

## Learning intentions:

- To understand that water runs downhill to the sea
- To appreciate that the shape of the hills and where they are placed affects where the rainwater travels
- To begin to understand what is meant by a catchment basin
- To understand what happens to water after it goes down a stormwater drain
- To understand what happens to water after it goes down wastewater pipes
- To understand that there are small insects living in the rivers, and small and larger animals living in the seas
- To identify and describe things that pollute our stormwater drains
- To understand that if the wrong things are put down drains they can hurt the animals in the rivers and seas
- To understand that outside drains should only drain rain

## Achievement objectives

### Nature of Science

#### LEVELS 1 AND 2

##### *Understanding about science*

- Appreciate that scientists ask questions about our world that lead to investigations and that open-mindedness is important because there may be more than one explanation.

##### *Investigating in science*

- Extend their experiences and personal explanations of the natural world through exploration, play, asking questions, and discussing simple models.

##### *Communicating in science*

- Build their language and develop their understandings of the many ways the natural world can be represented.

##### *Participating and contributing*

- Explore and act on issues and questions that link their science learning to their daily living.

#### LEVELS 3 AND 4

##### *Understanding about science*

- Appreciate that science is a way of explaining the world and that science knowledge changes over time.
- Identify ways in which scientists work together and provide evidence to support their ideas.

##### *Investigating in science*

- Build on prior experiences, working together to share and examine their own and others' knowledge.
- Ask questions, find evidence, explore simple models and carry out appropriate investigations to develop simple explanations.

##### *Communicating in science*

- Begin to use a range of scientific symbols, conventions and vocabulary.

##### *Participating and contributing*

- Use their growing science knowledge when considering issues of concern to them.
- Explore various aspects of an issue and make decisions about possible actions.

## Living World

### LEVELS 1 AND 2

#### *Life processes*

- Recognise that all living things have certain requirements so they can stay alive.

#### *Ecology*

- Recognise that living things are suited to their particular habitat.

#### *Evolution*

- Recognise that there are lots of different living things in the world and that they can be grouped in different ways.

### LEVELS 3 AND 4

#### *Life processes*

- Recognise that there are life processes common to all living things and that these occur in different ways.

#### *Ecology*

- Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

#### *Evolution*

- Begin to group plants, animals and other living things into science-based classifications.

## Planet Earth and beyond

### LEVELS 1 AND 2

#### *Earth systems*

- Explore and describe natural features and resources.

#### *Interacting systems*

- Describe how natural features are changed and resources affected by natural events and human actions.

### LEVELS 3 AND 4

#### *Earth systems*

- Develop an understanding that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.

#### *Interacting systems*

- Investigate the water cycle and its effect on climate, landforms and life.

## Physical World

### LEVELS 1 AND 2

#### *Physical inquiry and physical concepts*

- Explore everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat.
- Seek and describe simple patterns in physical phenomena.

### LEVELS 3 AND 4

#### *Physical inquiry and physics concepts*

- Explore, describe, and represent patterns and trends for everyday examples of physical phenomena such as movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe the effects of forces (contact and non-contact) on the motion of objects; identify and describe everyday examples of sources of energy, forms of energy, and energy transformations