

Age 7-8

(A) *Life and living things*

1. Life processes

The life processes common to humans and animals include nutrition, movement, growth and reproduction; the life processes common to plants include growth, nutrition and reproduction.

What keeps living things alive? Identify major life-maintaining organs:

- in humans: brain, heart, lungs, stomach, intestines, liver and kidneys in humans
- in plants: the root, stem, leaves and flower of a flowering plant

2. Humans: *Growth and Nutrition*

- the need for food and water
- Identify the main kinds of teeth (incisors, canines, pre-molars and molars) and their functions; the effect of bacteria (plaque), fluoride and diet on dental decay; the importance of dental care and hygiene

3. Green plants: *Growth and nutrition*

- the effect of variation in light, temperature and water on plant growth

(B) *materials, their properties and the earth*

1. Grouping and classifying materials

Compare everyday materials and objects on the basis of their material properties, including hardness, strength, flexibility and magnetic behaviour. Relate these properties to everyday uses of the materials

2. Changing materials

Describe changes that occur when materials are mixed [*e.g. adding salt to water*]

Describe changes that occur when materials [*e.g. water, clay, dough*] are heated or cooled (know that *temperature* is a measure of how hot or cold things are)

3. Separating mixtures of materials

Separate solid particles of different sizes by sieving [*e.g. those in soil*]

(c) *Energy, forces and space*

1. Forces and motion

Understand different types of force: pushing, pulling, changing shape

2. Light and sound

Light and shadow

Understand: that light travels from a source and that a luminous source gives out light.
that light travels in straight lines. Indicate a ray of light as straight line with arrow.
that light cannot pass through some materials, and how this leads to shadows.
the terms opaque, translucent and transparent and how shadows are formed by opaque objects

Investigate the effect of different distances between source, object and screen.

Sounds

Sounds travel away from sources and get fainter as they do so

3. The Earth and beyond

The Sun, Earth and Moon: Periodic changes

Study how the position of the Sun appears to change during the day, and how shadows change as this happens.