

Year 1 - Animals including humans

Statutory requirements from the Programme of Study, 2014

Pupils should be taught to:

- Identify and name a variety of common animals that are birds, fish, amphibians, reptiles and mammals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles and mammals, and including pets).
- Identify, name draw and label the basic parts of the human body and say which parts of the body is associated with each sense.

The learning journey: Animals including humans

| Year group | Statutory Requirements from the Programme of Study |
|------------|--|
| 1 | <ul style="list-style-type: none"> Identify and name a variety of common animals that are birds, fish, amphibians, reptiles and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles and mammals, and including pets). Identify, name draw and label the basic parts of the human body and say which parts of the body is associated with each sense. |
| 2 | <ul style="list-style-type: none"> 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. |
| 3 | <ul style="list-style-type: none"> Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat Identify that humans and some animals have skeletons and muscles for support, protection and movement. |
| 4 | <ul style="list-style-type: none"> 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. |

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| 5 | <ul style="list-style-type: none"> Describe the changes as humans develop from birth to old age. |
| 6 | <ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals, including humans. |

How the children should learn science at Key Stage 1

The principal focus of science teaching in Key Stage 1 is to enable pupils to **experience and observe phenomena**, looking more closely at the natural and humanly-constructed world around them. They should be encouraged to **be curious and ask questions** about what they notice.

Suggestions for Working Scientifically

Pupils might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.

Further guidance

The following opportunities for working scientifically should be provided across Years 1 and 2 so that the expectations in the programme of study can be met by the end of Year 2. Pupils are **not** expected to cover each aspect for every area of study.

Asking questions. Children should ask simple questions and recognise that they can be answered in different ways.

Scientific enquiries. They should be able to do the following types of enquiry:

- Observations. They should observe closely, using simple equipment.
- Simple tests
- Identifying and classifying
- Secondary sources. They should use simple secondary sources to find answers.

Recording. They should gather and record data to suggest answers to their questions. With help, they should record in a range of ways and begin to use simple scientific language.

Analysing observations. They should use their observations and ideas to suggest answers to questions. They should notice patterns and relationships in their observations. They should talk about what they have found out and how they found out.

Preparation for this unit of study

Preparing the children and adults for all weathers

Often the biology units of study within primary schools are only learnt during pleasant spring or summer days. However, the new curriculum states that: 'Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat'. Therefore, we need to ensure that children and adults have the correct clothing and attitude to learn outside in all of the terms. This is essential if children are really going to understand the changes that occur over time. Thus, schools might consider purchasing different sizes of waterproof jackets and possibly even welly boots. Children and some adults will also need to learn that as scientists the children will need to learn in all types of weather.

Plan when in the year is best to do the different aspects of learning

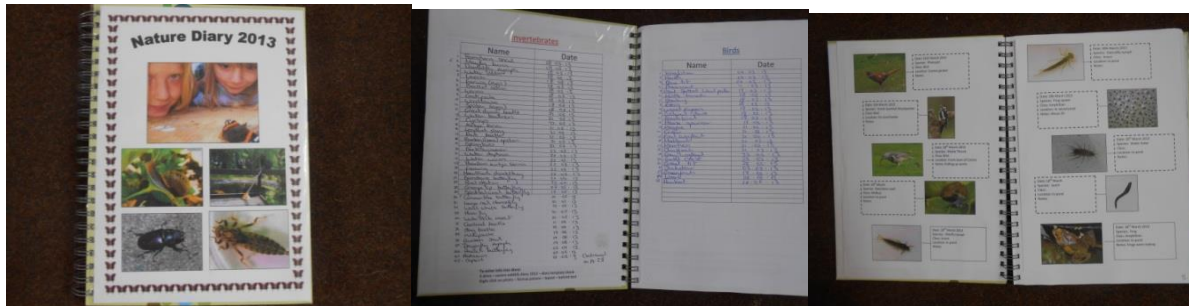
Aspects of this unit of study could be covered at different times in the year. Before the year begins, the teacher must plan ahead, deciding when each of the aspects of learning will be covered. So, for instance, if looking for minibeasts, the children are going to have the most successes if they look between April and the end of summer. However, be aware of when things happen in your wildlife area. So, for instance, you might find frogs going back to water in mid February, or butterflies feeding on plants in late July. Many birds are great to watch in mid January when there are not so many leaves on the trees.

