**Year 9 Science Program 2014**

**Home Learning:** As a general rule it will be **set every Wednesday** and **due the following Wednesday**. Please provide note (in diary or otherwise) if student was unable to complete home learning in time.

**Tutoring:** Available Wednesday afternoons (unless otherwise specified) from 3:10 to 4:00 depending on student availability.

**Text:** Science Quest 9 for the Australian Curriculum – Lofts G., Evergreen M. J

### Term 3

<table>
<thead>
<tr>
<th>Week</th>
<th>Content</th>
<th>Content Descriptions</th>
<th>Resource/reference</th>
<th>Assessment Task</th>
</tr>
</thead>
</table>
| 1-3  | Inside the Atom  
• Building block  
• Nucleus  
• Radioactivity | • All matter is made of atoms which are composed of protons, neutrons and electrons; natural radioactivity arises from the decay of nuclei in atoms (ACSSU177) | Chapter 6: 6.1 6.2 6.3 | Topic Test 1-Week 3 (Atoms) |
| 4-7  | Chemical Reactions  
• Rearrange atoms  
• Chemical reactions and energy  
• Acids and bases  
• Combustion Reactions  
• Acid Rain | • Chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed  
• Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer | Chapter 7, Alka-Seltzer tablets and balloon, exothermic and endothermic reactions, acids and bases + indicators, videos, PowerPoint, worksheets | Practical Investigation 1-Week 5 (Inv 7.3)  
Topic test 2-Week 7 (Chemical Reactions) |
| 8-10 (Week 1 Term 4) | Ecosystems  
• Ecosystems  
• Sustainable ecosystems  
• Changes in Population  
• Drought and fire  
• Plant organisation  
• Plant responses  
• Photosynthesis and Cellular Respiration | • Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems | Chapter 5, quadrants, leaves and starch test, candle in a jar, PowerPoints, charts, videos, worksheets | |
## Term 4

<table>
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<tr>
<th>Week</th>
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</thead>
<tbody>
<tr>
<td>2-5</td>
<td>Dynamic Earth</td>
<td>• The theory of plate tectonics explains global patterns of geological activity and continental movement</td>
<td>Chapter 8, volcano kit, seismograph set-up, videos, charts, PowerPoints</td>
<td>Topic Test 3-Week 2 (Ecosystem)</td>
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<tr>
<td></td>
<td>• The Earth’s Crust</td>
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<td>• Plate tectonics</td>
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<td>• Rocks under pressure</td>
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<td>• Earthquakes and Volcanoes</td>
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<tr>
<td>6-9</td>
<td>Forensics</td>
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<td>eBook Plus, worksheets, guest speaker, PowerPoint</td>
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<tr>
<td>7-9</td>
<td>Revision &amp; Exams</td>
<td>•</td>
<td>Revision Packs</td>
<td>Week 8-9: Semester 2 Exam</td>
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**Assessments:**

1. Practical Assessment 10% To be completed at the end of the practical and handed in at the start of the next lesson.
2. Topic Test 1 20%
3. Topic Test 2 20%
4. Topic Test 3 20%
5. Exam 30%
6. Total 100%