



Claremont Primary and Nursery School Science Curriculum

Year 2: Amazing Animals

NC link: Animals including humans

Objectives:

- Identify and describe the characteristics of a mammal and know what it needs to survive
- Identify and describe the characteristics of a bird and know what it needs to survive
- Identify and describe the characteristics of a fish and know what it needs to survive
- Identify and describe the characteristics of an amphibian and know what it needs to survive
- Identify and describe the characteristics of a reptile and know what it needs to survive
- Identify and describe the characteristics of a human and know what it needs to survive

Substantive Knowledge:

- 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)

Disciplinary knowledge (Think like a scientist):

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

Key Vocabulary:

Mammal, Fur, Carnivore, Herbivore, Omnivore, Bird, Feathers, Beak, Insect, Wing, Fish, Scales, Gills, Fin, Amphibian, Webbed feet, Frog, Toad, Newt, Reptile, Survival, Water, Air, Food, Shelter, Adult, Baby,



Claremont Primary and Nursery School Science Curriculum

Year 2: How do we take care of ourselves?

NC link: Animals including humans

Objectives:

- Explain why exercise is important
- Explain the importance of a healthy diet
- Explain the importance of good hygiene
- Explain why it is important to have healthy teeth

Substantive Knowledge:

- describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Disciplinary knowledge (Think like a scientist):

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

Key Vocabulary:

Heart, Exercise, Physical Health, Mental Health, Healthy Diet, Unhealthy diet, Meat, Vegetable, Fruit, Sugar, Germs, Hygiene, Doctor, Disease, Teethm Plaque, Filling, Gums



Claremont Primary and Nursery School Science Curriculum

Year 2: Which material shall I use?

NC link: Everyday Materials

Objectives:

- Explore different materials
- Explain the links between paper, cardboard and wood
- Identify and explain the difference between brick and rock
- Explain the properties of glass and plastic
- Recognise that different metals have different properties and identify suitable metal for an object
- Explain why certain fabrics are used for certain items of clothing
- Explain why the same objects are made from different materials
- Identify which materials can be bent, stretched, squashed and twisted
- Find the best material to use for an umbrella

Substantive Knowledge:

- identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Disciplinary knowledge (Think like a scientist):

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

Key Vocabulary:

Material, natural material, human-made material, Recycle, Smooth, Rough, Flexible, Rigid, Rock, Stone, Pebble, Brick, Brittle, Flexible, Transparent, Translucent, Opaque, Hard, Soft, Shiny, Dull, Fabric, Tough, Lightweight, Brittle, Bend, Squash, Twist, Stretch, Waterproof, Breakable,



Claremont Primary and Nursery School Science Curriculum

Year 2: How does your garden grow? (SPRING)

NC link: Plants

Objectives:

- Explore a wide range of plants
- Identify the different parts of common plants and trees
- Explain what plants need to grow
- Investigate the difference of light and dark on a growing plant

Substantive Knowledge:

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Disciplinary knowledge (Think like a scientist):

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

Key Vocabulary:

Plant, Flower, Fruit, Vegetable, Herb, Blossom, Stem, Leaf, Trunk, Branch, Seed, Plant, Sunlight, Compost,



Claremont Primary and Nursery School Science Curriculum

Year 2: Where do animals live and why do they choose to live there?

NC link: Living things and their habitats

Objectives:

- Explore habitats in our local area
- Explain the features of a polar habitat and identify animal and plants that live there
- Explain the features of a desert habitat and identify animals and plants that live there
- Explain the features of an ocean habitat and identify animals and plants that live there
- Explain the features of a woodland habitat and identify animals and plants that live there
- Explain what a microhabitat is and who lives there
- Explain the link between a habitat and diet
- Explain how a food chain works
- Compare things that are living, dead and never alive

Substantive Knowledge:

- 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 micro-habitats
- 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.

Disciplinary knowledge (Think like a scientist):

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

Key Vocabulary:

Mammal, bird, Deciduous tree, Evergreen tree, Habitat, Carnivore, Herbivore, Omnivore, Arctic plants, Animals, Hibernate, Reptile, Cactus, Desert, Rainfall, Ocean, Fish, Seagrass, Woodland, Fern, Moss, Microhabitat, Insect, Spider, Snail, Diet, Food chain, Living, Dead, Never alive,



Claremont Primary and Nursery School Science Curriculum

Year 2: How does your garden grow? (SUMMER)

NC link: Plants

Objectives:

- Explain the difference between a bulb and a seed
- Explain what plants need to grow
- Investigate the difference of temperature on a growing plant

Substantive Knowledge:

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Disciplinary knowledge (Think like a scientist):

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

Key Vocabulary:

Plant, Bulb, Seed, Shoot, Root, Sunlight, Temperature, Growth, Compost, Measurement, Observe



Claremont Primary and Nursery School Science Curriculum

Year 2: Circle of Life

NC link: Animals including humans

Objectives:

- Identify animals and their offspring
- Describe and explain the life cycle of a human
- Describe and explain the life cycle of different mammals
- Describe and explain the life cycle of amphibians
- Describe and explain the life cycle of a butterfly
- Explain similarities and differences between the different life cycles of animals

Substantive Knowledge:

- Notice that animals, including humans, have offspring which grow into adults.

Disciplinary knowledge (Think like a scientist):

- Identifying and classifying.
- Asking simple questions and recognising that they can be answered in different ways.
- Record and communicate their findings in a range of ways and begin to use simple scientific language
- Observing closely, using simple equipment
- Using their observations and ideas to suggest answers to questions.

Key Vocabulary:

Offspring, Growth, egg, Adult, Parent, Baby, Child, Teenager, Adolescent, Adult, Life cycle, Mammal, Amphibian, Frogspawn, Tadpole, Froglet, Caterpillar, Pupa, Butterfly, Compare



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Year 2: Wonderful Wildlife

NC link: Animals including humans

Objectives:

- Explain what wildlife does for us
- Explain what we can do to help wildlife

Substantive Knowledge:

Disciplinary knowledge (Think like a scientist):

- Asking simple questions and recognising that they can be answered in different ways.
- Using their observations and ideas to suggest answers to questions.

Key Vocabulary:

Food chain, wildlife, habitat, crops, insects, nature, local