

# Year 1

## Science: Animals

### Resource Pack



Including lessons on:  
Exploring different types of animals  
Sorting and grouping animals  
Keeping animals as pets  
What animals eat

### Amazing Animals

- Some animals live in water, some live on land, some fly in the sky.
- Animals have special features that help them to survive.
- Animals can be grouped according to their features.
- Amphibians are cold blooded animals that live in water and also on land. They lay eggs underwater.
- Mammals are warm blooded animals give birth to live young.

### What Animals Eat & Keeping Pets

- Animals that eat other animals are called carnivores.
- Animals that eat plants are called herbivores.
- Animals that eat both plants and other animals are called omnivores.
- Some animals are suitable for keeping as pets but some are not.
- Pets need food, water, space, shelter and medicine.
- Animals that are not pets are known as wild animals.

### Information Texts– Animals

- Some animals have similarities, some are very different.
- Fish have gills to help them breathe, fins to help them swim and scales to protect their bodies.
- Birds have beaks to help them eat, wings to help them fly, claws on their feet to help them grip and feathers to help them keep warm.

### Amazing Animals

- Give children an opportunity to share what they already know about animals. Record this through writing/drawing/ ICT etc.
- Show children images of a range of animals including birds, fish, amphibians, reptiles, mammals and invertebrates. Children could make an animal gallery on a display board.
- Discuss and create a presentation for one animal in detail explaining that its features help it to survive.

### Science Unit Overview– Year One

#### Animals and their Needs

### Looking after pets

- RSPCA education online– How to look after pets.
- Design a guidebook for looking after pets
- Visit from a pet owner (check safety of pet) to discuss responsibilities.
- Sort which animals would be suitable for keeping as pets and which would not.
- Create a video explaining what pets need.

### Information Texts– Animals

- Children will write a description of at least two animals. (see resource) This can be differentiated to support less able writers and to extend the more able.
- If there is curriculum time available, children could complete a booklet with a variety of different animals included.
- Children could present their information to another class or in an assembly.
- Children could be recorded talking about their animals and the clips put together to make a short film.

Core Knowledge

Creative application of knowledge



## Lesson 1. Amazing Animals

*This lesson is the first in a series that introduces children to the world of animals. In this lesson, teachers will find out what their pupils know already about animals. They will then teach relevant vocabulary in order for children to identify a range of common animals. Teachers will then introduce the idea that animals can be grouped according to particular features.*

**See Page 261 of *What Your Year 1 Child Needs to Know***

Learning Objective	Core Knowledge	Activities for Learning	Related Vocabulary	Assessment Questions
To name and describe a variety of animals.	<p>There are many different types of animals.</p> <p>Some animals live in water, some live on land, some fly in the sky.</p> <p>Animals have special features that help them to survive.</p>	<ul style="list-style-type: none"> <li>- Give children an opportunity to share what they already know about animals. Use this information to pitch your subsequent lessons. (resource 1)</li> <li>- Show children images of a range of animals including birds, fish, amphibians, reptiles, mammals and invertebrates. Ensure children become familiar with the names of these animals.</li> <li>- Discuss one animal in detail explaining that its features help it to survive. Eg a polar bear has thick fur and a layer of fat to keep it warm. It has sharp teeth and claws for catching animals to eat. It has fur on the soles of its feet to keep them from freezing on the ice.</li> </ul> <p><small>*Children do not necessarily need to understand the differences between mammals/reptiles etc at this stage but they should find out about a range of animals.</small></p>	<p>Animal names including:</p> <p><b>Birds:</b> blackbird, seagull, pigeon</p> <p><b>Fish:</b> salmon, tuna, mackerel, goldfish</p> <p><b>Amphibians:</b> Frog, toad, salamander, newt</p> <p><b>Reptiles:</b> crocodile, turtle, alligator, snake</p> <p><b>Mammals:</b> mouse, lion, dog, deer, human</p> <p><b>Invertebrates:</b> worm, jellyfish, spider, lobster</p>	<p><i>What can you tell me about birds?</i></p> <p><i>What animals might you find underwater?</i></p> <p><i>Can you describe an animal that has special features that help it to survive?</i></p>

Prior learning assessment

Date:

What I Know About Animals



Core Knowledge  
The official partnership in the UK

## Lesson 2. Grouping Animals

*This lesson introduces the concept of sorting animals according to their features. Children will understand that scientists group animals according to their features. Scientists look at similarities between different animals and use certain similarities to group them. For example, amphibians spend some of their life underwater and some of their life on land. But amphibians always lay their eggs underwater. Reptiles can also live on land or underwater, but they always lay their eggs on land.*

