

## NATURAL SCIENCE (PHYSICAL SCIENCE) - GRADE 8 2024

| TOPIC  | ASSESSMENT STANDARDS  | PORTFOLIO ASSESSMENT TASKS   |
|--|---|--|
| <b>PHASE 1 (17 January 2024 – 20 March 2024)</b> |   |  |
| <b>Matter and Materials</b>                      | Practical Investigation Theory <ul style="list-style-type: none"> <li>• Scientific Method</li> <li>• Analyzing and Recording Data</li> <li>• Evaluation and Conclusions</li> </ul>  | <b>Task 1:</b> Practical Investigation:<br>Scientific Method<br>19 – 23 Feb<br><br><b>Task 2:</b> Controlled Tests<br>21 Feb – 05 Mar  |
|  | The particle Model of Matter <ul style="list-style-type: none"> <li>• Phases of Matter</li> <li>• Change of state</li> </ul>  |  |
| <b>PHASE 2 (3 April 2024 – 14 June 2024)</b>     |   |  |
| <b>Matter and Materials</b>                      | The Particle Model of Matter <ul style="list-style-type: none"> <li>• Density, mass and volume</li> <li>• Density and states of matter</li> <li>• Density of different materials</li> <li>• Expansion and contraction of materials</li> <li>• Pressure</li> </ul>   | <b>Task 3:</b> Construction:<br>Building an Atom<br>20 – 25 May<br><br><b>Task 4:</b><br>June Examinations<br>03 – 14 June   |
|  | The Periodic Table and Atoms <ul style="list-style-type: none"> <li>• Structure of an Atom</li> <li>• Elements and Compounds</li> <li>• Metals and Non – metals</li> <li>• Chemical bonds</li> <li>• Chemical reactions</li> </ul>  |  |
| <b>PHASE 3 (09 July 2024 – 22 November 2024)</b> |   |  |
| <b>Energy and Change</b>                         | Static electricity <ul style="list-style-type: none"> <li>• Friction</li> <li>• Van Der Graaf Generator and Gold Leaf Electroscope</li> <li>• Lightning</li> </ul>  | <b>Task 5:</b> Assignment:<br>Static electricity<br>5 – 9 Aug<br><br><b>Task 6:</b> Controlled Test<br>19 Aug – 05 Sep<br><br><b>Task 7:</b> Nov Examinations<br>11 – 22 Nov |
|  | Energy transfer in electrical systems <ul style="list-style-type: none"> <li>• Circuits and current electricity</li> <li>• Components of a circuit</li> <li>• Effects of an electric current</li> <li>• Series and parallel circuits</li> </ul> Light <ul style="list-style-type: none"> <li>• Radiation, Reflection, Refraction</li> <li>• Opaque, transparent and absorption</li> </ul> |  |