Hamerton Zoo Park – Education

Animal Workshop Sessions

Introduction

If you are bringing a group on a visit to Hamerton Zoo Park, we offer additional sessions in our classroom – the “Explorers’ Cabin” to enhance the learning experience. The majority of such sessions will be hands-on and interactive, involving the use of various bio-artefacts, such as skins, feathers, antlers, eggs, plus live animals appropriate to any particular topic and age group.

The size of the cabin limits us to a maximum of 30 pupils per session, so, for larger groups we will run multiple sessions. Please contact us to discuss time slots and availability. Sessions last around 30 - 35 minutes. Please also note that if we are running multiple sessions, we may use different live animals. (Animal welfare is always paramount)

We want every pupil to enjoy the experience and gain from it, irrespective of age, ability, gender, ethnicity or background. We want to work with teachers, SENCOs, and group leaders to ensure that our sessions are fully inclusive, and match learner needs.

You will find below some detail of the lesson plans for some of our suggested topics, however each session will be adapted to the age, ability and needs of the group. When booking, you can choose one of these topics, or ask for a session specifically for your group. For example, a particular animal, or continent or whatever project you are working on. Please let us know if you have specific objectives, and we will adapt our session to suit. If the aim is purely enjoyment, that is fine too!

Most sessions start with some questions to the group, not only to try to get everyone involved, but also to indicate the level of prior knowledge.

We aim to give the children ample opportunity, both during and at the end of the session, to ask their own questions, relating to the workshop topic or the zoo’s collection or animals in general.

Workshop session details.

These lesson plans will suit children from Reception to year 6. For students at secondary and higher levels, sessions will be bespoke. Please contact the Education Officer at time of booking.

Detailed curriculum references in these plans relate to the 2014 National Curriculum for Primary Science. Most sessions will also encompass elements from the curriculum in other subject areas, particularly Personal, Social, Health and Economic, Geography, Numeracy and Literacy.

Variety of Life

This is a general “show-and-tell” session, which can be adapted to any age and ability group, but recommended for Reception and KS 1 to lower KS2. We will show and have pupils touch or hold a variety of different bio-artefacts including mammal and reptile skins, feathers, antlers, eggs and at least two quite different live animals.

The session involves asking pupils lots of questions, and encouraging them to ask their own questions.

Objectives: (depending on level)

- To understand that animals have different features.
- To be able to name some examples of different animals.
- To encourage observation of similarities and differences by sight and touch.
- To introduce the idea of sorting into sets, according to physical characteristics.
- To introduce vocabulary such as Mammal, Reptile, Invertebrate, Herbivore, Carnivore, Omnivore.
- To link physical adaptations to how an animal survives in its particular habitat.

Curriculum Links:

EYFS:

- Understanding the world:
- Communication and language *development*

KS1

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds 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 (fish, Amphibians, reptiles, birds and mammals, including pets)

KS 2

- 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 other animals have skeletons and muscles for support, protection and movement.
- Recognise that living things can be grouped in a variety of ways.

Fur, Feathers and Scales

This session can be adapted to suit any age group from reception to year 6. We will talk about some of the animals that pupils have seen or will see in the zoo, usually beginning with examples they know of “furry animals”. Some different animal furs will be available to pass round to touch. We introduce the term “Mammal”. We then talk about feathery animals- Birds – and scaly animals – Reptiles, again by asking children to think of some examples.

Specimens will be available on 3 separate tables, and class will split into three to handle the artefacts on each table in turn. Time permitting, with older groups, we then have some extra artefacts and plastic models to sort onto the correct table.

Live animal examples from at least 2 of the 3 groups are then brought in for the children to see and touch. (Animals such as snake, tortoise or lizard, and owl or hedgehog)

Objectives:

- To encourage observation of similarities and differences between animal groups.
- To understand that animals can be grouped according to observable characteristics.
- To use the vocabulary Mammal, Bird, Reptile (and possibly Fish, Amphibian, Invertebrate if pupils raise them)
- To name some examples of animals from each group.
- To correctly identify some Hamerton Zoo species as reptile, mammal or bird.

