## Paluma Environmental Education Centre

### School:
Example State School

### Year Level:
6

### Teacher/s:
Class Teacher

### Paluma EEC Teacher:
Life on Earth 6 (C2C Unit 4)

### Exm No:
XX

### Tuesday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.03.13</td>
<td><strong>AWARENESS</strong></td>
</tr>
<tr>
<td></td>
<td>Rise and Shine</td>
</tr>
<tr>
<td>6.30 am</td>
<td>Observing Birds/ Using Binoculars [7] PT/CT</td>
</tr>
<tr>
<td></td>
<td>• Learn how to use binoculars</td>
</tr>
<tr>
<td></td>
<td>• Observe birds in grounds and on rainforest edge</td>
</tr>
<tr>
<td></td>
<td>• Identify sources of water for local birds</td>
</tr>
<tr>
<td></td>
<td><strong>ACTION</strong></td>
</tr>
<tr>
<td></td>
<td>6.30 am</td>
</tr>
<tr>
<td></td>
<td>EXPLORIS Investigating Plant/ Animal Interactions [15] PT/CT</td>
</tr>
<tr>
<td></td>
<td>• Sci_Y07_U7_V1.1_Food Webs, 2 - Discuss animals seen on the Bandicoot Bench, the complexity of plant/animal relationships &amp; the Connected Map</td>
</tr>
<tr>
<td></td>
<td>• Distribute Plant/ Animal role cards &amp; construct food web. Model impact of disturbance.</td>
</tr>
</tbody>
</table>

### Wednesday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>02.03.13</td>
<td><strong>CONNECTION</strong></td>
</tr>
<tr>
<td></td>
<td>7:30 am</td>
</tr>
<tr>
<td></td>
<td>EXPLORE_H-Track – Investigating plant growth PT/CT</td>
</tr>
<tr>
<td></td>
<td>• Predict the effect light has on plant growth</td>
</tr>
<tr>
<td></td>
<td>• Investigate the effect light has on plant growth &amp; compare prediction to findings</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 8 – Investigating plant growth</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 11 – This will be needed to be further used in relation to mould and an investigation back in the classroom.</td>
</tr>
<tr>
<td></td>
<td><strong>ACTION</strong></td>
</tr>
<tr>
<td></td>
<td>7.30 am</td>
</tr>
<tr>
<td></td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td></td>
<td>Sensory Trail Experience [8] PT/CT</td>
</tr>
<tr>
<td></td>
<td>• Discuss the requirements for this activity</td>
</tr>
<tr>
<td></td>
<td>• Experience the Sensory Trail HHD 08</td>
</tr>
</tbody>
</table>

### Thursday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>02.03.13</td>
<td><strong>CONNECTION</strong></td>
</tr>
<tr>
<td></td>
<td>6.30 am</td>
</tr>
<tr>
<td></td>
<td>EXPLORIS Measuring Biodiversity/Trapping Methods PT/CT/BS</td>
</tr>
<tr>
<td></td>
<td>• Analyse data about living things in the environment.</td>
</tr>
<tr>
<td></td>
<td>• Predict which elements of the environment support particular living things.</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 3 – Analysing evidence of life</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 17 - Reversing Change</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 10 – Identifying and profiling habitats</td>
</tr>
<tr>
<td></td>
<td>• Collect Abiotic Data from different habitats. Shady (closed environment), changing (Ectone) and Lookout (Open Environment).</td>
</tr>
<tr>
<td></td>
<td>• Look at the disturbances Cyclone Yasi caused and the growth of weeds and pioneer plants along the track.</td>
</tr>
<tr>
<td></td>
<td><strong>ACTION</strong></td>
</tr>
<tr>
<td></td>
<td>7.30 am</td>
</tr>
<tr>
<td></td>
<td>Laboratories Managing Quarry Revegetation PT/CT/BS</td>
</tr>
<tr>
<td></td>
<td>• Discuss revegetation project as example of action taken to restore disturbed habitat.</td>
</tr>
<tr>
<td></td>
<td>• Divide into three groups to carry out maintenance tasks - Remove weeds (don’t disturb tree roots). Mulch. Measure &amp; record growth &amp; take abiotic data measurements.</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 17 - Reversing Change</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 14 – Analyzing evidence of life</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 16 – Thriving Ferals</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 17 – Reversing Change</td>
</tr>
<tr>
<td></td>
<td><strong>ACTION</strong></td>
</tr>
<tr>
<td></td>
<td>11:30 am</td>
</tr>
<tr>
<td></td>
<td>BYO Lunch</td>
</tr>
<tr>
<td></td>
<td>Lunch</td>
</tr>
<tr>
<td></td>
<td>12.30 pm</td>
</tr>
<tr>
<td></td>
<td>EXPLORE Feral Plant Problems PT/CT</td>
</tr>
<tr>
<td></td>
<td>• Discuss the requirements for this activity</td>
</tr>
<tr>
<td></td>
<td>• Locate feral plants using identification cards</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 14 – Analyzing evidence of life</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 16 - Thriving Ferals</td>
</tr>
<tr>
<td></td>
<td>Sci_Y06_U4_V1.1_Lesson 17 – Reversing Change</td>
</tr>
</tbody>
</table>

