

Key Stage 1 & Key Stage 2

## REPTILES



### General points about this talk:

Talks generally last 30-40 minutes and take place in one of our classrooms.

Talks are generally lead by the keepers on this section so they may vary slightly between different staff members. We will adapt this talk according to the age of the children and as such it is suitable for pupils from KS1 right through to GCSE level.

This talk will involve hands-on contact with at least three reptiles so please discuss with your group how to touch animals and the importance of good hygiene.

We try to keep the numbers below 20 for most of our talks.

The meeting point for this talk will be at the Education Meeting Point

### What we will cover in the talk:

Reptiles are a hugely varied group that started to evolve around 330 million years ago whilst dinosaurs still roamed the Earth. There are over 10,000 species and this talk will start with a look at the different types of reptiles including; snakes, lizards, alligators, crocodiles, tortoises and turtles. During this talk, the keeper will bring out three reptiles, which usually include a lizard, a tortoise and a snake and the children will get the chance to touch and maybe even hold them. They will discuss how they all have the same essential characteristics including the fact they are cold-blooded, are covered in scales and breathe air, with most laying eggs.

Reptiles are found in a wide variety of habitats from desert to forests, mountains to oceans and the keeper will discuss the adaptations that each animal has in order to live there. They will talk about what the animals eat and may also take a simple look at their life cycles. Finally, we may look at ways that they protect themselves through camouflage, colouration and even venom.

### Animals we may include:

We cannot guarantee which animals you will see during your talk but you will visit at least three of the following:

Royal python	Hermann's tortoise
Bearded dragon	Red footed tortoise



## Areas of the new National Curriculum that this talk addresses:

### Year 1

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).

**Non-statutory guidance:** They should understand how to take care of animals taken from their local environment and the need to return them safely after study. Pupils should become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets. Pupils should have plenty of opportunities to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth). 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.

### Year 2

Living things and their habitats:

- explore and compare the differences between things that are living, dead, and things that have never been alive
- 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
- describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Animals, including humans:

- 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).

**Non-statutory guidance:** Pupils should be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. They



should raise and answer questions that help them to become familiar with the life processes that are common to all living things. Pupils should be introduced to the terms 'habitat' (a natural environment or home of a variety of plants and animals). They should raise and answer questions about the local environment that help them to identify and study a variety of plants and animals within their habitat and observe how living things depend on each other, for example, plants serving as a source of food and shelter for animals. Pupils should compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest.

They could construct a simple food chain that includes humans (eg, grass, cow, human). They could describe the conditions in different habitats and microhabitats (under log, on stony path, under bushes); and find out how the conditions affect the number and type(s) of plants and animals that live there.

Pupils should be introduced to the basic needs of animals for survival. They should also be introduced to the processes of reproduction and growth in animals. Pupils might work scientifically by: observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy.

### Year 3

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
- identify that humans and some other animals have skeletons and muscles for support, protection and movement.

**Non-statutory guidance:** Pupils should continue to learn about the importance of nutrition and should be introduced to the main body parts associated with the skeleton and muscles, finding out how different parts of the body have special functions. They might compare and contrast the diets of different animals (including their pets) and decide ways of grouping them according to what they eat.

### Year 4

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.



Animals, including humans:

- construct and interpret a variety of food chains, identifying producers, predators and prey.

**Non-statutory guidance:** Pupils could begin to put vertebrate animals into groups, for example: fish, amphibians, reptiles, birds, and mammals; and invertebrates into snails and slugs, worms, spiders, and insects. Pupils should explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population and development, litter or deforestation.

Pupils might work scientifically by: comparing the teeth of carnivores and herbivores and suggesting reasons for differences.

## Year 5

Living things and their habitats:

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

**Non statutory guidance:** Pupils might work scientifically by: observing and comparing the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times), asking pertinent questions and suggesting reasons for similarities and differences.

## Year 6

Living things and their habitats:

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Animals, including humans:

- describe the ways in which nutrients and water are transported within animals, including humans.

Evolution and inheritance:

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago



- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

**Non-statutory guidance:** Pupils should build on their learning about grouping living things in year 4 by looking at the classification system in more detail.

Pupils might work scientifically by: observing and raising questions about local animals and how they are adapted to their environment; comparing how some living things are adapted to survive in extreme conditions, for example, cactuses, penguins and camels. They might analyse the advantages and disadvantages of specific adaptations, such as being on 2 feet rather than 4, having a long or a short beak, having gills or lungs, tendrils on climbing plants, brightly coloured and scented flowers.

English overview and objectives: All of our topics can be used as a springboard to a number of literacy activities. Our talks specifically highlight spoken word objectives such as listening and responding to adults and peers; asking relevant questions to extend their understanding and knowledge; articulate and justify answers; maintain attention and participate actively, speak audibly and fluently, participate in discussions and many others. It can also be used as an introduction to a wide range of comprehensions, word reading and writing-transcription exercises.

