Level 2

EDUCOOT

Shape & Space

Student Worksheets

Contents

Sample   1

# Overview for Level 2 Shape & Space

To be successful on this course, you will be expected to do the following:

1. Name common shapes and forms in everyday life.

2. Describe the properties of common 2D shapes and 3D forms.

3. Recognise the relationship between area and volume.

4. Sort 2D and 3D shapes and forms in relation to size.

Assessment Technique: Collection of Work 100%

You will be given tuition during class time and all areas of the course will be covered. It is your responsibility to attend classes regularly and to keep up with the work. If you experience any difficulties during the course, please inform the tutor.
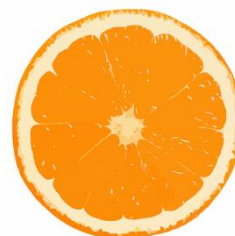
Signed: _____ Date: _____

.
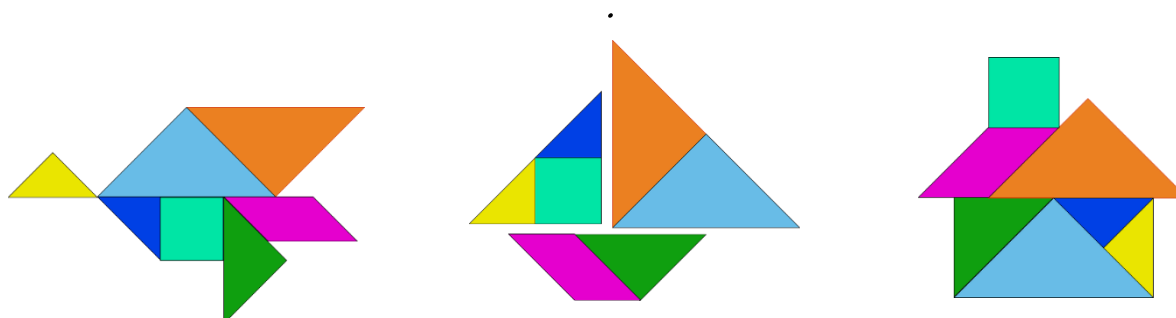
Describing 2D Shapes

1. Fill in the missing words.

| rectangle, circle, triangle, square |

a) A _____ has three straight sides.

b) A _____ has no corners.

c) A _____ has 2 sides longer than the other two.

d) A _____ has 4 equal sides.

2. Fill in the table:
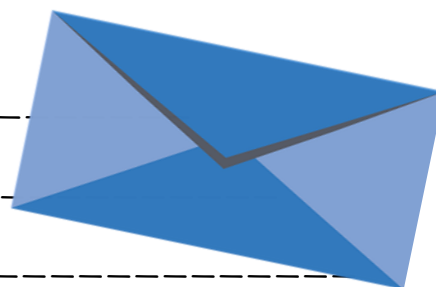
	Circle	Square	Rectangle	Triangle
Number of sides				
Number of corners				
Length of sides				

3. Are these sentences true or false?

a)   A rectangle has 4 sides. _____

b)   A square has 4 sides. _____

c)   A rectangle has 2 corners. _____

d)   A square has 4 sides with different lengths. _____

Sample   **3**
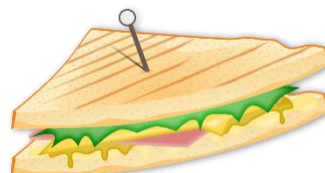
1. Match the descriptions and the images.

   a) Has 3 sides

   b) Has no straight sides

   c) Has 4 straight sides, all equal

2. Describe the properties:

   a) What shape is this? How do you know?

_____

_____

   b) What shape is this? How do you know?

_____

_____

   c) What shape is this? How do you know?

