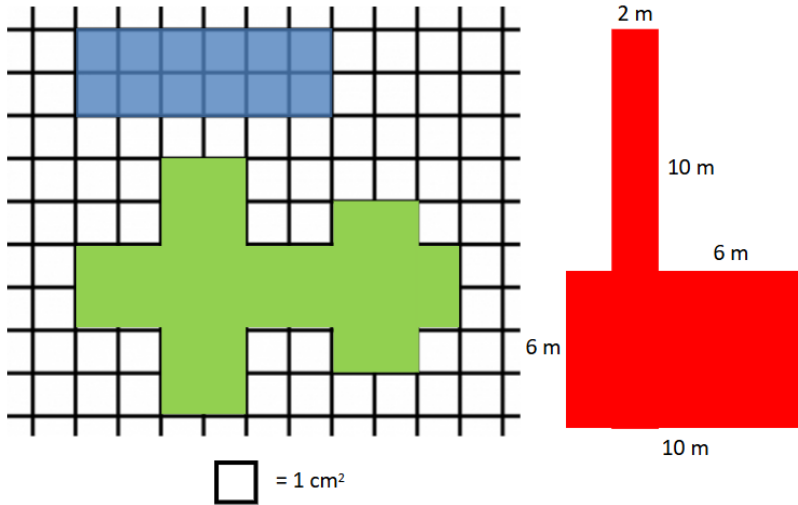


1. Pick one of the shapes (blue, green, or red). Find its area and perimeter.



2. About how many cans of pop are in a 2 litre bottle of pop? Justify your thinking.

3. Which weighs more?

- a) A 1000 gram bag of feathers
- b) A 1 kilogram bag of rocks

Justify your thinking.




4. Use a ruler. Draw each of the following shapes.

- a) A 3 cm square
- b) A rectangle that is 8 cm long and 5 cm wide
- c) A triangle with a square corner and side lengths: 3 cm, 4 cm, 5 cm

Challenge: A circle with a circumference as close to 20 cm as you can get!



5. Measure the height and length of each item using centimetres.



6. Exploring Linear Measurement.

Millimetre

Symbol	What is a good referent?	I can use it to measure...
--------	--------------------------	----------------------------

Centimetre

Symbol	What is a good referent?	I can use it to measure...
--------	--------------------------	----------------------------

Metre

Symbol	What is a good referent?	I can use it to measure...
--------	--------------------------	----------------------------

Kilometre

Symbol	What is a good referent?	I can use it to measure...
--------	--------------------------	----------------------------

7. a) Describe or show a strategy for measuring the distance around a circle or curved object like a cylinder.

b) Find some objects that are curved to measure (water bottle, tree trunk, your head). Write them in the chart below. Estimate the distance around them. Then measure them. How close did you get (find the difference between your estimate and measurement)?

Curved Object	Estimate	Measurement	Difference



8. Explain how one person could measure something and get a big number, and a different person could measure the same thing and get a small number. Use a specific example to support your thinking.

9. Use a balance scale and weights. Find two very different objects that have almost the same mass. How can you tell if they have the same mass? How close in mass were the two objects?

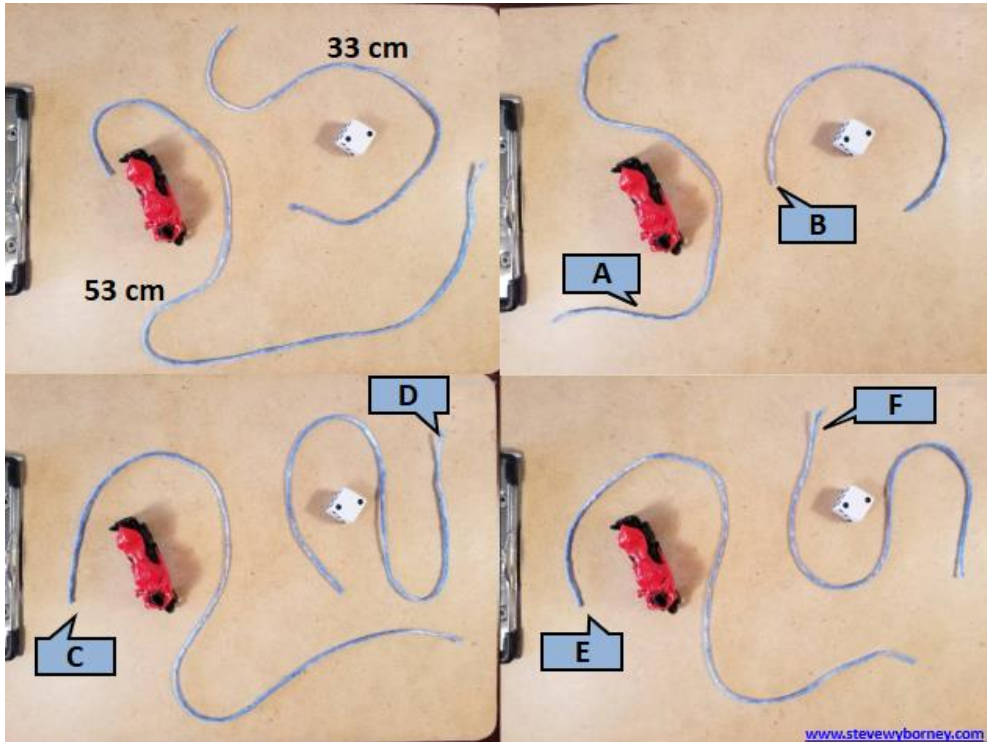
10. In Canada, we have to be familiar with both the Metric System and the Imperial System. Make a pro/con list for each system. Then decide which one you think is better using your pro/con lists to justify your choice.

