



















Junior Tukkies Gr.12 Winter School 2020



Physical Sciences

NOTE: Links to study material, worksheets, memo's and videos will become available on this programme at the start of every two-week topic.

Week	Activity	Watch video	Print	Practice
Week 1 & 2:		1 July – 12 July		
Physical Sciences: Chemical equilibrium	Study Material			
	Worksheet			
	Memo			
	Watch the following videos:			
	Chemical equilibrium 1 (Equilibrium and Kc)			
	Chemical equilibrium 2 (Le Chatelier's principle)			
	Chemical equilibrium 3 (Graphs)			
	Chemical equilibrium 4 (Difficult questions)			
	Saturday feedback video:			
	11 July Watch a video on answers to frequently asked questions			
Week 3 & 4:		13 July – 26 July		
Physical Sciences: Work, energy and power	Study Material			
	Worksheet			
	Memo			
	Watch the following videos:			
	Work, energy and power 1 (Work)			
	Work, energy and power 2 (Work-energy principle)			
	Work, energy and power 3 (Conservative forces. power)			
	Work, energy and power 4 (Work and momentum)			
	Saturday feedback video:			
	18 July Watch a video on answers to frequently asked questions			
	25 July Watch a video on answers to frequently asked questions			
Week 5 & 6:		27 July to 9 August		
Physical Sciences: Acids and Bases	Study Material			
	Worksheet			
	Memo			
	Watch the following videos:			
	Acids and bases 1 (Acids and bases)			
	Acids and bases 2 (Writing equations)			
	Acids and bases 3 (pH)			
	Acids and bases 4 (Hydrolysis and titrations)			
	Saturday feedback videos:			
	1 & 8 August Watch videos on answers to frequently asked questions:			
	- Discussion Acids and bases 1			
	- Discussion Acids and bases 2			

Week 7 & 8: 10 August – 23 August	
Physical Sciences: Mole calculations	 Study Material  Worksheet  Memo
	Watch the following videos:  Mole calculations 1 (Stoichiometry)  Mole calculations 2 (STP and titrations)  Mole calculations 3 (Limiting reactant)  Mole calculations 4 (Two reactions and percentage purity)
	Saturday feedback video: 15 August Watch a video on answers to frequently asked questions 22 August Watch a video on answers to frequently asked questions
Week 9: 24 August – 30 August	
Physical Sciences: Maths in Physics	 Study Material  Worksheet  Memo
	Watch the following videos:  Maths in Physics 1 (Variables and relationships)  Maths in Physics 2 (Graphs)
	Saturday feedback video: 29 August Watch a video on answers to frequently asked questions
Week 10: 31 August – 5 September	
Physical Sciences: Exam preparation	 Study Material  Worksheet  Exam guidelines  Exam papers
	 How to prepare for Physics  How to prepare for Chemistry