_____

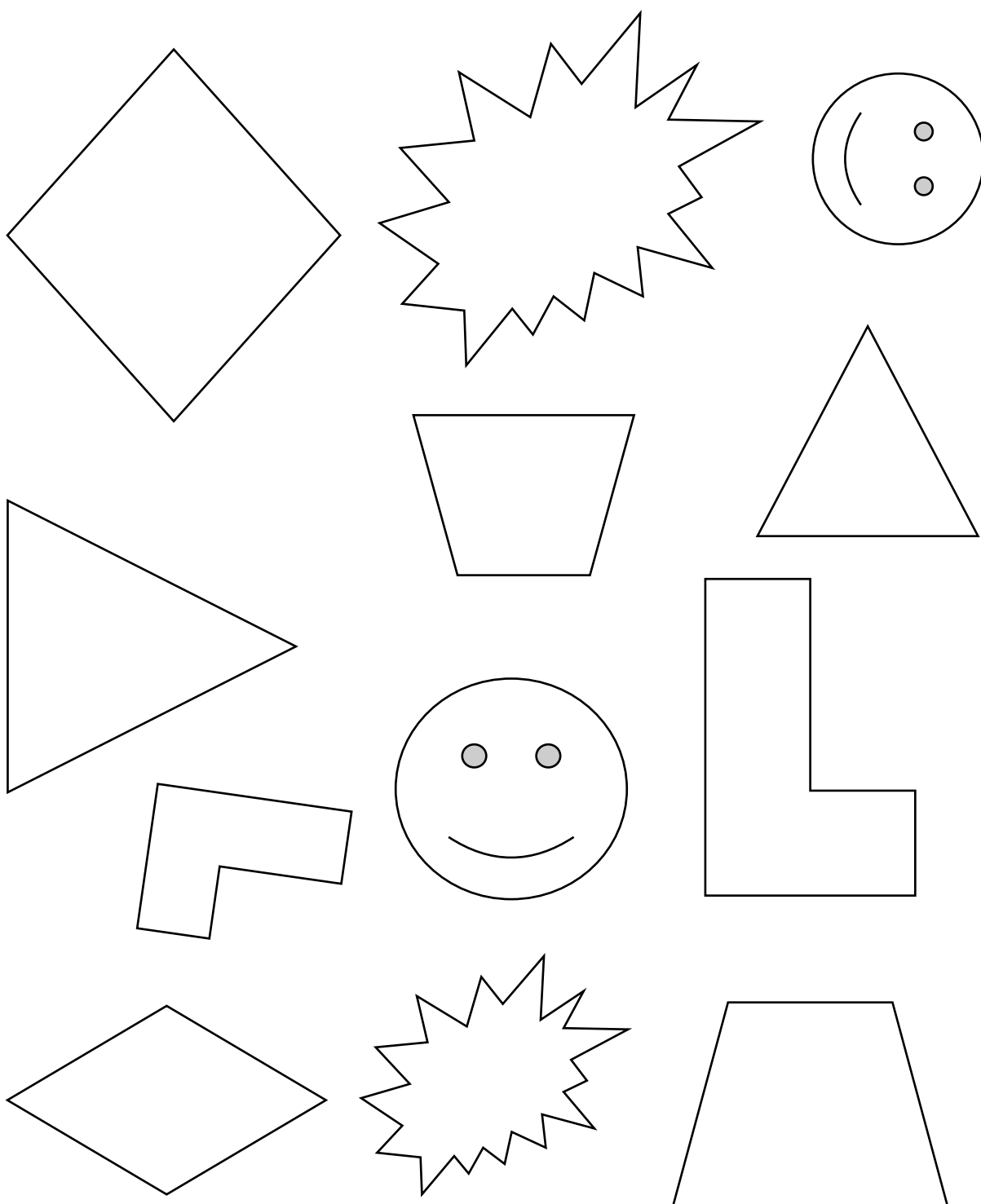_____

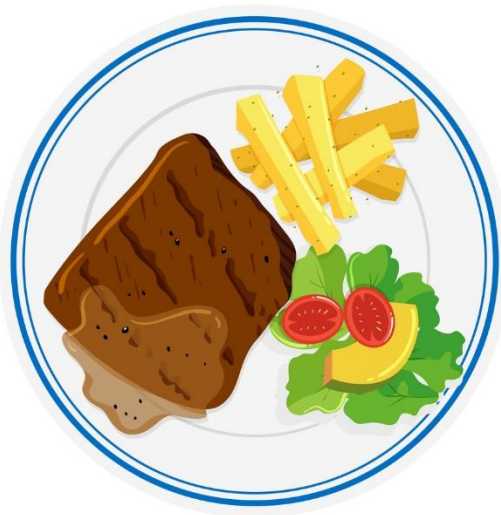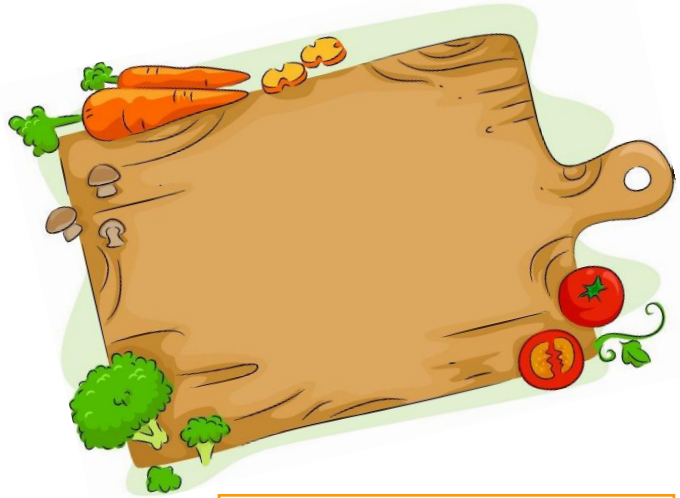   d) What shape is this? How do you know?