Preparing the indoors for learning

1. Display. Ensure that your display board on humans and other animals is interactive. There could be questions that the children have created, key science words, and pieces of information. You could introduce a different animal every day. With this 'animal of the day' you could provide the following information: name, class, what it eats, what it looks like, and any interesting facts.
2. A short-term terrarium. A terrarium is a container in which some types of invertebrates can be kept for a short period of time. It could be a transparent tank covered with secured plastic sheet. Inside you will need to place damp garden soil, covered with decaying leaves. This should be kept in a cool and dimly lit place. Animals should only be kept for a day or two. Do NOT keep worms in them, and don't have too many animals or there could be too many droppings. You can feed the animals on sliced vegetables and fruit.

Recording findings throughout the year

It will be worth keeping a **large floor book** (like a giant scrap book) in which 'evidence' of the animal world developing in the school can be placed – e.g. photos of habitats in different seasons and the animals found there. Some of this 'evidence' could be **collected at different points throughout the year**, but used in the studies during this unit of work.



Preparing the learning spaces

Make sure that you have a **great range of habitats in the school grounds**. This will mean having: long grass areas, wild flower area, garden flower area, trees, plants in and around a pond, vegetable allotment, hibernation areas, ponds, etc. You will need to mark where particular spaces are for particular activities. This could be done by laminating letters or number with a background of a particular colour that links to a particular activity. This will help the children to focus in on the animals that are relevant to their activity, and also aid them in making links in their learning of these animals over time.

SAMPLE



- 1. British flower garden (great for bees and butterflies)
- 2. Herb garden
- 3. Raised pond
- 4. Sunk pond
- 5. Meadow (cut beginning of summer to allow summer plants to grow easier)
- 6. Composter
- 7. Hibernation stack

8. Log piles
9. Meadow (to be cut at the end of summer)
10. Stag beetle logs (vertical)
11. Dark hide-away (great for Newts, slugs, ants, etc)

Use information from [CLEAPSS \(Developing and Using Environmental Areas in School Grounds L221\)](#), as well as organisations' websites such the [Bee Conservation Trust](#), [the Butterfly Conservation Trust](#), [Buglife](#) and the [RSPB](#) to ensure that plants you grow and the habitats that you develop are useful for the range of animals that could live in your school grounds.

Also, look out for any **national surveys** that may be taking place which are looking for different animals in local environments.

Resources

- Resources for making a crash site for an alien spaceship
- Webcam and alien animation software
- Posters of the human body
- Model skeletons of human and other animals.
- Foods for tasting (check for allergies)
- Microscopes and digital microscopes
- Mystery sounds on the computer
- Feely bag and objects
- Fruit pastilles or other flavoured chewy sweets
- Different flavours of crisps
- Copies of the 'alien table'
- Binoculars
- Small pots with lids to collect minibeasts in.

- Spoons and paintbrushes for picking up minibeasts
- Sweep nets
- White sheets
- Animals ID charts – You might want to make your own ones, containing the animals that are most likely to be found in your school grounds. Alternatively you can buy or find ones on websites: <http://www.gatekeeperel.co.uk/guides.html>
- Pictures of animals from all classes. Enough sets of pictures so that children can sort them when they are in small groups.
- Animal skeletons
- Bird feathers
- A fish in a fish tank
- Pictures of British animals
- PE hoops
- Video clip of a scientist talking about an animal (or make one starring the teacher!)
- Pictures of various British animals
- Laminated pictures of different animals parts/structures.
- Pets
- Photos of pets
- Large floor book (can be made from A2 sheets of card/sugar paper folded and stapled).
- Video camera
- Digital camera
- Animal identification charts from Gatekeeper (www.gatekeeperel.co.uk)

Vocabulary

Scientific Language requirements from the science curriculum for Key Stage 1

- They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways.
- Pupils should read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at Key Stage 1

Key words

- Birds, fish, amphibians, reptiles, mammals and invertebrates
- Feathers, scales, gills, fins, hair, land, water, backbone, skeleton
- Carnivores, herbivores, omnivores
- Meat, plants
- (Common parts/structures of animals)
- (Names of animals that can be found in the school grounds)
- (Names of animals that the children keep as pets)

Key information for teachers

The following information does not have to be learnt by the children, but is a good background context for the teacher:

There are **billions of different kinds** of living things (or **organisms**) on earth. To help study them, biologists have devised ways of naming and classifying them according to their similarities and differences.

The system most scientists use puts each living thing into **seven groups** (or **taxons**), organized from most general to most specific. Therefore, each species belongs to a genus, each genus belongs to a family, each family belongs to an order, etc.

From largest to smallest, these groups are:

1. Kingdom
2. Phylum
3. Class
4. Order
5. Family
6. Genus
7. Species

Kingdoms are huge groups, encompassing millions of kinds of organisms each. All animals are in one kingdom (called Kingdom Animalia); all plants are in another (Kingdom Plantae). In the most widely-used system, there are **five kingdoms**, containing animals, plants, fungi, prokaryotes, and protists (the last two are different sorts of one-celled organisms). Other systems have six or more kingdoms.