Curriculum links:

EYFS:

- Understanding the world:
- Communication and language development

KS 1

Working scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

Animals, including humans

Identify and name a variety of common animals including fish, amphibians, reptiles, birds 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 (fish, Amphibians, reptiles, birds and mammals, including pets)

KS 2

- Identify that humans and some other animals have skeletons and muscles for support, protection and movement.
- Recognise that living things can be grouped in a variety of ways.

- Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.
- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.
- Give reasons for classifying plants and animals based on specific characteristics.

Colour and Camouflage

Beginning with questions to find out the children's level of prior knowledge, we talk about why blending into the background is useful for hunters and prey animals.

We have a quick-look picture chart to demonstrate how effective camouflage can be.

Children are than asked to walk around a series of pictures on the walls of camouflaged animals, followed by picture show on screen of the same pictures to talk about each animal, and how its camouflage works.

One or two live animal examples are then brought in to show/handle.

Objectives:

To introduce "camouflage" into the vocabulary.

To observe different colours and patterns in animal skins, and understand that there is a reason for these colours and patterns.

To understand that there is a difference between use of colour for camouflage, or display.

To relate the camouflage of the animal to the habitat in which it lives.

Curriculum links:

EYFS:

Understanding the world:

Communication and language development

Key Stage 1

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Identify and name a variety of common animals including fish, amphibians, reptiles, birds 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 (fish, Amphibians, reptiles, birds and mammals, including pets)
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

Night and Day – Nocturnal animals

In this session we use pictures on screen of some of the nocturnal animals in the Hamerton collection and talk about how and why they are adapted to being active in the dark. (Including hunting, predation, defence and senses)

A collection of miniature pictures are then handed out for children to identify day or night time animals. This will bring in discussion of animals which are nocturnal, diurnal and crepuscular.

Live examples may include invertebrates, our tame owl, or pygmy hedgehog.

Objectives:

Recognise some animals that are active at night.

Understand how nocturnal animals have adapted senses.

Awareness that not all animals are clearly nocturnal or diurnal.

Curriculum Links:

EYFS:

Understanding the world:

Communication and language development

KS 1

Working scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

Animals, including humans

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores

Adaptations to Habitat Workshop

We begin with image and sound effects from a tropical rainforest habitat, and by describing conditions encourage the children to imagine themselves there. Then children suggest examples of animals that they might find there and we talk about some of them, thinking of adaptations such as camouflage, movement, lifestyle, sounds. Live examples of forest invertebrates will then be taken round for children to see and touch.

Moving on to other habitats, we again imagine ourselves in those conditions before thinking of some animal examples. Bio artefacts and live examples are used as appropriate.

Objectives:

Pupils will understand that different geographical areas of the world have different climate and ecology.

Pupils will be able to name some examples of animals adapted to a particular habitat.

Pupils will see that particular features of animals relate specifically to the habitat they occupy.

Curriculum references:

Key stage 1

Working scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

Living things and their habitats

- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including microhabitats

Key Stage 2

Animals, including humans

- 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

Living things and their habitats

- Recognise that living things can be grouped in a variety of ways
- Recognise that environments can change and that this can sometimes pose dangers to living things.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.

Animals' Senses

In this session we look at our own 5 senses, then consider various animals and relate their senses to our own. We use pictures to illustrate how some animals have one or more particularly well developed senses. We consider how certain senses differ in predators and prey animals, for example cheetah versus zebra eyesight.

We have some blind Cave Fish which children can see reacting to the presence of food. Other live examples may include one or more of snakes, snails, owl or hedgehog.

Objectives:

To consolidate prior learning and awareness of human senses.

To relate animal senses to our own.

To be aware that some animals have much more highly attuned senses than humans.

To understand that predators may use their senses differently from their prey.

Curriculum links:

EYFS:

Understanding the world:

Communication and language development

KS 1

Working scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

Animals, including humans

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds 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 (fish, Amphibians, reptiles, birds and mammals, including pets)
- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.