_____

_____

Recognising 2D Shapes

Match similar shapes. Draw lines to match.
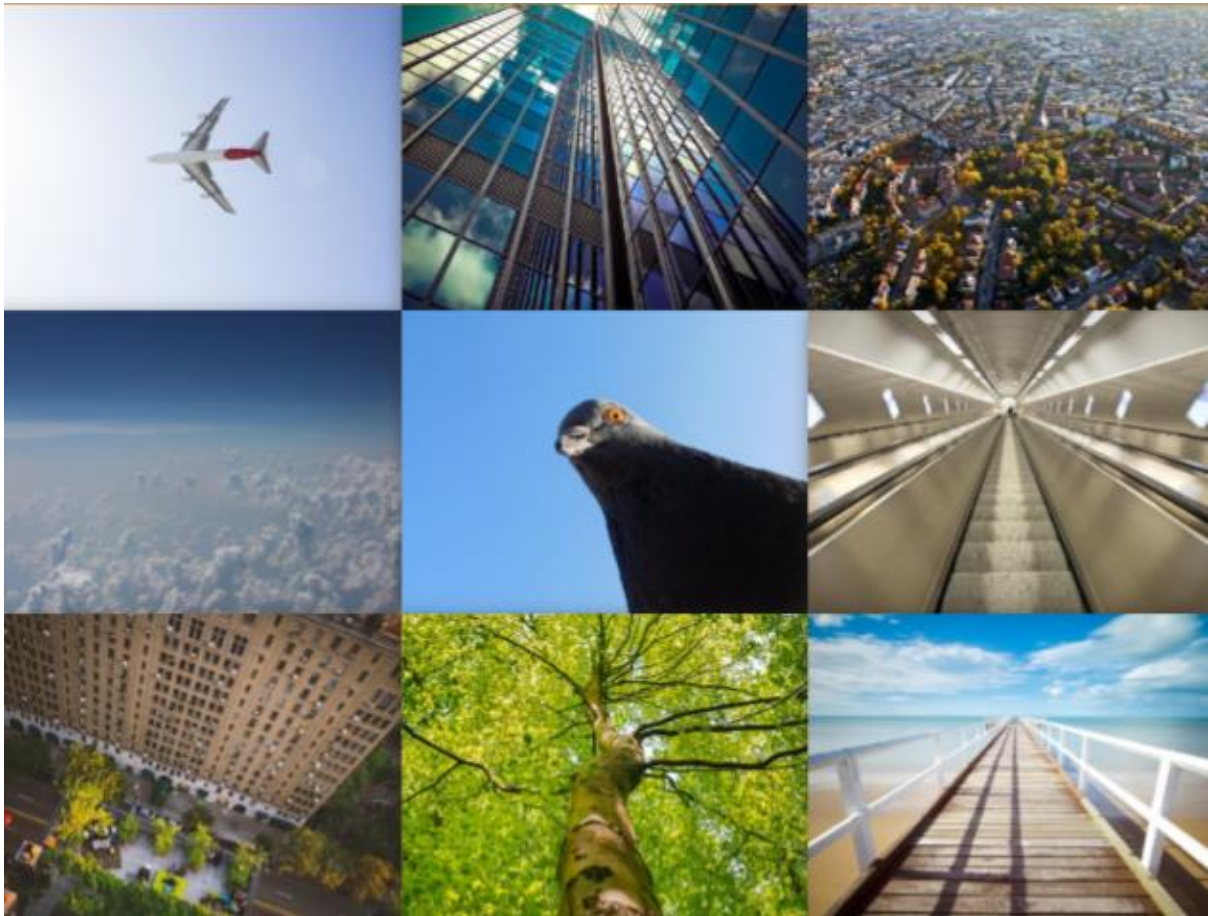
1. Name one shape you