

GRADE 4

Course Outline 2019-2020 Science

Term 1

Animals incl. humans

- Describe the changes as humans develop from birth to old age.
- Name the different stages of lifecycle of humans.
- Name the different stages of lifecycle of plants.

Earth and Space

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.
- Describe the movement of the Moon relative to the Earth.
- Use the idea of the Earth's rotation to explain day and night.
- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.

Term 2

Properties of changing materials

- Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Forces

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- Identify the effects of air resistance, water resistance and friction that act between moving surfaces.
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Term 3

Light

- Recognise that light appears to travel in straight lines.
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Living things and habitats

- Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.

Assessments:

The final grade for the course will be calculated based on multiple forms of formal and informal assessments including CAT 4 and GL Assessments, these will be used to gain knowledge about a student's level of understanding. Assessments will be in the form of End of Unit Evaluations, End of Unit Project, Lab Report and Formal Assessment.

All formal test dates will be posted on the communicator.

