**Year 10 Science: Semester Two Overview 2018**

**Physics Program and Earth and Space Programs**

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| Weeks | Topic | Summative Assessments |
| Term 1  1-5 | **Physics**   * Energy transfer and transformation * Energy systems * Velocity (speed/distance/time) * Acceleration | \*Throughout the semester there are formative assessments that assess the students’ level of learning and understanding, however, these do not contribute to the students’ overall grade.  **Folio Task:** Alternative Energy Sources (20%) |
| 6-10 | **Physics**   * Newton’s 1st Law: Inertia * Newton’s 2nd Law: F=ma * Newton’s 3rd Law: Conservation of Momentum | **Practical Investigation:** Acceleration due to gravity (20%)  **Topic Test:** Physics Topic (10%) |
| Term 2  1-3 | **Earth and Space**   * The carbon /water/oxygen/ nitrogen cycle * Photosynthesis * Metamorphic, igneous and sedimentary rock cycle | **Practical Investigation:** Design and build a terrarium **(**20%) |
| 4-7 | **Earth and Space**   * Cosmic Calendar * Big Bang theory * Life Cycle of Stars * Red shift / Doppler effect * Galaxies | **Folio Task:** Identifying Galaxies (20%)  **Topic Test:** Earth and Space (10%) |