Species are the smallest groups. A species consists of all the animals of the same type, who are able to breed and produce young of the same kind. For example, while any two smooth newts are in the same species, as are any two common frogs, smooth newts and common frogs are in different species (since they can't interbreed).

The lion belongs to the following groups:

- Kingdom **Animalia** (includes all animals)
- Phylum **Chordata** (includes all vertebrate animals, as well as some other more primitive ones)

- Class **Mammalia** (includes all mammals)
- Order **Carnivora** (includes carnivorous mammals)
- Family **Felidae** (includes all cats)
- Genus **Panthera** (includes the great roaring cats: lions, tigers, jaguars, and leopards)
- Species **leo** (lions!)

An animal **class** is made up of animals that are all alike in important ways. Scientists have grouped animals into classes to make it easier to study them.

There are many different animal classes and every animal in the world belongs to one of them. The five most well known classes of vertebrates (animals with backbones) are mammals, birds, fish, reptiles, amphibians. They are all part of the **phylum chordata**.

There are also a lot of animals without backbones. These are called invertebrates and are part of the **phylum arthropoda** (arthropods). Two of the most commonly known classes in this phylum are arachnids (spiders) and insects.

Mammals

People are mammals. So are dogs, cats, bats, hedgehogs, dolphins and whales. If an animal drinks milk when it is a baby and has hair on its body, it belongs to the mammal class.

Birds

Birds are animals that have feathers and that are born out of hard-shelled eggs.

Fish

Fish are vertebrates that live in water and have gills, scales and fins on their body.

Reptiles

Reptiles are a class of animal with scaly skin. They are cold blooded and are born on land.

Snakes, lizards, crocodiles, alligators and turtles all belong to the reptile class.

Amphibians

Amphibians are born in the water. When they are born, they breathe with gills like a fish. But when they grow up, they develop lungs and can live on land.

Arthropods

Arthropods is a huge **phylum** of animals -- it includes eleven animal classes: Merostomata, Pycnogonida, Arachnida, Remipedia, Cephalocarida, Branchiopoda, Maxillopoda, Malacostraca, Chilopoda, Diplopoda, and Insecta.

Any animals that have more than four, jointed legs are arthropods. Insects, spiders and crustaceans all belong to this class of animals.

Key Scientists

Carl Linnaeus (1707-1778) - The inventor of modern scientific classification. <http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/linnaeus/>


Amy Vedder (1951 -) – Wildlife biologist and conservationist http://iwasonwondering.org/amy_homepage.html

| Learning Expectations | Possible Tasks | Resources |
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| To be able to identify, name draw and label the basic parts of the human body. | <p>Hook – The aliens have landed!</p> <p>Create a crash site for an alien spacecraft on the playground. This could be any size you want it to be. You could place cones around it and some safety tape. Leave some evidence showing that the aliens had left the site; footprints leading off in a particular direction, a gooey mixture (e.g. gelli baffle), etc. Importantly, have something that the aliens have left behind which is a communication between them and you. For instance, it could be a memory stick on which there is a communication from the aliens. Alternatively, they could leave behind a date and time when they will be in contact. You could then ask a colleague to use a web cam (many cheap ones have some 'alien' animation included as part of the software) to communicate with you children via the white board! The aliens could ask the children to help them with their mission. They are trying to find out about humans and other animals on our planet.</p> | <ul style="list-style-type: none"> • Resources for making a crash site for an alien spaceship • Webcam and alien animation software • Posters of the human body • Model skeletons of human and other animals. |

| Learning Expectations | Possible Tasks | Resources |
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| | <p>Identifying – What are the names of the different parts of our bodies?</p> <p>Discuss with the children what all animals have in common. Ask the children whether humans are animals – i.e. do we move, sense, eat, get rid of waste, grow, breathe and make more of ourselves?</p> <p>Sing and do actions to ‘Head, Shoulders, Knees and Toes’ to begin to establish the names of the parts of the body.</p> <p>The children could play a game in a group. One child calls out, ‘We use this part of the body to ...’. The other children must try to point to the correct part of their bodies.</p> <p>Recording</p> <p>Children can draw an outline of the human body and label the main parts.</p> <p>Some of the children could use this as a way of telling the aliens what the functions are for the different parts of our bodies.</p> | |
| <p>To know which part of the body is associated with each sense.</p> <p>To be able to observe closely, using simple equipment.</p> | <p>Simple test – What can our different senses do?</p> <p>Hook - Explain that the aliens are interested in how humans sense the world around them. You could invent some special senses that the aliens might have: they can feel magnetic fields, they have a feature that allows them to read the mind of others, and even telescopic eyesight!</p> <p>Observations – Using the senses</p> <p>In this session the children could have a carousel of activities; each one using a different sense:</p> <ol style="list-style-type: none"> 1. Taste table – identify the object through taste 2. Sight – use the digital microscopes and hand lenses to look carefully at a range of objects/materials. 3. Sound – play some sound through the computer. Which ones can they identify? | <ul style="list-style-type: none"> • Foods for tasting (check for allergies) • Microscopes and digital microscopes • Mystery sounds on the computer • Feely bag and objects • Fruit pastilles or other flavoured chewy sweets • Different flavours of crisps |