Metric System		Imperial System	
Pro	Con	Pro	Con

11. Estimate the length of the wholly mammoth in the picture using the referent for 1 metre. Explain your process and how you know your estimate is reasonable.



11. Estimation Clipboard. Use the first image (top, left) to estimate the lengths of the strings labelled A through F. Justify your estimates.



Visually list the strings in order from shortest to longest. Do your number estimates agree with the order of your letters? Adjust your estimates if you need to.

1. Provide a set of 3D solids. How many faces, edges, vertices do each have?

a) Cube

b) Rectangular prism

c) Rectangular pyramid

d) Tetrahedron

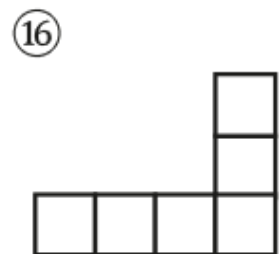
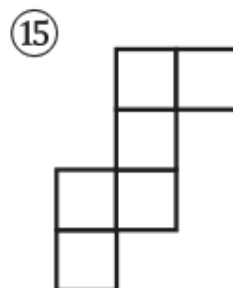
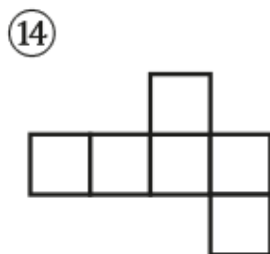
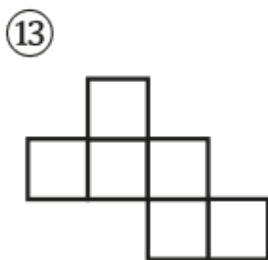
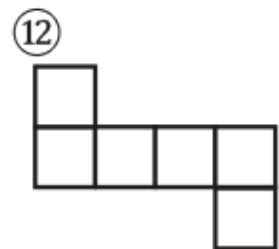
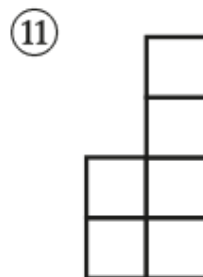
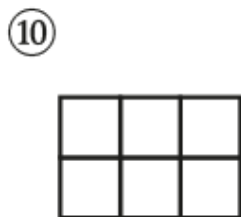
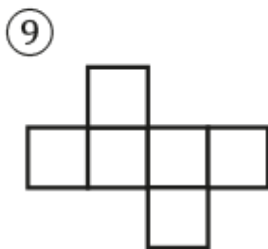
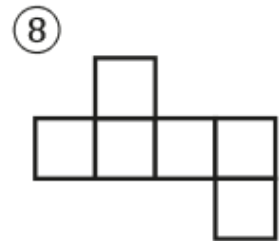
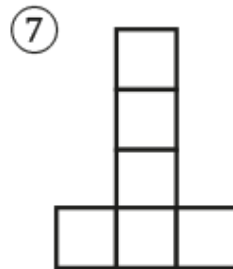
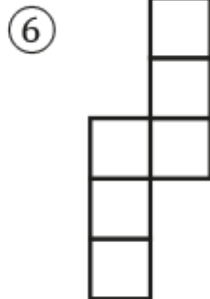
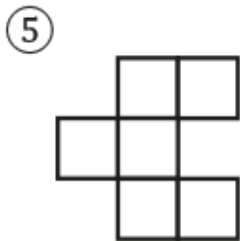
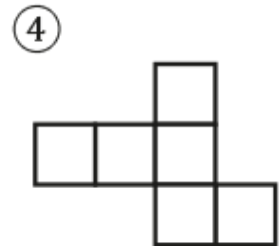
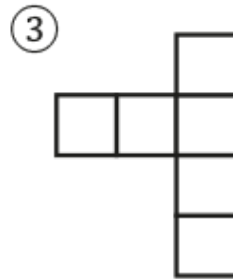
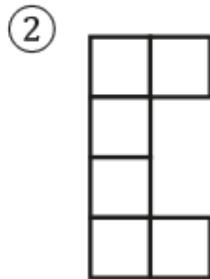
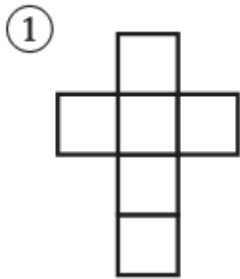
e) Triangular prism

