

## Year 6 – Adaptation and evolution programme outline – all day visit

### PROVISIONAL PROGRAMME

#### Introduction/Comfort break

- Welcome and introductions
- Health and safety and orientation
- Plan for the day
- Introduction to topic

#### Evolution – the fossil record

- A brief look at the fossil record with examples of real fossils
- A comparison of fossils and similar animals today
- Mechanisms of evolution – adaptation, survival of the fittest, maladaptation
- Animal adaptation

#### Plant adaptations

- Adaptations of the reserve's trees and plants
- Adaptations in seed dispersal

#### Insect adaptations

- Meadow habitat – what adaptations would be useful in this habitat.
- Sweep netting in the meadow to examine adaptation of insects

#### Lunch

#### Pond dipping

- How to pond dip, health and safety
- Pond dipping – collecting specimens

#### Identification and adaptations

- Identification and classification using simple keys
- Record species found
- Adaptation in pond animals

#### Plenary – Design a creature

In groups of 5 children are given a design brief to build a new creature and explain it's adaptations to the rest of the class.

**THE ABOVE PROGRAMME IS INTENDED TO SUPPORT THE FOLLOWING LEARNING OUTCOMES/INTENTIONS**

**Continued overleaf**

**Most children will....**

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

**Some children will not have progressed so much and will...**

- understand that animals are adapted to their habitats
- be able to name some adaptations
- recognise that adaptation is a cause of evolution

**Some children will have progressed further and will also...**

- be able to describe the advantages and disadvantages of different adaptations
- be able to name animals which have reached the end of their evolutionary chain

**Literacy**

- words related to life processes *eg adaptation, evolution*
- words relating to adaptation and evolution *eg habitat, condition, organism, fossil, survival*
- words which have a different meaning in other contexts *eg change, key, condition*
- expressions making generalisations and comparisons

**Numeracy**

- using keys
- sorting

**Citizenship**

Know that animals have needs just like humans, and that these needs include food, water, companionship, a suitable place to live, being looked after by a vet if they are ill, and the freedom to behave naturally.

They begin to appreciate the ways in which humans have a responsibility towards all animals – wild animals, farm animals and pets. Understand the role of voluntary organisations/charities.

They know that we all have a responsibility towards animals, and that there are laws to protect them. They recognise that different pets have different needs, and that not everyone makes a suitable pet owner. They appreciate that there are a large number of animal welfare issues, and understand one in some depth. They contribute ideas and opinions to class discussions

**SEAL / ECM**

- Every individual to have a sense of achievement and enjoyment
- Each pupil to make a positive contribution to the day
- Increased confidence in ability and knowledge
- Every child to explore and discover in a safe and encouraging environment
- Every individual to be aware of how the environment and their actions contribute to their health and well-being
- Activities which vary in delivery for example individual and group work, discussions, thought and reflection time, games

**Inclusion**

- Worksheets and activities will be differentiated to accommodate individual learning needs
- Where possible all children will have access to the same opportunities regardless of their abilities.