**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 A14 – 18 February(STC)**Task 2:** PAT Section A1 – 4 March**Task** **3:** Controlled Test B7 – 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 B11 – 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**Test15 – 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 |