



The Mead Infant and Nursery School – Science



Year 1 Animals including humans

Key Knowledge

What is an animal?

Animals are living things. Like plants, **animals** need food and water to live. Unlike plants, which make their own food, **animals** feed themselves by eating plants or other **animals**.

Vertebrates: are animals that have a backbone.

There are 5 groups of vertebrate:

Mammals:

- Give birth to their young
 - usually have fur or hair
 - are warm blooded
 - cannot breathe underwater
- Some common mammals are:*
- pets** such as dogs, cats, hamsters
 - farm animals** such as cows, sheep, horses
 - wild animals** such as foxes, hedgehogs and lions
 - human**



Fish:

- have fins and scales
 - breathe underwater using gills
 - lay eggs in water
 - are cold-blooded
- Some common fish are salmon, cod and tuna*



Birds

- are warm-blooded
 - have wings and beaks
 - have feathers
 - lay eggs
- Some common birds are ducks, chickens, penguins and pigeons*



Reptiles

- are cold-blooded
- lay eggs
- have scales
- cannot breathe underwater
- some common reptiles are snakes and lizard



Amphibians

- are cold-blooded
- lay eggs
- live on land and water - can breathe underwater through gills
- some common amphibians are frogs and toads



Key Vocabulary

backbone	the column of small linked bones down the middle of your back
carnivores	an animal that eats meat
cold-blooded	a body temperature that changes according to the surrounding temperature
environment	all the circumstances, people, things, and events around them that influence their life
farm	an area of land used to produce crops or to breed animals and livestock
gills	the organs on the sides of fish and other water creatures through which they breathe
herbivore	an animal that only eats plants
invertebrate	a creature that does not have a spine, for example an insect, a worm, or an octopus
omnivore	person or animal eats all kinds of food, including both meat and plants
pet	a tame animal kept in a household
vertebrate	a creature which has a spine
warm-blooded	a fairly high body temperature which does not change much and is not affected by the surrounding temperature
wild	animals or plants that live or grow in natural surroundings and are not looked after by people
invertebrate	a creature that does not have a spine, for example an insect, a worm, or an octopus
temperature	a measure of how hot or cold something is

Scientific Enquiry

Wildlife watch: Use observations in local environment to compare animals or videos to investigate what different animal groups eat/identify features of animal group eg wings/fur etc

Can you find out about your class animal-first hand?!

Find out which birds frequent trees in our setting.

Make own sensory toy e.g. different senses calm different people. What would you put in a sensory bottle or would you prefer something to touch etc.

Invertebrates are animals that do not have a backbone: Insects (e.g. ladybirds), molluscs e.g. snails & arachnids e.g. spiders

What do animals eat?

- Animals that only eat meat (other animals) are called carnivores (examples include lions and eagles).
- Animals that only eat plants are called herbivores (examples include cows and giraffes)
- Animals that eat plants and meat are called omnivores (examples include humans and squirrels)



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Year 2 Animals including humans

Key Knowledge

Key Vocabulary

What is a cycle?

- **life cycle** is the series of changes that an animal or plant passes through from the beginning of its life until its death.
- Animals, including humans, have **offspring** which grow into adults.

Bones

The hard parts inside your body which together form your skeleton

disease

an illness which affects people, animals, or plants

exercise

When you **exercise**, you move your body energetically in order to get fit and to remain **healthy**

farm

an area of land used to produce crops or to breed animals and livestock

What do all animals need to survive?

- All animals need water, air and food to survive.

healthy

well and not suffering from any illness

hygiene

keeping yourself and your surroundings clean, especially in order to prevent illness or the spread of diseases

What do humans need to be healthy?

- to eat a **balanced diet** and **healthy** food
- some **exercise** to keep their **muscles** and **bones healthy**
- to take **medicines** that are given by doctors and nurses when feeling poorly
- to keep good **hygiene** by washing regularly, having clean clothes, brushing teeth and hair.

life cycle

the series of changes that an animal or plant passes through from the beginning of its life until its death

medicine

the treatment of illness and injuries by doctors and nurses

muscles

something inside your body which connects two bones and which you use when you make a movement

offspring

a person's children or an animal's young

balanced diet

choosing **foods** in the right amounts from each of the food groups.

skeleton

the framework of bones in your body

survive

continue to exist

Scientific Enquiry

Are all babies just smaller versions of an adult?
 what happens to hand/foot size at different ages (points in a life cycle)?
 How do needs of an animal/human change during each stage of their life cycle?
 Which activity gets your heart working the most?