2. What 2D shapes are in a hexagonal prism? How about a hexagonal pyramid?

3. What shapes do you see in a bentwood box?

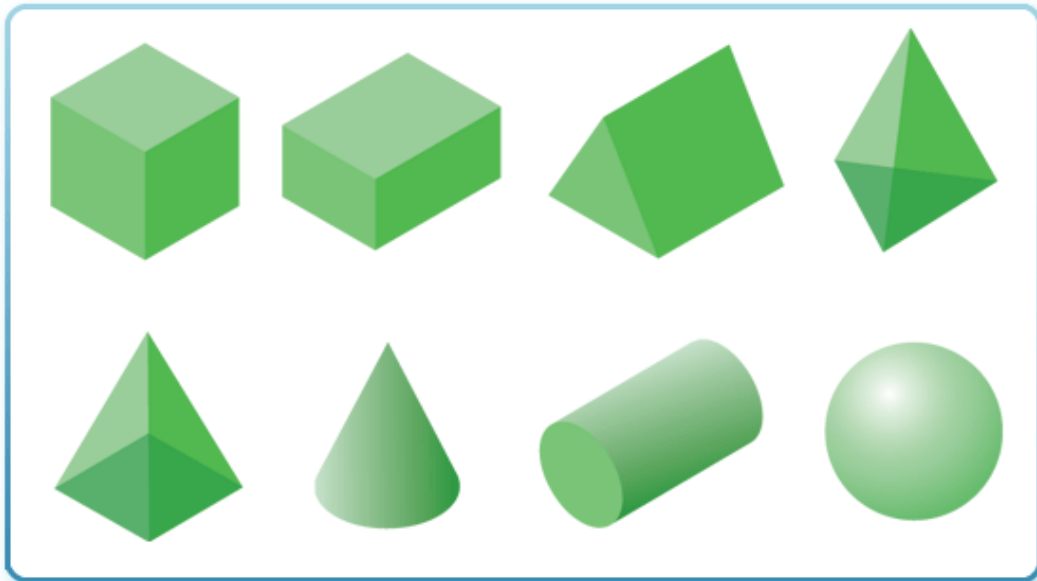


4. Investigate. Cut out the following nets. Which of them can fold into a cube? Which cannot? Challenge: Can you predict which nets will work before you cut them out?





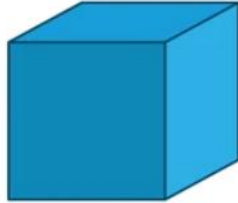
5. Name the 3D solids in the image below.



6. Consider a square and a cube. How are they similar? How are they different?



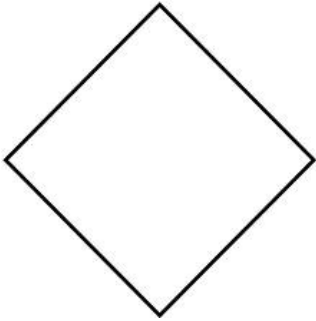
Square



Cube

7. How many different ways can you draw a quadrilateral? Name them if you can!

8. Lucy says the shape below is a diamond. Samuel says it's a square. Who do you agree with? Justify your thinking.



9. a) Identify three different kinds of prisms. Name them. What gives a prism its name?

b) Identify three different kinds of pyramids. Name them. What gives a pyramid its name?

c) How are prisms and pyramids similar? How are they different?



10. Platonic Solids investigation. Using multiple copies of a single shape, how many different 3D shapes can you make? How do you know you have found all the ways?