Learning Objective	Core Knowledge	Activities for Learning	Related Vocabulary	Assessment Questions
To understand that we can group animals according to their features.	<p>Animals can be grouped according to their features.</p> <p>Amphibians are cold blooded animals that live in water and also on land. They lay eggs underwater.</p> <p>Mammals are warm blooded animals give birth to live young.</p>	<ul style="list-style-type: none"> <li>- Give children images of many different animals including birds, fish, amphibians, reptiles, mammals and invertebrates</li> <li>- Explain that we can group animals according to their features. Ask children to discuss how they might group the animals provided. Allow children to explore sorting animals and discuss how they decided to sort e.g 4 legs, wings etc.</li> <li>- Explain that scientists use special categories to sort animals. Teach children the words amphibian and mammal as two examples of animal groups. Give lots of examples of each, explaining why they are a mammal or an amphibian. See resource.</li> <li>- Children to record their sorting either through drawing or writing animal names in relevant categories.</li> </ul>	sorting, grouping, features, legs, wings, fur, tail, underwater, air, amphibian, mammal	<p><i>How do scientists group animals?</i></p> <p><i>Why do you think it might be helpful for scientists to group animals?</i></p> <p><i>Can you describe one group of animals that you know about?</i></p> <p><i>How is a mammal different to an amphibian?</i></p>

Link: <http://video.nationalgeographic.com/video/kids/animals-pets-kids/reptiles-kids>

## Amphibians

Amphibians live on land and in water.



Green Tree Frog

They lay their eggs in water.

They usually have soft skin.



Common Reed Frog

They all have a spine.

They are all cold-blooded.



Fire Salamander

## Mammals

Most mammals live on land, but some, like whales and dolphins, live in the sea.



Elephant

They all have a spine.

They are all warm blooded.



Red Squirrel

Mammals give birth to live young and feed them milk.



Human

## Lesson 3. Hungry Animals

*In this lesson children will be taught that animals eat different things. Scientists group animals into three different groups according to what animals eat. These groups are carnivores, herbivores and omnivores. Carnivores eat other animals, herbivores eat plant material including fruit, leaves, vegetables, omnivores eat a mixture of meat and plant material.*

Learning Objective	Core Knowledge	Activities for Learning	Related Vocabulary	Assessment Questions
<p>To understand that we can group animals according to what they eat.</p>	<p>Animals that eat other animals are called carnivores.</p> <p>Animals that eat plants are called herbivores.</p> <p>Animals that eat both plants and other animals are called omnivores.</p>	<ul style="list-style-type: none"> <li>- Show children pictures of animal teeth and discuss what the animals might eat.</li> <li>- Teach children the words: carnivore, herbivore and omnivore. (carnivore comes from the Latin words for <i>flesh</i> and <i>devour</i>; <i>carno</i> and <i>vorare</i>)</li> <li>- Ask children to sort animals into a venn diagram.</li> <li>- Have reference books and the internet available to children if possible so that they can research if required.</li> <li>- Play animal diet game (link below)</li> <li>- Complete resource- What do I eat?</li> </ul>	<p>teeth (<i>incisors, canine, molars</i>), sharp, carnivore, herbivore, omnivore, diet</p>	<p><i>Can you describe how animals can be grouped according to what they eat?</i></p> <p><i>What do we call animals that only eat plants?</i></p>

Link: <https://www.sheppardsoftware.com/content/animals/kidscorner/games/animaldietgame.htm>

Date:

LO: To understand that we can group animals according to what they eat.

**Carnivore**

**Herbivore**

**Omnivore**



The official partnership in the UK



Name:

Date:

LO: To understand that we can group animals according to what they eat.



I am a \_\_\_\_\_.

I like to eat \_\_\_\_\_.



I am a \_\_\_\_\_.

I like to eat \_\_\_\_\_.