| Learning Expectations | Possible Tasks | Resources |
|--|---|---|
| | <p>4. Feeling – Place objects in a mystery bag. Which ones can they identify by feeling? 5. Smell – Place different flavours of crisps in a bowl. Can they identify the flavour by only smelling the crisps?</p> <p>The fruit pastille challenge! In pairs, one child is blindfolded. The blindfolded child must guess the flavour of the fruit pastille. Have a sip of water to clear the taste. Repeat, but this time they must hold their nose.</p> <p>Research – How good are the senses of other animals? You could present some information to children about the incredible senses of other animals; e.g. how well badgers can smell, bats can hear, owls can see, etc. Over the term, the children could try to find out more about the senses of other animals.</p> <p>Recording Children could draw the human body and label where the senses can be found.</p> | |
| <p>To be able to record data in a table.</p> | <p>Game – Alien table The idea of this game is to introduce the children to how tables are completed. Provide groups of children with the table below. Explain that we are pretending that these are animals that live on a planet on the aliens’ planet. Give each group either a dice or a spinner with numbers up to 6. As a group the children decide on an animal and its body part and then roll the dice/spin the spinner to find out how many of these it has.</p> <p>Recording They can fill in the table with the numbers generated by the spinner/dice. When the table has been fully populated, the children can try to draw each of their animals. Finally, you can display the statement below on the white board. The children can decide whether those statements are true for their versions of the animals.</p> | <ul style="list-style-type: none"> • Copies of the ‘alien table’ |

| Learning Expectations | Possible Tasks | | | | | Resources |
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| | Name of animal | Number of eyes | Number of legs | Number of spots on body | Number of wings | |
| | Doobe | | | | | |
| | Wasto | | | | | |
| | Shamo | | | | | |
| | Lingle | | | | | |
| | Tropee | | | | | |
| | <ul style="list-style-type: none"> • A Wasto has the most spots on its body • A Shamo only has one eye • A Lingle has more legs than a Doobe • A Tropee has more wings than it has legs | | | | | |
| <p>To be able to identify and name a variety of common animals that are birds, fish, amphibians, reptiles and mammals.</p> <p>To be able to describe and compare the structure of a variety of common animals.</p> <p>To be able to use secondary sources to find out more about animals (non-</p> | <p>Naming and identifying animals</p> <p>Excellent videos of all types of animals can be found on - http://www.bbc.co.uk/nature/animals/</p> <p>The following activities will depend on the range of habitats that you have created in your school grounds and the resources that you have purchased.</p> <p>Birds.</p> <ul style="list-style-type: none"> • Talk with children about the different ways in which birds can be identified: colours, shape, song and flight patterns. Show them pictures of common birds, talk about how they fly, and let them listen to recording of bird song. Sounds of birds and other very useful information can be found on the RSPB website: http://www.rspb.org.uk/wildlife/birdguide/name/a/ • Identify birds. Find a quiet place to watch birds. If possible, use binoculars (Health and Safety - Warn the children NOT to look at the Sun). Children could note down the size of the bird (provide them with cut-outs of outlines of some common birds to use for | | | | | <ul style="list-style-type: none"> • http://www.bbc.co.uk/nature/animals/ • http://www.bbc.co.uk/radio4/science/birdsong.shtml • http://www.wildsong.co.uk/species.html • Binoculars • Small pots with lids to collect minibeasts in. • Spoons and paintbrushes for picking up minibeasts • Sweep nets • White sheets |

