Problem of the Week

The problems that follow focus on measurement. More specifically, students will explore perimeter, area and volume. The tasks are meant to be open-ended so that discussion can support understanding.

Be mindful that during these prompts, it is important the teacher listens to student conversations and asks questions that illicit student thinking.

Primary	Karrie and Ali were each given a piece of string to make a shape.
	Karrie created a square while Ali created a rectangle. Karrie's
	square had a perimeter that was quite a bit bigger than the
	perimeter of Ali's rectangle. Sketch the two shapes and their
	dimensions. What was the perimeter of both shapes?

Elementary	Karrie and Ali built two shapes that had the same perimeter. The
	area of the two shapes, however, were different. One shape had
	an area that was approximately 20 cm ² greater than the other
	shape. What was the perimeter and area of each shape?

Intermediate	Karrie and Ali each created a rectangular prism. Both rectangular
	prisms had the same length. However, the surface area of the
	two rectangular prisms were different. Karrie's rectangular
	prism had a surface area 20 cm ² to 30 cm ² greater than Ali's
	rectangular prism. What were the possible dimensions of Karrie
	and Ali's rectangular prisms? What was the surface area of each
	rectangular prism?