

## Learning intentions:

- To construct a water filter
- To experiment with layers of filtering material
- To choose the most effective filtering material
- To explain their choices for the type of filtering material chosen
- To understand that just because the water is clear it is not necessarily safe to drink

## 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.

### Material World

#### LEVELS 1 AND 2

##### *Chemistry and society*

- Find out about the uses of common materials and relate these to their observed properties.

#### LEVELS 3 AND 4

##### *Chemistry and society*

- Relate the observed, characteristic chemical and physical properties of a range of different materials to technological uses and natural processes.

## Living World

### LEVELS 1 AND 2

#### *Life Processes*

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

### LEVELS 3 AND 4

#### *Life Processes*

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

## 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.