

Work schedule

1.1 Term 1





1.1.1 Mechanics

Days	Content	Activity	Date planned	Date completed
12 days	UNIT 1 VECTORS IN TWO DIMENSIONS Scalars and vectors Graphical presentation of vectors Resolution of a vector into components What is a force? Forces and free body diagrams Frictional force Forces in equilibrium Resultant or net force Determining the resultant vector	Exercise 1 P. 16 – 19 Exercise 2 P. 26 – 28 Experiment 1 P. 36 – 37 Experiment 2 P. 38 Experiment 3 P. 39 Exercise 3 P. 40 – 43 Experiment 4 P. 46 – 47 Exercise 4 P. 51 – 55 Summary P. 56 – 58 Mind maps P. 59		
16 days	UNIT 2 NEWTON'S LAWS OF MOTION Newton's first law of motion Newton's second law of motion Newton's third law of motion	Practical activity 1 P. 63 – 64 Exercise 5 P. 65 – 66 Experiment 5 P. 78 – 81 Experiment 6 P. 82 – 83 Exercise 6 P. 84 – 90 Experiment 7 P. 92 – 93 Exercise 7 P. 94 – 95 Summary P. 96 – 97 Mind maps P. 98 – 100		
3 days	UNIT 3 NEWTON'S LAW OF UNIVERSAL GRAVITATION The law of universal gravitation Mass and weight Weightlessness Relationship between g and G	Experiment 8 P. 106 – 108 Exercise 8 P. 108 – 111 Summary P. 112 Mind maps P. 113 – 114 Question paper P. 115 – 128		

Mechanics	<p>Vectors in two dimensions: resultant of perpendicular vectors, resolution of a vector into its parallel and perpendicular components</p> <p>Newton's Laws and Application of Newton's Laws: Newton's first, second and third laws and Newton's law of universal gravitation, different kinds of forces: weight, normal force, frictional force, applied (push, pull), tension (strings or cables), force diagrams, free body diagrams and application of Newton's laws (equilibrium and non-equilibrium)</p>
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Mechanics: 31 dae

Administration: 1 day

Test and corrections: 2 days

Formal assessment (experiment): 1 day

1.1.2 Matter and materials

Days	Content	Activity	Date planned	Date completed
5 days	UNIT 1 ATOMIC COMBINATIONS: MOLECULAR STRUCTURE Chemical bonds Bonding models Valence electrons Lewis structures Forming of bonds Simple covalent bonds Molecules with multiple bonds Dative covalent bonds VSEPR Electronegativity Forces between atoms, energy changes at the forming of a molecule Bond energy and length	Activity 1 P. 17 Exercise 1 P. 23 – 24 Activity 2 P. 25 Practical activity 1 P. 28 Exercise 2 P. 29 Activity 3 P. 34 – 35 Exercise 3 P. 36 – 37 Exercise 4 P. 41 – 42 Summary P. 43 – 44 Mind maps P. 45 – 48		