I also know that \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Lesson 4. Animals as Pets

*Pets rely on their owners for all the things they would normally find for themselves if they were living in the wild. Apart from feeding, pets need shelter, veterinary treatment and exercise. Some pets will require a specific sort of environment in which to live, possibly a certain humidity or temperature. In order to keep a pet healthy, its owners must replicate as far as possible, the natural environment in which that animal would live. This environment must also be kept clean; if bacteria from waste builds up it can make animals ill.*

**See Page 262 of *What Your Year 1 Child Needs to Know***

Learning Objective	Core Knowledge	Activities for Learning	Related Vocabulary	Assessment Questions
To describe the needs of a pet.	<p>Some animals are suitable for keeping as pets but some are not.</p> <p>Pets need food, water, space, shelter and medicine.</p> <p>Animals that are not pets are known as wild animals.</p>	<ul style="list-style-type: none"> <li>- Sort animals into two groups; suitable for a pet and not suitable for a pet. Discuss why animals were sorted in a particular way.</li> <li>- Explore the resources here <a href="http://www.rspca-education.org.uk/teachers">www.rspca-education.org.uk/teachers</a></li> <li>- Design a leaflet explaining to potential pet owners what their animal will need.</li> <li>- Ask a pet owner to come in and discuss the responsibilities involved with looking after an animal.</li> </ul>	<p>suitable, pets, domestic, wild, food, space, shelter, medicine, water, care, responsibility</p> <p>Pets: dog, cat, fish, rabbit, guinea pig</p>	<p><i>Can you describe what a pet needs?</i></p> <p><i>Why is it a big responsibility to own a pet?</i></p> <p><i>What happens when a pet's needs are not met?</i></p>

Link: <http://kids.nationalgeographic.com/kids/animals/>

Date:

LO: To understand that some animals are not suitable for pets.

Pets	Wild Animals

Some wild animals are kept as pets. Why might this be difficult? What do you think about this?

---

---

---

---

---

---

## Lesson 5. Researching animals

*This lesson will continue to build children's vocabulary in this area of Science. They will be taught specific vocabulary for describing a fish before researching other terms used to describe animals. It is important to ensure children are explicitly taught any unfamiliar vocabulary and are also given lots of opportunity to use these new words.*

Learning Objective	Core Knowledge	Activities for Learning	Related Vocabulary	Assessment Questions
To describe an animal using scientific words.	<p>Fish have gills to help them breathe, fins to help them swim and scales to protect their bodies.</p> <p>Birds have beaks to help them eat, wings to help them fly, claws on their feet to help them grip and feathers to help them keep warm.</p>	<ul style="list-style-type: none"> <li>- Explain to children that we have hands and feet, but that we use different words when we describe animals. For example a cat has paws.</li> <li>- Show them a picture of a fish. Ask children to name any of the parts of the fish. Teach vocabulary: gills, fins and scales. Repeat with a picture of a bird.</li> <li>- Children independently research an animal of their choice and explore the vocabulary required to describe them.</li> <li>- Give children many opportunities to say new words aloud to help them remember the new vocabulary.</li> <li>- Children can draw and label an animal of their choice into their science books.</li> </ul>	<p>scientific, describe, description</p> <p><b>Fish:</b> gills, fins, scales</p> <p><b>Birds:</b> beaks, wings, claws, feathers</p> <p>Include any other specific animals your class are interested in.</p>	<p><i>Can you describe a fish using scientific words?</i></p> <p><i>Can you describe a bird using scientific words?</i></p> <p><i>What other animals can you describe?</i></p>

Link: <http://www.bbc.co.uk/nature/animals/>

## Lesson 6. Information Text- Amazing Animals

*Children will produce a description of two different animals using the knowledge they have built over the unit. This piece of work can be a simple description of each animal using the vocabulary children have learned, or it could be extended over a longer period of time to allow children to produce a booklet containing information about a wider variety of animals. This lesson is an opportunity for children to show what they have learned, and for teachers to assess their progress. Comparing the children's first piece of work at the beginning of the unit, with this final piece of work, should show their progress clearly.*

Learning Objective	Core Knowledge	Activities for Learning	Related Vocabulary	Assessment Questions
To describe and compare a variety of common animals.	<p>I can name and describe an animal. E.g. Fish live underwater. They have gills to help them breathe. They have fins to help them swim and scales to protect their bodies.</p> <p>I can describe similarities and differences between animals.</p>	<ul style="list-style-type: none"> <li>- Children will write a description of at least two animals. This can be differentiated to support less able writers and to extend the more able.</li> <li>- If there is curriculum time available, children could complete a booklet with a variety of different animals included.</li> <li>- Children could present their information to another class or in an assembly.</li> <li>- Children could be recorded talking about their animals and the clips put together to make a short film.</li> </ul>	<p>scientific, describe, description</p> <p><b>Fish:</b> gills, fins, scales</p> <p><b>Birds:</b> beaks, wings, claws, feathers</p> <p>Include any other specific animals your class are interested in.</p>	<p><i>What can you tell me about animals?</i></p> <p><i>In what way are some animals similar?</i></p> <p><i>How do scientists group animals?</i></p>