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

**Physics Program and Earth and Space Programs**

|  |  |  |
| --- | --- | --- |
| Weeks | Topic | Summative Assessments |
| Term 11-5 | **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 21-3 | **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%) |