**LIFE SCIENCES - GRADE 10 2023**

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| **TOPIC** | **ASSESSMENT STANDARDS** | **PORTFOLIO ASSESSMENT TASKS** |
| **PHASE 1 (18 January 2023 – 31 March 2023)** |
| **How Science works** | Scientific skills | **Task 1:** Project– Environmental studies21 – 25 Feb**Task 2:** Practical 2 - Food tests6 – 11 March**Task 3:** March Controlled TestTest A: 6 – 10 FebTest B: 13 – 17 March |
| **Biosphere to Ecosystems** | Biosphere, Biomes, Environment and Ecosystems |
| Abiotic and biotic factors |
| Energy flow through ecosystems and ecotourism |
| **The Chemistry of Life** | Molecules for life – inorganic compounds |
| Organic compounds |
| Vitamins |
| **PHASE 2 (12 April 2023 – 23 June 2023)** |
| **Cells: The Basic Units of Life** | Microscope and Molecular make-up of cells | **Task 4:** Practical 3 – Microscope22 – 27 May **Task 5:** June exam5 – 23 June |
| Cell structure and function |
| Cell structure and function continued |
| Cell differentiation and specialization |
| **Cell Division** | Mitosis |
| **Plant Tissues** | Simple tissues, epidermal tissues, vascular tissue |
| **Animal Tissues** | Epithelia, connective, muscle, nervous.  |
| Application of indigenous knowledge systems and biotechnology |
| **Organs** | Leaf structure |
| **Support and Transport in Plants** | Support and transport in plants - Anatomy of dicotyledonous plants |
| **PHASE 3 (18 July 2023 – 10 November 2023)** |
| **Support and Transport in Plants** | Support and transport in plants – Movement of water through the plant and transpiration | **Task 6:** Sept Controlled Test – Support and transport in plants, support in animalsTest A: 7 – 11 AugTest B: 4 – 8 Sept**Task 7:** Final Exam 23 Oct – 10 Nov |
| **Support systems in animals** | Skeletons – The human skeleton and its functions. |
| Joints, voluntary muscles, diseases of the skeleton |
| **Transport in Mammals** | The circulatory system |
| Lymph |
| **Diversity, Change and Continuity** | Biodiversity and classification |
| History of Life on Earth |