**Science 9 Earth Science Unit Overview**

1. Effects of solar radiation (Textbook topic 4.2, 4.3)
   * solar radiation provides the energy required for most life on Earth
   * root cause of wind and ocean currents, which distributes energy and nutrients around the planet
   * drives the water cycle through convection currents
2. Matter cycles (Textbook topic 4.4)
   * nutrients and matter are cycled throughout the Earth
     + nitrogen
     + carbon
     + phosphorous
   * nutrients and matter are stored in “sinks” and released from stores
     + humans have a direct impact on sources and sinks
   * bioaccumulation and biomagnification
3. Sustainability of Ecosystems (Textbook topic 4.5, parts of 4.1)
   * all matter and energy are interconnected and exist in a dynamic equilibrium
     + climate change, greenhouse effect
   * these connections exist locally and globally
   * First Peoples have a variety of perspectives on sustainability
   * First Peoples have a variety of perspectives on interconnectedness