| Learning Expectations | Possible Tasks | Resources |
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| <p>statutory).</p> | <p>comparisons – e.g. robin, blackbird, feral pigeon and mallard). The children could also note down any colours, shape of beak, and length of legs, noise it made and how it flew. The children can then try to identify their birds by either looking at bird pictures or going on a website such as www.rspb.org.uk/wildlife/birdidentifier/</p> <ul style="list-style-type: none"> Take part in the RSPB’s Big Schools’ Birdwatch - http://www.rspb.org.uk/schoolswatch/index.aspx . This is a great opportunity to hook children into nature as they will know that they are taking part in a real piece of science. It is also something they can do at home (Big Garden Birdwatch - http://www.rspb.org.uk/birdwatch/index.aspx) <p>Land invertebrates</p> <ul style="list-style-type: none"> Talk with children about how invertebrates can be recognised – e.g. number of body parts, number of legs, whether it has a shell, etc. Show some common invertebrate pictures to the children and practise their names. Find and identify invertebrates. Great places for children to find invertebrates are: under logs and stones, in long grasses, on leaves, and on flowers. Catch minibeasts on plastic spoons and then place in tubs for viewing. You could also try: pitfall traps, using a sheet to collect minibeasts that can be knocked off leaves, and using sweep nets in long grasses. It might be easier if you make a home-made ID sheet. By doing this, you would have already checked that there is a chance that children will actually find the invertebrate on the sheet. Otherwise, use a resource from the internet or buy some ID sheets (e.g. from Gatekeeper). Take part in some national surveys: <ol style="list-style-type: none"> http://www.buglife.org.uk/getinvolved/surveys - this site will list many invertebrate surveys taking place. http://www.opalexplornature.org/bugscount - this site will allow children to survey invertebrates in different areas in the wildlife area. A range of specific surveys, looking at one particular invertebrate - http://www.harlequin- | <ul style="list-style-type: none"> Animals ID charts – You might want to make your own ones, containing the animals that are most likely to be found in your school grounds. Alternatively you can buy or find ones on websites: http://www.gatekeeperel.co.uk/guides.html  |

| Learning Expectations | Possible Tasks | Resources |
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| | <p>survey.org/, https://www.societyofbiology.org/newsandevents/biologyweek/flyingantsurvey, http://www.ladybird-survey.org/, and http://butterfly-conservation.org/4291/big-butterfly-count-2013.html .</p> <ul style="list-style-type: none"> • Invite in an expert. You could contact organisations such as the Butterfly Conservation Trust to find out whether any of their members would be willing to visit your class to talk about invertebrates. <p>Aquatic animals</p> <ul style="list-style-type: none"> • If you have access to a pond encourage children to dip at various times of the year – especially from February onwards through to autumn. This is an opportunity for children to find invertebrates that live in the water, as well as amphibians such as newts, toads and frogs. • Take part in a national/regional survey. There is probably a reptile and amphibian group in your area. For example: KRAG - http://www.kentarg.org/ • Invite in an expert. Contact one of your local amphibian groups to find out whether one of their members can visit your school. <p>Mammals</p> <ul style="list-style-type: none"> • Spotting British mammals is often quite difficult. However, the children might to be able to find clues – e.g. prints, fur, droppings, scraps (small pits where they have dug for food), where they have moved through long grass, etc. • Maybe your class could become involved in any mammal survey. Keep an eye on the Bat Conservation Trust website (http://www.bats.org.uk/) and the Mammal Society website (http://www.mammal.org.uk/). • Invite someone in from the Mammal Society of the Bat Conservation Trust to talk to the children about mammals. | |

| Learning Expectations | Possible Tasks | Resources |
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| <p>To be able to identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates.</p> <p>To be able to sort and group animals with some help (non-statutory).</p> | <p>Classifying animals</p> <ul style="list-style-type: none"> • Sit down on the carpet with the children and provide each group with a set of pictures of animals from all animal classes. Ask them to find different ways of putting them into groups. They might decide on: number of legs, size, where it lives, etc. • Explain that scientists all use the same way of sorting animals into different groups – i.e. classes. Explain the different animal classes to the children. <p>The following website shows an animated video which is a terrific introduction to classifying animals - http://www.brainpopjr.com/science/animals/classifyinganimals/</p> <p>a) Vertebrate/Invertebrate – Show some animal skeletons to the children and ask them to name an animal it belongs to. Get them to feel their own backbones. Discuss the animals that they might have stroked that have backbones. Ask them whether they think ‘minibeasts’ have backbones. Ask them whether they have ever found any mini skeletons of minibeasts. Introduce the term ‘invertebrate’.</p> <p>b) Mammals – Ask children to think about what babies drink when they are little (i.e. milk). www.arkive.org is a good website for images of animals. Ask children to think of animal that have hair on their bodies.</p> <p>c) Birds – Ask children to name what birds have that no other animals have (i.e. feathers). Allow children to feel some feathers from birds. http://photography.nationalgeographic.co.uk/photography/photos/patterns-scales-feathers/#/albatross-feathers-eastcott-momatiuk_18515_600x450.jpg This website provides a few pictures of feathers close up. Ask them to name any birds that they have seen or heard about.</p> <p>d) Fish –To establish what animals in this class have in common, children need to know particular body parts: fins, gills and scales. http://www.microscopy-uk.org.uk/mag/artnov08macro/CaitShannon/caitlinshannon_fishpage.html This webpage has a good sketch of the different parts of a fish, as well as photos of their fins, scales and gills.</p> | <ul style="list-style-type: none"> • Websites to view images of animals • Pictures of animals from all classes. Enough sets of pictures so that children can sort them when they are in small groups. • Animal skeletons • Bird feathers • A fish in a fish tank |