can see in each of these:
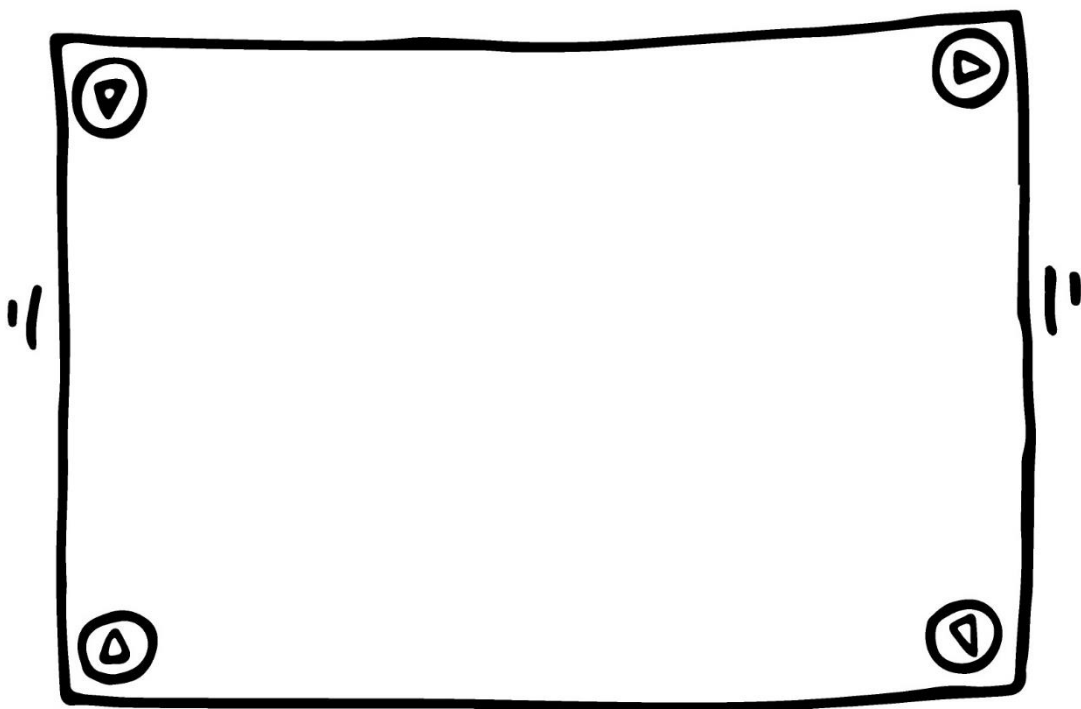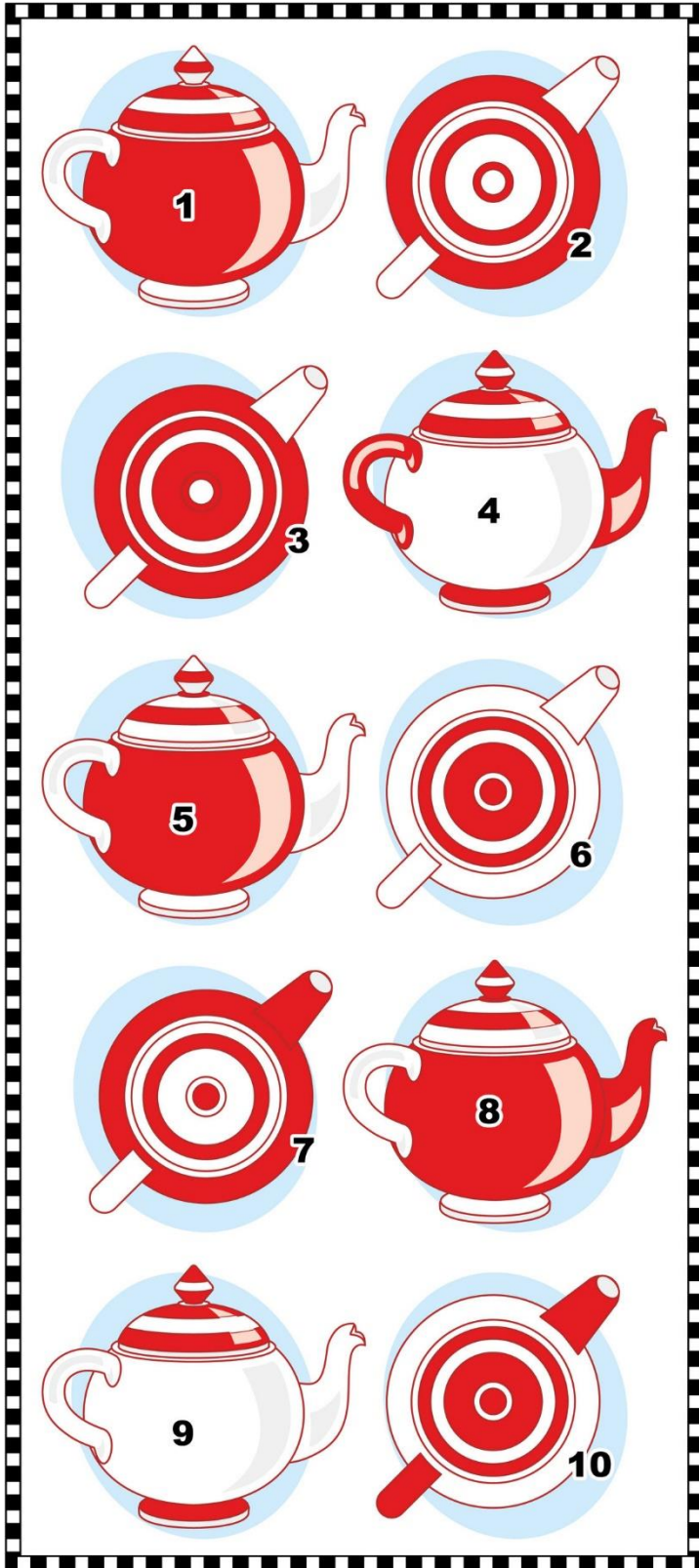
1. Identify one shape in each photo.

