**TECHNOLOGY – GRADE 8 2021**

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| **TOPIC** | **ASSESSMENT STANDARDS** | **PORTFOLIO ASSESSMENT TASKS** |
| **PHASE 1 (15 February 2021 – 23 April 2021)** | | |
| **Structures**  **Mechanical** | Structures around the world | **Task1:** Test  1 – 5 March (STC)  **Task2:** PAT Section A  Due 8 – 12 March  **Task** 3: Controlled Test  12 – 23 April |
| 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 (3 May 2021 – 9 July 2021)** | | |
| **Mechanical Systems and Control** | Levers, linkages and uses | **Task 4:** PAT Section B  Due 17 – 21 May  **Task 5:** June Controlled test  28 June – 9 July |
| 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** | PAT 1 Section B: Make a model of a water tower out of paper |
| **PHASE 3 (26 July 2021 – 26 November 2021)** | | |
| **Electrical Systems and Control &**  **Graphic Communication** | Sources of energy | **Task 6:** Test  24 – 28 August  **Task 7:** PAT  13 – 17 September  **Task 7:** End of year Controlled test  15 – 26 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 ) |
| Tinker CAD App -Graphic Communication |
| **PAT 2** | Section A & B - Design, make and present a Circuit with logic control in video format |