

## TERM 1

<b>DURATION</b>	<b>CHAPTER</b>	<b>TOPICS</b>	<b>PRACTICALS</b>
<b>WEEK 1 - 4</b>	<b>10.1 – 10.4</b>	<b>HEAT</b> <ul style="list-style-type: none"><li>▪ Nature of Heat</li><li>▪ Transfer of Heat (conduction, convection and radiation)</li><li>▪ Heat and temperature (thermometers)</li><li>▪ Thermal measurements (specific heat capacity, specific latent heat)</li></ul>	Demos: Conduction, convection (pg 159) Expansion of solids, liquids and gases (pg 164)  Cooling curve of naphthalene Specific heat capacity of solids methods of mixtures
<b>WEEK 5 - 8</b>	<b>1.1 – 2.2</b>	<b>LIGHT</b> <ul style="list-style-type: none"><li>▪ Light rays and shadows (solar eclipse and lunar eclipse)</li><li>▪ Reflection (laws of reflection, plane mirrors, images and instruments)</li><li>▪ Refraction (Snell's law, real and apparent depth, critical angle and instruments)</li><li>▪ Colour (deviation and dispersion, spectrum, rainbow)</li></ul>	Laws of reflection Laws of Refraction
<b>WEEK 9 -10</b>	<b>3.1 – 3.3</b>	<b>LENSES</b> <ul style="list-style-type: none"><li>▪ Converging and diverging lens</li><li>▪ Principal axis, principal focus, focal length, focal plane, magnification)</li><li>▪ Images (real and virtual images, magnification)</li><li>▪ Ray diagrams</li><li>▪ Eye and optical instruments</li></ul>	Finding the focal length of a converging lens
<b>WEEK 11 - 12</b>	<b>4.1 – 4.3</b>	<b>MEASURING</b> <ul style="list-style-type: none"><li>▪ Length, area and volume</li><li>▪ Mass, density and relative density</li><li>▪ Time (simple pendulum, ticker timer)</li></ul>	Density – solid, liquid Simple pendulum Internal diameter of test tube/drinking straw
<b>WEEK 12 - 14</b>	<b>5.1 – 5.3</b>	<b>FORCES</b> <ul style="list-style-type: none"><li>▪ Naming forces, measuring forces, adding forces (parallelogram law, linear)</li><li>▪ Vector and scalar</li><li>▪ Turning forces (moments, couples)</li><li>▪ Centre of gravity</li><li>▪ Stability (neutral, unstable, stable)</li></ul>	Centre of gravity of an irregular shaped object Moments

**TERM 2**

<b>DURATION</b>	<b>CHAPTER</b>	<b>TOPICS</b>	<b>PRACTICALS</b>
<b>WEEK 1 - 3</b>	<b>6.1 – 6.3</b>	<b>PRESSURE</b> <ul style="list-style-type: none"><li>▪ Pressure depending on force and area (hydraulic machine)</li><li>▪ Pressure in a liquid</li><li>▪ Measuring pressure (u-tube manometer and other instruments)</li><li>▪ Archimedes principle and upthrust</li></ul>	
<b>WEEK 4 - 6</b>	<b>7.1 – 7.3</b>	<b>MACHINES</b> <ul style="list-style-type: none"><li>▪ Work, energy and power</li><li>▪ Efficiency and friction</li><li>▪ Levers, pulley</li></ul>	
<b>WEEK 7 -11</b>	<b>8.1 – 8.5</b>	<b>MOTION</b> <ul style="list-style-type: none"><li>▪ Speed and velocity</li><li>▪ Distance and displacement</li><li>▪ Aristotle laws and Galileo laws</li><li>▪ Newton Laws of motion</li><li>▪ Terminal velocity</li><li>▪ Momentum (elastic, inelastic, conservation of momentum)</li><li>▪ Potential and kinetic energy</li><li>▪ Motion in a circle</li></ul>	Rebound height of a table tennis ball

**TERM 3**

<b>DURATION</b>	<b>CHAPTER</b>	<b>TOPICS</b>	<b>PRACTICALS</b>
<b>WEEK 1 - 3</b>	<b>9.1 – 9.2</b>	<b>KINETIC THEORY AND GAS LAWS</b> <ul style="list-style-type: none"><li>▪ Brownian motion</li><li>▪ States of matter (solids, liquids and gases)</li><li>▪ How molecules produce gas pressure</li><li>▪ Forces on molecules in liquids</li><li>▪ Hookes law</li><li>▪ Charles, Boyles and Pressure Laws</li><li>▪ Vapour pressure</li></ul>	Hookes law (pg 154)
<b>WEEK 3-END</b>	<b>ALL</b>	<b>REVISION</b>	