

➤ Notes for parents. Activity next page.

The purpose of this task is to have your child:

- to learn to calculate the perimeter and area of a given shape, and to investigate the relationship between them

perimeter: the continuous line that forms the boundary of a shape

area: the extent of the surface of a shape.

Think about this:

- Make sure that a pencil and paper are available.
- FYI: You can draw a square with sides of 6cm. It's perimeter is $4 \times 6\text{cm} = 24\text{cm}$, and its area is $6\text{cm} \times 6\text{cm} = 36\text{cm}^2$
You can also draw a narrow rectangle with sides of 10cm and 2cm. It's perimeter is also 24cm, but it's area is just 20cm^2
- Check that your child understands each part of the task and talk about how they are going to begin their investigation.
- You might want to do the task yourself so you can talk with your child about what you each find out.



Hei Mahi | E hia te paenga? Perimeter Puzzle

**Tau
Kura 5**

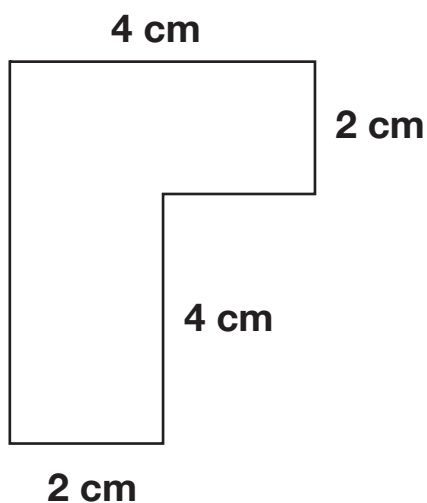
He tauira kōrero Māori

Me pēhea te whiriwhiri i te paenga o tēnei āhua? E hia te roa huri āmio i ōna tapa?	How do we work out the perimeter of this shape? How long around all of its edges?
E hia mitarau (cm) tēnei tapa roa o tēnei āhua? Karekau he inenga ki reira.	How many centimetres long is this long side of this shape. There's no measurement there.
Me pēhea te whiriwhiri i te horahanga o tēnei āhua? E hia mitarau pūrua?	How do we work out the area of this shape. How many square centimetres?
Wāwāhia te āhua ki ētahi wāhanga e rua.	Break the shape in to two parts.
E 4 mitarau (4cm) mā te 2 mitarau (2cm) te wāhanga o runga. Whakareatia te 4 ki te 2, e 8 mitarau pūrua te horahanga.	The top part (of the shape) measures 4cm by 2cm. Multiply 4 by 2, that's 8 square centimetres which is the area.
He aha ētahi inenga tapa mō tētahi tapawhā hāngai kia eke ki te 20 mitarau (20cm) tōna paenga? E hia te horahanga o tēnā tapawhā hāngai?	What are some side measurements for a rectangle so that its perimeter will be 20cm? What is the area of that rectangle?
He aha ētahi inenga tapa mō tētahi tapawhā hāngai kia eke ki te 16 mitarau pūrua (16cm ²) tōna horahanga? E hia te paenga o tēnā tapawhā hāngai?	What are some side measurements for a rectangle so that its area will be 16cm ² ? What is the perimeter of that rectangle?



Titiro ki tēnei āhua.

- E hia te paenga huri āmio i ōna tapa?
- E hia tōna horahanga?



- Tuhia tētahi āhua he ōrite tōna horahanga ki tēnei, engari he iti ake tōna paenga.
- Tuhia tētahi āhua he ōrite tōna horahanga ki tēnei, engari he nui ake tōna paenga.
- Tuhia tētahi āhua he ōrite tōna paenga ki tēnei, engari he iti ake tōna horahanga.
- Tuhia tētahi āhua he ōrite tōna paenga ki tēnei, engari he nui ake tōna horahanga.

