

## TECHNOLOGY – GRADE 8 2024

TOPIC	ASSESSMENT STANDARDS	PORTFOLIO ASSESSMENT TASKS
<b>PHASE 1 (17 January 2024 – 20 March 2024)</b>		
<b>Mechanical Structures</b>	Structures around the world	<b>PAT 1 Section A &amp; B</b> 4 – 8 March
	Mechanisms that change the type of movement.	
	Components of a structure and forces acting on them	
<b>PAT</b>	PAT 1 Section A: Design a model of a Water tower using paper	
	PAT 1 Section B: Make a model of a Water tower using paper	
<b>Digital Technology</b>	Google Classroom - functionality Microsoft Word: <ul style="list-style-type: none"> <li>• Inserting and formatting text and paragraphs</li> <li>• Modifying a document</li> <li>• Tables and inserting graphic objects</li> <li>• Controlling page appearance</li> <li>• Printing and preparing to publish documents</li> </ul>	
<b>PHASE 2 (3 April 2024 – 14 June 2024)</b>		
<b>Mechanical Systems and Control</b>	Levers, linkages and uses	<b>Mid-Year Exam</b> 3 – 14 June
	Types of levers	
	Mechanical advantage calculations	
	Gear systems - terminology	
	Types of gears, gears ratio, gear train	
	Mechanical & speed advantage	
<b>Digital Technology</b>	Microsoft Powerpoint: <ul style="list-style-type: none"> <li>• Setting up the 5/5/5 rule</li> <li>• Global formatting</li> <li>• Use of graphs, charts and images</li> <li>• Synchronising slides with sound and music</li> </ul>	
<b>PHASE 3 (9 July 2024 – 22 November 2024)</b>		
<b>Electrical Systems and Control</b>	Advantages and disadvantages of technology – AI, 4IR	<b>PAT 2 A &amp; B</b> 26 – 30 August
	Sources of energy: conventional and non-conventional	
	Alternate sources of energy	
	Electrochemical cells and batteries - AC and DC Power Circuits - Series /Parallel/ Logic Control /Circuit Simulator	
	Electricity for the people/electricity theft	
	Electronic Circuits - Electronic simulated circuit design	
<b>PAT</b>	PAT 2 Section A: Design a model of an alarm system	<b>End of Year Exam</b> 11 – 22 November
	PAT 2 Section B: Design, make and present a circuit with Logic control	
<b>Digital Technology</b>	Microbit <ul style="list-style-type: none"> <li>• Introduction to Microbit language and instruction</li> <li>• Programming Microbit</li> <li>• Tasks 1 – 5</li> </ul>	