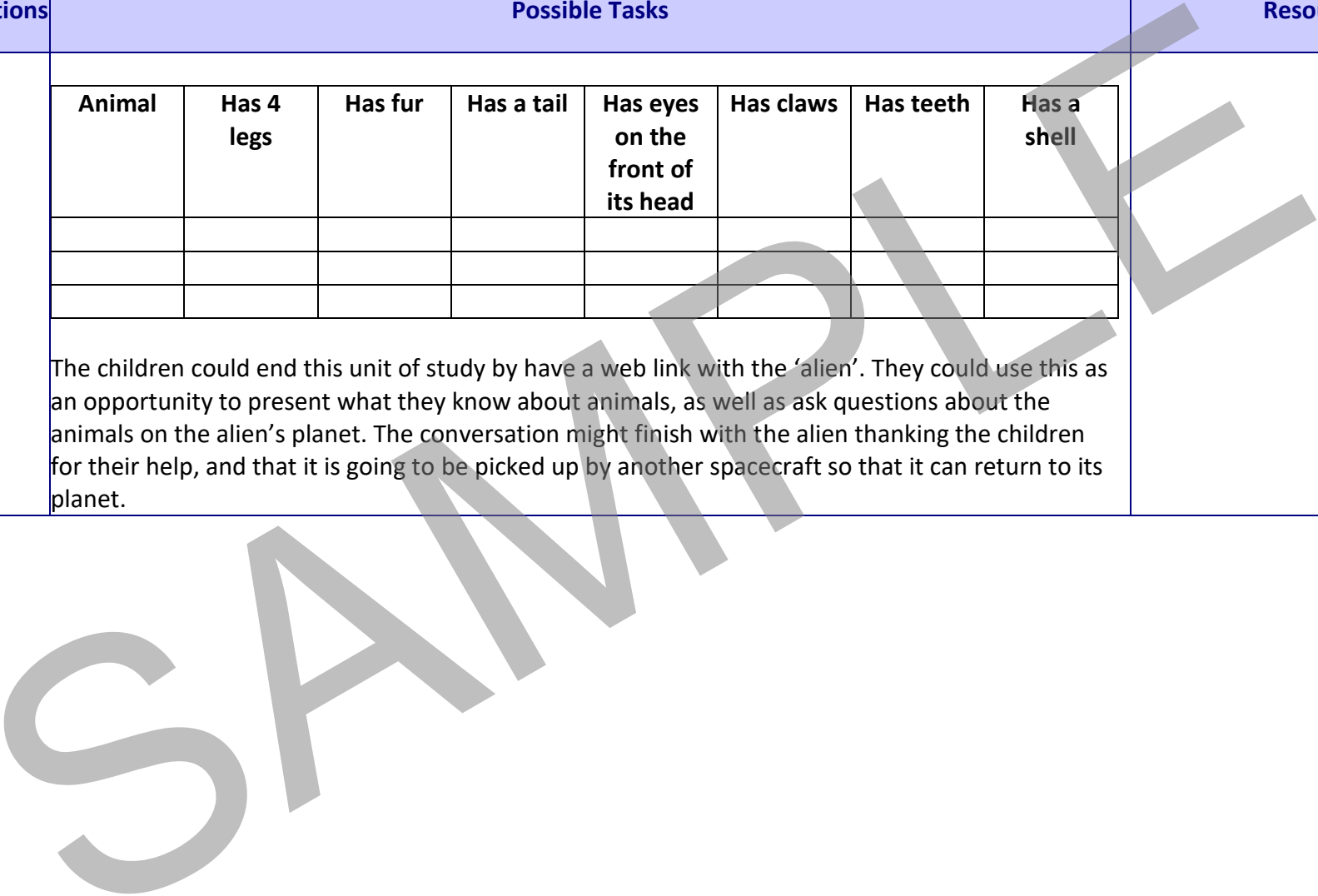
| Learning Expectations | Possible Tasks | Resources |
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| | <p>http://photography.nationalgeographic.co.uk/photography/photos/patterns-scales-feathers/#/albatross-feathers-eastcott-momatiuk_18515_600x450.jpg This website also has a good close-up picture of scales.</p> <p>If possible, allow children to look at a real fish in fish tank. Identify the different body parts and try to describe their function.</p> <p>e) Reptiles. Reptiles are a class of animal with scaly skin. They are cold blooded and are born on land. Snakes, lizards, crocodiles, alligators and turtles all belong to the reptile class. http://animals.nationalgeographic.co.uk/animals/reptiles/ This is a great website to find images of many animals. It could be that someone in your school has a pet snake that they can bring in for children to look at. Alternatively, there may be a company near to you that will bring a range of animals to your school. You might be able to attract reptiles to a quiet place in the school grounds by placing down corrugated metal sheets. However, although unlikely to do any harm, be careful in case you attract adders.</p> <p>f) Amphibians. Amphibians are born in the water. When they are born, they breathe with gills like a fish. But when they grow up, they develop lungs and can live on land. http://animals.nationalgeographic.co.uk/animals/amphibians/ Again, good for images of amphibians. If you have a pond, you could look out for frogs and newts throughout the year. During the spring and summer they might both be in the pond, whereas during the autumn and winter you might find them hiding away in dark places.</p> <ul style="list-style-type: none"> • Read out a description of an animal group and the children must find any of their pictures of animals from that group. The terms to use here are: birds, fish, amphibians, reptiles, mammals and invertebrates. <p>Recording</p> | |

