

## He Āhuahanga Papatahi — Flat Shapes

**Approach:** Station

**Focus:** Nets of 3D objects.

**Resources:** Laptop computer with video recording of instructions and example; bottle with label, Jaffa packet, ruler, measuring tape.

Questions/instructions:	% responses			% responses	
	GEd	MI		GEd	MI
<p>This activity is done on the computer. Click the button that says <i>Flat Shapes Part 1</i>. Click the <i>Play</i> button and watch the video that plays. Then:</p> <p>Kei runga tēnei mahi i te rorohiko. Pāwhiria te pātene e kī ana <b>He Āhuahanga Papatahi - Wāhanga Tuatahi</b>. Pāwhiria te pātene <b>Tīmata</b>, ka mātaki ai i taua rīpene ataata. Kātahi:</p> <p>1. Draw the shape of the label before it was put on the bottle (to the nearest centimetre). Label the length of each line.</p> <p>Tāhia te āhua o te tapanga i mua o te whakapiringa ki runga pounamu. Tuhia te roa o ia rārangi (tuhia ki te henimita tino pātata).</p> <p>label shape is rectangular 80 65</p> <p>label size recorded accurately with or without units (8.5–8.9cm x 3.5–4.5cm) 10 0</p> <p>recorded but incomplete or inaccurate 24 17</p> <p>2. Write the name of the shape.</p> <p>Tuhia te ingoa o te āhua.</p> <p><b>Answer:</b> rectangle or oblong 64 57</p> <p>Click the button that says <i>Flat Shapes Part 2</i>. Click the <i>Play</i> button and watch the video that plays. The video tells you what to do with the Jaffa packet.</p> <p>Pāwhiria te pātene e kī ana <b>He Āhuahanga Papatahi - Wāhanga Tuarua</b>. Pāwhiria te pātene <b>Tīmata</b>, ka mātaki ai i taua rīpene ataata. Mā te ataata e whakaatu me ahatia e koe, te pouaka Jaffa.</p>					
<p>3. Remember: you need to draw what the Jaffa packet looked like before it was made (to the nearest centimetre).</p> <ul style="list-style-type: none"> <li>• Draw dotted lines to show where you would fold it.</li> <li>• Label the parts of your drawing.</li> <li>• Label the length of each line.</li> </ul> <p>3. Me maumahara: E tika ana me tā koe i te āhua o te pouaka Jaffa i mua i tōna hangatanga.</p> <ul style="list-style-type: none"> <li>• Tuhia he <u>rārangi ira</u> [dotted lines] hei whakaatu, ki hea ngā <u>whātuitanga</u> [folds].</li> <li>• Whakaingoatia ngā wāhanga o tō pikitia.</li> <li>• Tuhia te roa o ia rārangi (ki te henimita tino pātata).</li> </ul> <p><b>Drawing of Jaffa box:</b></p> <p>4 sides, 2 ends, 3 glueing flaps, 4 small flaps appropriately proportioned 4 0</p> <p>as above, except not including 4 small flaps 5 4</p> <p>4 sides and 2 ends, appropriately proportioned 15 12</p> <p>basic idea correct but significant distortions 37 13</p> <p><b>Measurements given and accurate:</b> (12–13cm, 3.1–3.9cm, 1.6–2.4cm) all major 2 0</p> <p>most major 14 9</p>					

### Commentary

Māori students in general education (GEd) settings scored statistically significantly higher than students in Māori immersion (MI) settings.