into healthy adults they also need the right amounts and types of food and exercise.

Good hygiene is also important in preventing infections and illnesses.

Describe the life cycle of some animals, including humans, and their growth to adults – cicada lifecycle

Describe basic needs of humans and other animals for survival.

Explain how development and health might be affected by differing conditions and needs being met/not met.

Wider Knowledge:

Human Exercise: Ancient Greeks and Hippocrates – prior to this disease and illness was thought to be a punishment by the Gods. He related health to diet and exercise.

Galen and his study of human anatomy.

Working scientifically:

asking simple questions and recognising that they can be answered in different ways ♣ observing closely, using simple equipment ♣ performing simple tests ♣ identifying and classifying ♣ using their observations and ideas to suggest answers to questions ♣ gathering and recording data to help in answering questions

End Goals:

To know that animals including humans change as they grow older.

To know that animals including humans need food, water and air to survive.

To know it is important for humans of exercise, have varied diet and to keep clean.

CPD: Reach out CPD – everyday materials

Science Association

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