

Te Pouaka Pea — Bear Box

Approach: Station

Focus: Designing and drawing a box for a teddy bear.

Resources: Teddy bear, pencil, rubber, 30cm ruler, instruction card.



Questions/instructions:

In this activity you are going to draw a plan of a box that would be suitable for this teddy bear.

Show a teddy bear.

The box needs to be suitable for sending the teddy bear in the post to someone.

The teddy bear would be lying flat in the box.

I'll give you an instruction card which tells you what to do. This is what the instructions say ...

Read instruction card to students before handing out the supplies.

Bear Box

Have a good look at the teddy bear. It is going to be posted to someone in a box. Teddy bear would be lying flat in the box.

1. Draw a 3D plan of a rectangular box for the teddy bear.
2. Make the box about the right size for the teddy bear — not too big, and not too small.
3. Write in measurements on your plan to show how long, wide and high it will be.
4. Show how and where the box opens.
5. Show what the box is made from.

Someone else should be able to make this box by using your plan.



I tēnei mahi ka tāngia e koutou tētahi hoahoa o tētahi pouaka pai, mō tēnei teti pea.

Whakaaturia tētahi teti pea.

E tika ana me pai tonu te pouaka hei tuku teti pea ki tētahi atu, mā te pōhi.

Ka takoto papatahi te teti pea i rō pouaka.

Ka hoatuhia he kāri tohutohu hei āwhina i a koutou. Anei ngā tohutohu...

Pānuitia atu te kāri tohutohu ki ngā ākonga, i mua o te tohatoha o ngā taputapu.

Pouaka Pea

Āta titiro ki te teti pea. Kei te tukuna atu i rō pouaka ki tētahi tangata. E takoto papatahi ana a teti pea i rō pouaka.

1. Tāngia he hoahoa ahu 3 o tētahi pouaka tapawhā roa mō te teti pea.
2. Mahia kia rite tonu te rahi o te pouaka mō te teti pea, kaua e rahi rawa, kaua e paku rawa.
3. Tuhia ngā inenga ki runga i a koutou hoahoa kia kitea ai pēhea te roa, te whānui me te teitei.
4. Whakaaturia me pēhea te huaki, ā, kei whea te huakanga.
5. Whakaaturia ngā rauemi hei mahi i te pouaka.

E tika ana, ka taea e tētahi atu te hanga i tēnei pouaka, mā te whai i a koutou hoahoa.

Exemplars next page.

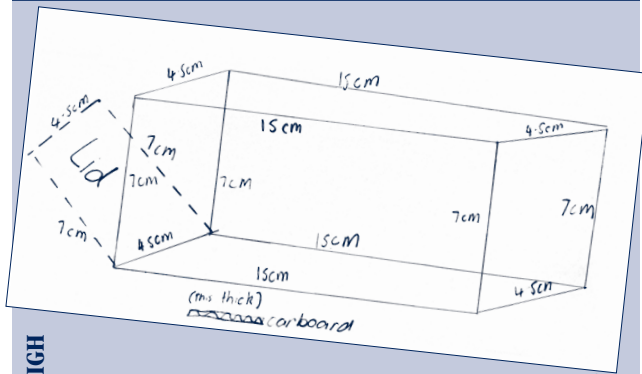
	% responses	
	GE	MI
Drawing looks like 3-D box:		
drawing shows three faces meeting in one corner of the box	88	91
it looks like an object where all faces are rectangular and meet at right angles	81	79
dotted lines for hidden edges	35	50
non-parallel (<i>converging</i>) lines used to create 3D perspective	27	11
Measurements:		
length, width and height	64	60
2 of 3	29	36
1 of 3	2	2
no relevant measurements	5	2
used recognisable units for all measurements	89	58

	% responses	
	GE	MI
Measurements appropriate for size of teddy bear:		
all 3	23	22
2	48	51
1	16	18
0	13	9
clear where box opens	83	73
label showing what box is made from	72	56
diagram shows material has thickness	7	2
plan provided as well as 3D diagram	4	0
plan provided instead of requested 3D diagram	4	0
<i>Exemplars next page ></i>		