| Learning Expectations | Possible Tasks | Resources | | | | | | | | | | | | | | | | | | |
|--|--|---------------------|-------------------|---------------------|-------|-----|----|-------|-----|-----|-------|----|-----|--------|----|-----|--------|-----|-----|---|
| | <p>Every child could stick in their books pictures of animals that all belong in the same group. The teacher can assess if the children understand the classification being used by providing them with more pictures of animals and asking them to stick the pictures in the correct group.</p> <p>Modelling - Making your own animal Recording Children can design their very own animal. They must decide which class of animal it comes from and therefore the features that it must have. They can also think about where it might live, what it eats, how it hides from predators, and it breathes.</p> | | | | | | | | | | | | | | | | | | | |
| <p>To be able identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>To be able to record data in simple ways (Venn diagram).</p> | <p>Naming and classifying – Which animals are herbivores, carnivores and omnivores? Ask children to name some of the food that they eat. Make a list of these on the board under two headings: meat and not meat. Show pictures of some British animals and ask children to name whether they eat meat (carnivore), plants (herbivore), or both (omnivore).</p> <p>Provide children with following information about the aliens they have met earlier in their studies:</p> <table border="1" data-bbox="405 906 1171 1190"> <thead> <tr> <th>Name of animal</th> <th>Does it eat meat?</th> <th>Does it eat plants?</th> </tr> </thead> <tbody> <tr> <td>Doobe</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Wasto</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Shamo</td> <td>No</td> <td>Yes</td> </tr> <tr> <td>Lingle</td> <td>No</td> <td>Yes</td> </tr> <tr> <td>Tropee</td> <td>Yes</td> <td>Yes</td> </tr> </tbody> </table> <p>Give small groups of children two PE hoops; one for animals that eat meat and one for animals that eat plants. Provide them with cards on which are the names and pictures of the aliens. They must place them in the correct place in the overlapping hoops. This could be extended by asking them to invent their own alien and place it in the hoops.</p> | Name of animal | Does it eat meat? | Does it eat plants? | Doobe | Yes | No | Wasto | Yes | Yes | Shamo | No | Yes | Lingle | No | Yes | Tropee | Yes | Yes | <ul style="list-style-type: none"> • Pictures of British animals • PE hoops |
| Name of animal | Does it eat meat? | Does it eat plants? | | | | | | | | | | | | | | | | | | |
| Doobe | Yes | No | | | | | | | | | | | | | | | | | | |
| Wasto | Yes | Yes | | | | | | | | | | | | | | | | | | |
| Shamo | No | Yes | | | | | | | | | | | | | | | | | | |
| Lingle | No | Yes | | | | | | | | | | | | | | | | | | |
| Tropee | Yes | Yes | | | | | | | | | | | | | | | | | | |

