

Curriculum Content

Theme I: Measurements and Units (1st Quarter)

Lessons:

- Numbers and units
- A system of units
- Measuring length and time
- Volume and density
- Measuring volume and density
- More about mass and density

Theme II: Forces and Motion (2nd Quarter)

Lessons:

- Speed, velocity, and acceleration
- Motion graphs
- Recording motion
- Free fall
- More motion graphs
- Forces in balance
- Force, mass, and acceleration
- Friction and braking
- Force, weight, and gravity
- Action and reaction
- More about vectors
- Moving in circles

Theme III: Forces and Pressure (3rd Quarter)**Lessons:**

- Forces and turning effects
- Centre of mass
- More about moments
- Stretching and compressing
- Pressure
- Pressure in liquids
- Hydraulic systems
- Pressure from the air
- Gas pressure and volume
- Pressure problems

Theme IV: Forces and Energy (4th Quarter)**Lessons:**

- Work and energy
- Energy transformation
- Calculating PE and KE
- Efficiency and power
- Energy for electricity (1)
- Energy for electricity (2)
- Energy resources
- How the world gets its energy