1. Talk about these different views.

2. If you were looking from above, what would the room look like? Draw a rough sketch.

3. Find the top view for each teapot. Write the numbers that go together.

_____

_____

_____

_____

_____

_____

It's Tea Time!

Assessment Brief 2

Programme Module Title: Shape & Space
Component Title and Code: M2N07
Assessment Technique: Collection of Work
Weighting: 100%
Title: **3D shapes**

Guidelines:

You will:

1. Name common 3D shapes and forms in everyday life, e.g. cube, cylinder and sphere.
2. Describe three different 3D shapes in terms of sides and corners.
3. Recognise the above shapes in different orientations.
4. Identify at least 2 examples of 3D shapes found in everyday objects.

Assessment criteria:

- Recognise and name at least 2 examples of each of the following shapes: cube, cylinder and sphere.

- Structure answers in a logical and clear manner.
- Ensure the correct spelling of familiar and personally relevant words.
- The properties of at least 3 different shapes should be explained.
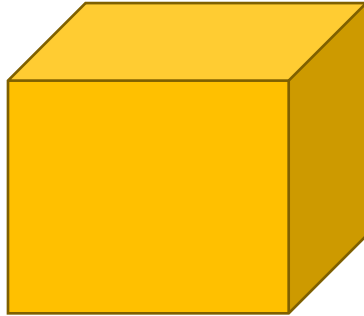- Have an awareness of 3D shapes in everyday life.

Submission Date: _____
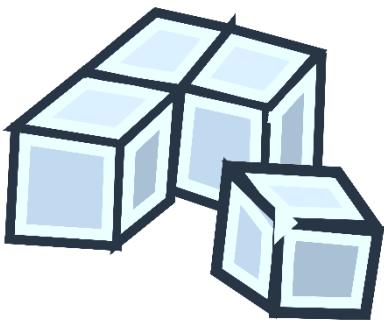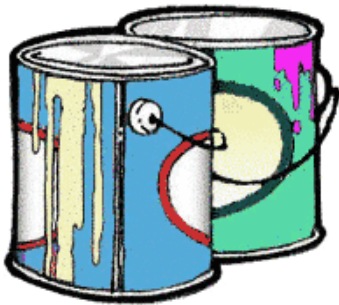
I, _____, confirm that this is my own work.

Signed: _____ Date: _____

Sample   **10**

3D Shapes in Everyday Life

1. Name these shapes.

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2.　What shapes do you see in these everyday objects?

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Describing 3D Shapes
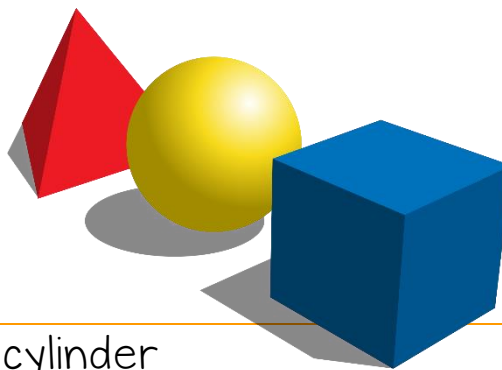
1. Complete the sentences.

sphere, cube, cylinder

a) A _____ has circular ends of equal size.

b) A _____ has 6 square faces.

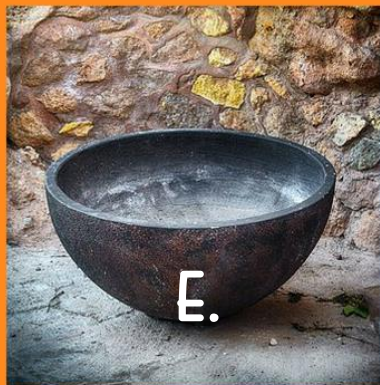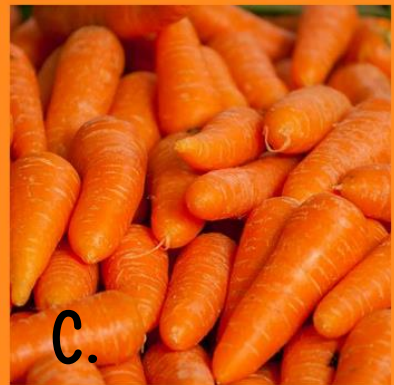c) A _____ has only one curved face.

2. Fill in the table.

	Cube	Cylinder	Sphere
Number of faces			
Number of edges			

3. Write true or false.

a) A cylinder has 6 faces. _____
b) A cube is a 3D shape. _____
c) A sphere is a perfectly round 3D shape.
   _____
d) A cube has 6 edges. _____
e) Cylinders and squares are 3D shapes.
   _____

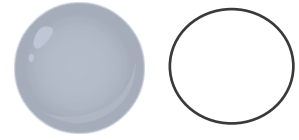**Sample**   **12**

1. Name the 3D shapes.

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

G. _____

H. _____

I. _____

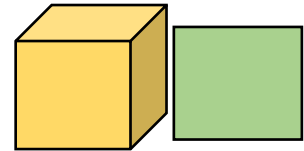# What Shapes have in Common

1. What do these shapes have in common?

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2. What do these shapes have in common?