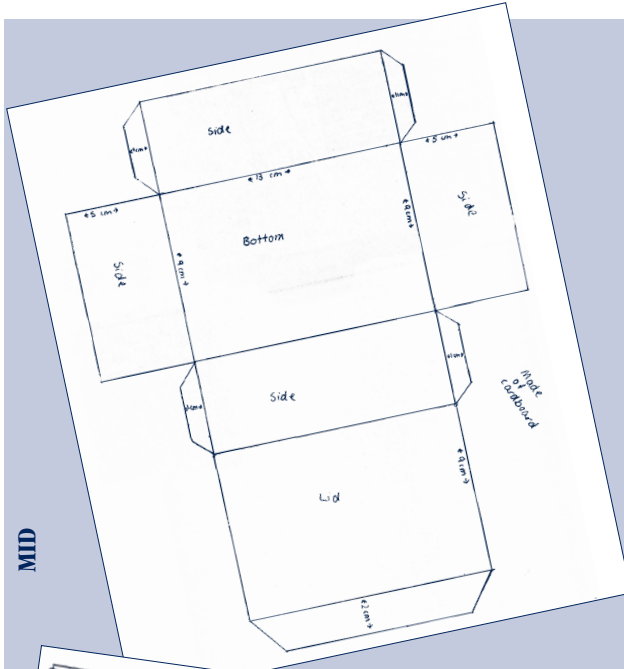
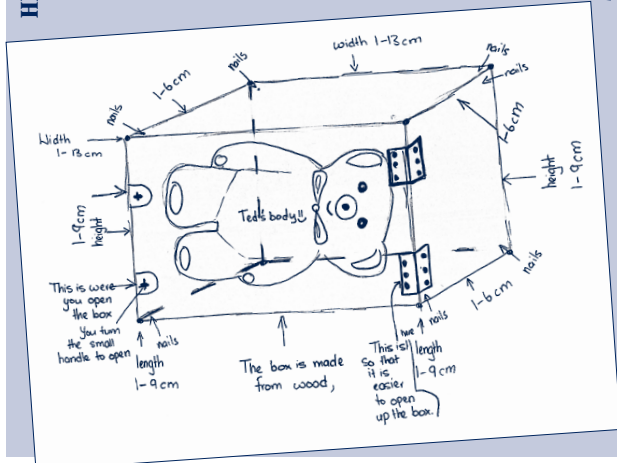
Commentary:

The results achieved by Māori students in general education (GE) and Māori immersion (MI) settings were not statistically significantly different.

Te Pouaka Pea — Bear Box continued



HIGH



MID



He Mahinga Rōpere

Approach: One to one**Focus:** Choice of materials to suit particular purpose.**Resources:** 5 types of cover material, 6 types of fastener, sample of frame material, photo, plan of frame.**Questions/instructions**

In this activity you will be thinking about the best way to protect a strawberry garden from birds.

Mō tēnei mahi, ka whakaaro ake koe, mō tētahi huarahi pai rawa, hei ārai atu i ngā manu i te māra rōpere.

Here is a picture of a strawberry patch.

Anei tētahi whakaahua mahinga rōpere.



Show student the photo.

1. There is a problem. Birds keep on eating the nice, juicy straw-berries. How do you think the problem could be fixed?

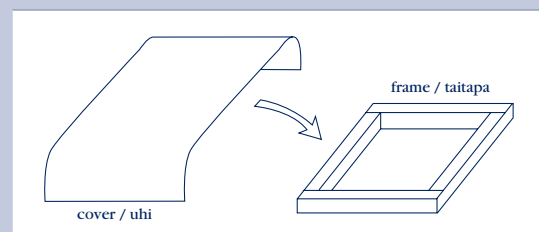
He raruraru. Kei te kainga tonutia ngā rōpere tino reka nei e ngā manu. Ki ōu whakaaro, me ahatia tēnei raruraru kia tika ai?

Pause for answer.

One idea for fixing the problem is to put a cover on a frame, then put the covered frame over the strawberry patch. Here is a plan of a frame to help you think about that idea.

Ko tētahi whakaaro hei whakatika i tēnei raruraru, kia whakatakoto he uhi ki runga i tētahi taitapa [frame]. Kātahi, ka whakatakoto taua taitapa uhi ki runga i te mahinga rōpere. Anei tētahi hoahoa o tētahi taitapa hei whakaarotanga māu.

Show student the plan.



Here are some materials that could be used for the cover on the frame.

Anei ētahi momo uhi tērā pea, he pai hei uhi taitapa.

Give student the possible covers.