

## LIFE SCIENCES - GRADE 10 2020

| TOPIC  | ASSESSMENT STANDARDS  | PORTFOLIO ASSESSMENT TASKS   |
|--|---|--|
| <b>PHASE 1 (15 January 2020 – 20 March 2020)</b> |   |  |
| <b>How Science works</b>                         | Scientific skills   | ☞ <b>Task 1</b><br>Project– Environmental studies<br>27 – 31 Jan   |
| <b>Biosphere to Ecosystems</b>                   | Biosphere, Biomes, Environment and Ecosystems   |  |
|  | Abiotic and biotic factors  |  |
| <b>The Chemistry of Life</b>                     | Energy flow through ecosystems and ecotourism   | ☞ <b>Task 2</b><br>Practical 2 - Food tests<br>24 – 28 Feb   |
|  | Molecules for life – inorganic compounds  | ☞ <b>Task 3</b><br>March Controlled Test<br>9 – 20 March   |
|  | Organic compounds   |  |
|  | Vitamins  |  |
| <b>PHASE 2 (31 March 2020 – 12 June 2020)</b>    |   |  |
| <b>Cells: The Basic Units of Life</b>            | Microscope and Molecular make-up of cells   | ☞ <b>Task 4</b><br>Practical 3 – Microscope<br>6 – 9 April   |
|  | Cell structure and function   |  |
|  | Cell structure and function continued   |  |
|  | Cell differentiation and specialization   |  |
| <b>Cell Division</b>                             | Mitosis   |  |
| <b>Plant Tissues</b>                             | Simple tissues, epidermal tissues, vascular tissue                                      |  |
| <b>Animal Tissues</b>                            | Epithelia, connective, muscle, nervous.   | ☞ <b>Task 5</b><br>June Exam<br>1 – 12 June  |
|  | Application of indigenous knowledge systems and biotechnology                           |  |
| <b>Organs</b>                                    | Leaf structure  |  |
| <b>Support and Transport in Plants</b>           | Support and transport in plants - Anatomy of dicotyledonous plants                      |  |
| <b>PHASE 3 (7 July 2020 – 30 October 2020)</b>   |   |  |
| <b>Support and Transport in Plants</b>           | Support and transport in plants – Movement of water through the plant and transpiration | ☞ <b>Task 6</b><br>Sept Controlled Test – Support and transport in plants, support in animals<br>3 – 7 Aug |
| <b>Support systems in animals</b>                | Skeletons – The human skeleton and its functions.                                       |  |
|  | Joints, voluntary muscles, diseases of the skeleton                                     |  |
| <b>Transport in Mammals</b>                      | The circulatory system  | ☞ <b>Task 7</b><br>Final Exam<br>Theory<br>19 – 30 Oct   |
|  | Lymph   |  |
| <b>Diversity, Change and Continuity</b>          | Biodiversity and classification   |  |
|  | History of Life on Earth  |  |