### This excursion program supports:
- The Australian Curriculum (Biological Sciences Years 6-7)
- The growth and survival of living things are affected by the physical conditions of their environment (ACSSU094)
- There are differences within and between groups of organisms; classification helps organise this diversity (ACSSU111)
- Interactions between organisms can be described in terms of food chains and food webs; human activity can affect these interactions (ACSSU112)

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers

### Example State School

### From:
October – December, 2013

### To:
October to December 2013

### Paluma Teachers
### Science as a Human Endeavour
- **Nature and development of science**
  - Important contributions to the advancement of science have been made by people from a range of cultures (ACSHIE099)
  - Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHIE098)

- **Use and influence of science**
  - Scientific knowledge is used to inform personal and community decisions (ACSHIE220)
  - Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples’ lives (ACSHIE100)

### Science Inquiry Skills
- **Communicating**
  - Communicate ideas, explanations and processes in a variety of ways, including multi-modal texts (ACSIS110)

### Evaluating
- Suggest improvements to the methods used to investigate a question or solve a problem (ACSIS108)

### Planning and conducting
- Decide which variable should be changed and measured in fair tests and accurately observe, measure and record data, using digital technologies as appropriate (ACSIS103)

### Processing and analysing data and information
- Compare data with predictions and use as evidence in developing explanations (ACSIS221)
  - Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate (ACSIS107)

### Questioning and predicting
- With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be (ACSIS232)

### Science Understanding
- **Biological sciences Year 6**
  - The growth and survival of living things are affected by the physical conditions of their environment (ACSSU094)

- **Biological sciences Year 7**
  - There are differences within and between groups of organisms; classification helps organise this diversity (ACSSU111)
  - Interactions between organisms can be described in terms of food chains and food webs; human activity can affect these interactions (ACSSU112)

### Year 6 achievement standard
By the end of Year 6 students plan investigations to answer questions relating to simple cause-and-effect relationships. When carrying out investigations, they collect relevant data and apply the concept of a fair test. They reflect on the processes that they have used and demonstrate an awareness of science inquiry methods in their work. They represent data and knowledge using introductory scientific language and graphical representations.

Students suggest explanations for observable changes and they predict the effect of environmental changes on living things. They compare different types of change in materials. They identify requirements for the transfer of electricity and describe one way that electricity can be generated. They describe how developments in science have affected peoples’ lives and identify examples where scientific knowledge is used in decision making.

<table>
<thead>
<tr>
<th>Before PEEC</th>
<th>AT PEEC</th>
<th>After PEEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>What learning will already have taken place in the classroom?</td>
<td>How does the class teacher see the excursion program feeding into the assessment task?</td>
<td>Rest of Unit Two Lessons</td>
</tr>
<tr>
<td>Classroom lessons will include</td>
<td>Lessons from the units planned to be delivered at Paluma (time permitting) are:</td>
<td>Complete assessment task – Mouldy Bread</td>
</tr>
<tr>
<td>• Visit from PEEC to introduce Paluma, TWLH chart &amp; data collection methods &amp; equipment.</td>
<td>Unit 4 – Science Year 6 (V1.1)</td>
<td>Follow-up plant growth investigation. What were their parameters and what did they find out?</td>
</tr>
<tr>
<td>OR</td>
<td>• Lesson 1 – Identifying and profiling habitats</td>
<td>Visit from PEEC</td>
</tr>
<tr>
<td>• Plant seeds and begin investigation about what affects plant growth – Lesson 4</td>
<td>• Lesson 2 – Identifying environmental conditions that support life</td>
<td>AND</td>
</tr>
<tr>
<td></td>
<td>• Lesson 3 – Analysing evidence of life</td>
<td>Complete investigation on plant growth, allowing time for plant to grow and change.</td>
</tr>
<tr>
<td></td>
<td>• Lesson 16 – Thriving ferals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lesson 17 – Reversing change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Part of the following lessons will be covered</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lesson 8 – Investigating plant growth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lesson 11 – Exploring Mould</td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>Feedback</td>
<td>Use student responses to activities about relationship between living things and their environment throughout the teaching and learning sequence to monitor students’ capacity to:</td>
</tr>
<tr>
<td>Front-ending the assessment task – what is the task?</td>
<td>• collect data over a period of time</td>
<td>• understand that different living things are affected by changes in their environments</td>
</tr>
<tr>
<td>• C2C assessment task - Assignment/Project – Mouldy Bread</td>
<td>• have evolved different responses to their environment</td>
<td>• display graphical information using computer software</td>
</tr>
<tr>
<td>Student work samples for inclusion in Science portfolio:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Monitoring – Independent Investigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Monitoring – Salt plant investigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Monitoring - Local Field Study and Field observation of animals used when setting up traps and counting bugs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paluma EEC will provide GTMJs for each of the additional assessment tasks as required</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>