

## Gr 6 Natural Science

### **TERM 1: LIFE AND LIVING THINGS**

#### System in the body

- Bone systems: - exoskeleton, endoskeleton, hydrostatic skeleton
  - vertebrates / invertebrates
  - human skeleton: functions of different bones
- Joints: Ball and socket, hinge, pivot joint
- Muscular system: - Voluntary muscles
  - Involuntary muscles
- Cardiovascular system: Heart and cardiac cycle
- Digestive system: Mouth, esophagus, stomach, small intestine, large intestine
- Respiratory system: - nasal cavity, bronchial tubes
  - inhale and exhale
- Interesting digestive systems: birds and cattle
- Eat healthy: - Food groups – healthy diet
  - Water its importance
  - Clean water: filtration
- Mechanisms: - Mechanical advantage
  - Force, fulcrum and load
  - Simple machines

### **TERM 2: MATTER AND MATERIAL**

- 3 Phases: properties of gas / liquid / solid
- Phase change: Physical and Chemical changes
- Mixtures: examples and properties
- Filtration
- Solution / Solvent
- Saturated and unsaturated solutions
- Separation methods: - Evaporation
  - Distillation
- Speed at which something dissolves: experiments

### **TERM 3: ENERGY TRANSFER AND SYSTEMS**

#### Electricity:

- Wiring of power plugs
- Electrical conductors and non-conductors
- Dangers of electricity: safety measures
- Electrical circuits: - Cell and battery  
- Simple circuits
- How is electricity saved?
- Electrical symbols
- Open and closed circuits
- 2 Laws of energy

#### Static electricity

- Protons, neutrons, electrons
- Positive and negative charge
- Static electricity in nature

#### Magnetism:

- North Pole, South Pole
- Properties of a magnet
- Magnetic field
- Magnetic and non-magnetic material
- Permanent and temporary magnets
- Electromagnets
- What are magnets used for?

### **TERM 4: OUR SOLAR SYSTEM**

- Importance of sun:
  - Sunspots, solar flares
- Planets
- Earth
- Stars
- Constellations
- Earth's moon:
  - Visit to the moon
  - Surface of the moon
  - Moon phases