

Gr 5 Natural Science

Term 1: Life and Living Things

- Life processes:

Senses, Respiration, Reproduction, Movement, Growth, Excretion, Nutrition

Plants:

- Why did God make plants?
- From seed to plant
- Parts of a cotyledon: seed coat, hypocotyl, radicle
- Different root systems: taproot, taproot
- How does a plant make food?
- Photosynthesis
- How a plant breathes - experiments
- Food chains: producers, consumers, decomposers, herbivores, carnivores
- Parts of a flower: male and female parts
- Life cycle: pollination, fertilization, germination
- Reproduction without seeds: rhizomes, runners, cuttings, tubers, bulbs

Soil:

- Important role that soil plays on Earth
- Base layers
- Tree growth: cross-section of a tree trunk, growth rings

Animals:

- Functions of a skeleton
- 2 types of skeletons
- Vertebrates and Invertebrates
- Types of bones in the human body

Term 2: Matter and Material

- Phases: Solid, Liquid, Gas
- Properties of: Solid, Liquid, Gas
- Phase change – experiments
- Physical and chemical changes
- Experiment: grow crystals
- Metals and non-metals
- Properties of materials - experiments
- Properties and uses of metals
- Properties and uses of non-metals

Term 3: Energy and energy transfer

- What does a fuel do (uses)
- Combustion of fuels – experiments
- Dangers of fire
- Layers of the atmosphere
- Renewable energy – examples
- Non-renewable energy – examples
- Global warming
- 2 Main types of energy: kinetic and potential

Hydro electric energy

- Experiments
- The power of water
- Advantages and disadvantages

Wind energy

- Why does air move?
- Wind farms and turbines

Mechanisms

- Load, Strength, fulcrum
- Mechanical advantage
- Simple machines: experiments

Term 4: The Earth and beyond

Our Solar System:

- Our solar system - planets
- The Earth: geography
- Earth's composition
- Day and night
- Moon landing

Types of crust on the earth's crust

- Igneous rocks - experiments
- Sedimentary rocks - experiments
- Metamorphic rocks - experiments