**TECHNOLOGY – GRADE 8 2022**

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| **TOPIC** | **ASSESSMENT STANDARDS** | **PORTFOLIO ASSESSMENT TASKS** |
| **PHASE 1 (19 January 2022 – 25 March 2022)** | | |
| **Structures**  **Mechanical** | Structures around the world | **Task 1:** Controlled Test A  14 – 18 February  (STC)  **Task 2:** PAT Section A  1 – 4 March  **Task** **3:** Controlled Test B  7 – 11 March |
| Buildings and Bridges/ Roofs and Pylons |
| Mechanisms that change the type of movement. |
| PAT 1 Section A: Design a model of a Water tower using paper |
| **PHASE 2 (5 April 2022 – 24 June 2022)** | | |
| **Mechanical Systems and Control** | Levers, linkages and uses | **Task 4:** PAT Section B  11 – 15 April  **Task 5:** Mid-year exams  13 – 24 June |
| Mechanical advantage calculations |
| Gear systems-terminology, mechanical & speed advantage, types, gears ratio, gear train |
| Advantages and disadvantages of technology – A.I. |
| Fourth Industrial Revolution: Disruptive Technologies |
| PAT 1 Section B: Make a model of a water tower out of paper |
| **PHASE 3 (19 July 2022 – 25 November 2022)** | | |
| **Electrical Systems and Control &**  **Graphic Communication** | Sources of energy | **Task 6**  Test  15 – 19 August  **Task 7**  PAT  12 – 16 September  **Task 8**  End of year Exam  14 – 25 November |
| Electrical systems/electricity for the nation-Power Stations/ Energy supply for the people / electricity theft |
| Electrochemical cells and batteries - AC and DC Power Circuits - Series /Parallel/ Logic Control **/Circuit Simulator** |
| Electronic Circuits - Electronic simulated circuit design **(Micro.bit )** |
| PAT 2- Section A & B: Design, make and present a Circuit with logic control in video format |
| **Tinker CAD** App -Graphic Communication, Coding | 28 Nov - 2 Dec |