| Learning Expectations | Possible Tasks | Resources |
|--|---|---|
| | <p>You could then ask them to sort their real animal pictures from the previous session into these groups.</p> <p>Recording Children could draw their hoops and animals, or photos could be taken of them with their sorting hoops.</p> <p>Survey – How many animals can be found in the school grounds that are carnivores, herbivores and omnivores? Take the children into the outdoor area. The children can draw or write down the name of any animals that they might find. Remember to also look for birds. Back in the class; try to help the children to find out whether the animals that they found were herbivores, carnivores or omnivores. Place two overlapping PE hoops on the ground. One hoop is for meat eaters and the other for plant eaters. Start by placing a couple of pictures of the children in the hoops – would be useful if a few vegetarians were chosen. Next place in pictures of other animals. Children could then do this activity for themselves in small groups.</p> <p>Recording Children could be provided with a drawing of two overlapping circles; labelled herbivores, carnivores and omnivores. Children can stick pictures of animals that they have found in the correct section of the circles. This they could add to throughout the term as they find out more about animals.</p> | |
| <p>To be able to describe and compare the structure of a</p> | <p>Naming and identifying - Describing the structures of common animals Show the children of a video clip of a scientist describing an animal. For example, the following video shows Bill Oddie finding and describing a slow worm. Tell them that they are going to pretend that they are on a nature programme on TV. Their job is</p> | <ul style="list-style-type: none"> • Video clip of a scientist talking about an animal (or make one starring the teacher!) |

| Learning Expectations | Possible Tasks | Resources |
|--|--|--|
| <p>variety of common animals.</p> | <p>to try and describe what some of our animals look like to the aliens. You could start by doing one together. So, for example, using a photo of a stag beetle, describe how: it has no skeleton, it has a hard case, and it has pincers, six legs, a head, thorax and abdomen. The children could work in small groups, each taking a turn to describe a photo to the other children in the group.</p> <p>Outside, the children could sketch any animals that they might find and label or talk about the different body parts. Back as a class, children could take it turns to talk about one of their animals found without naming it, so that the other children have to work out which animal it could be.</p> <p>Recording Make short videos of children providing information about the features of different animals – in the style of a natural history presenter.</p> <p>Animals mix-up. Provide small groups of children with pictures of parts of different animals. They can try to create new animals with these parts. Ask the children to name the different body parts and possibly explain how these parts are beneficial for this new animal.</p> | <ul style="list-style-type: none"> • Pictures of various British animals • Laminated pictures of different animals parts/structures. |
| <p>To be able to describe and compare the structure of a variety of common animals.</p> <p>To be able to record data in simple ways (chart).</p> | <p>Identifying and naming - Describing the structures of pets Have a day when the children can bring in suitable pets. To supplement this, make sure you have some pictures of pets that other people keep. The children can then try to describe each of these pets.</p> <p>Recording Children could draw some of the animals. With support, they could label the main features of the different animals. Provide children with a chart. They can fill in the names of the animals (or draw pictures of them) and place a cross or tick under each of the headings. The children could then play a game when one of them chooses an animal and the other children have to work out which one it is by asking questions that relate to the features mentioned on the chart..</p> | <ul style="list-style-type: none"> • Pets • Photos of pets |

| Learning Expectations | Possible Tasks | | | | | | | | Resources |
|-----------------------|---|-------------------|----------------|-------------------|--|------------------|------------------|--------------------|-----------|
| | Animal | Has 4 legs | Has fur | Has a tail | Has eyes on the front of its head | Has claws | Has teeth | Has a shell | |
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| | <p>The children could end this unit of study by have a web link with the 'alien'. They could use this as an opportunity to present what they know about animals, as well as ask questions about the animals on the alien's planet. The conversation might finish with the alien thanking the children for their help, and that it is going to be picked up by another spacecraft so that it can return to its planet.</p> | | | | | | | | |



Year 1 – Animals including humans

Assessing children’s knowledge and understanding of the nature, processes and methods of science

| Learning expectation | Group 1 (lower ability) | Group 2 (average ability) | Group 3 (higher ability) | Comments |
|--|----------------------------|------------------------------|-----------------------------|----------|
| To be able to identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates. | | | | |
| To be able identify and name a variety of common animals that are carnivores, herbivores and omnivores. | | | | |
| To be able to describe and compare the structure of a variety of common animals. | | | | |
| To be able to identify, name draw and label the basic parts of the human body. | | | | |
| To know which part of the body is associated | | | | |

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|--|--|--|--|--|
| with each sense. | | | | |
| To be able to record data in a table. | | | | |
| To be able to observe closely, using simple equipment. | | | | |
| To be able to record data in simple ways (Venn diagram). | | | | |
| To be able to record data in simple ways (chart). | | | | |
| To be able to sort and group animals with some help (non-statutory). | | | | |

| Children <u>below</u> the learning expectations | Children <u>above</u> the learning expectations |
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