

## Learning intentions:

- To understand what wastewater is
- To explain how wastewater was treated many years ago
- To understand what happens to water after it goes down wastewater pipes
- To have some understanding of how liquids and solids are treated at a wastewater plant
- To demonstrate that substances and materials have different densities

## Achievement objectives

### Nature of Science

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 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 3 AND 4

#### *Properties and changes of matter*

- Group materials in different ways, based on the observations and measurements of the characteristic chemical and physical properties of a range of different materials.
- Compare chemical and physical changes.

#### *Chemistry and society*

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

### Physical World

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.