----
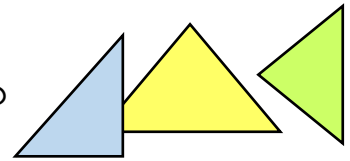
3. What do these shapes have in common?

----

4. What do these shapes have in common?

----
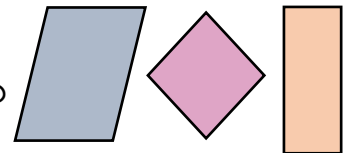
5. What do these shapes have in common?

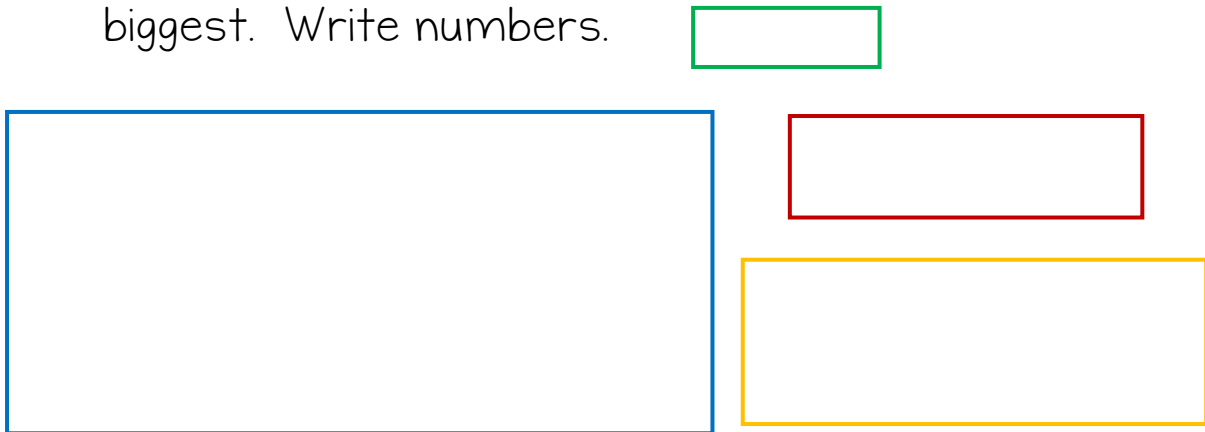--
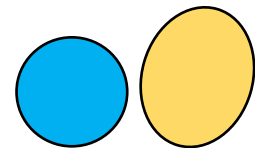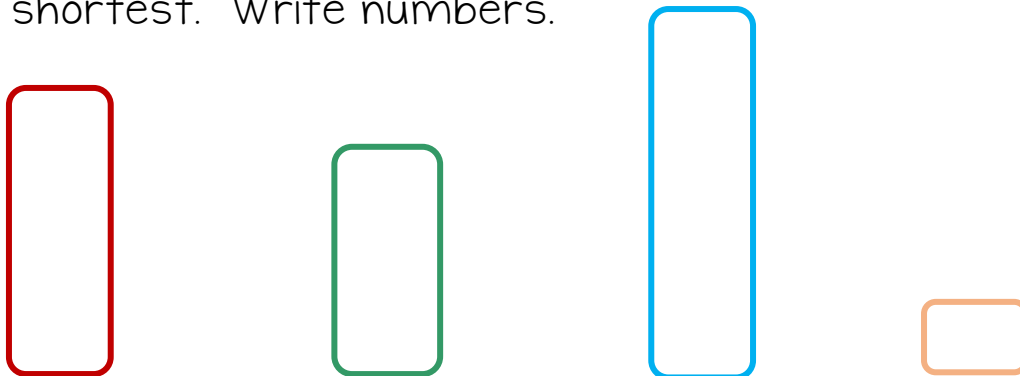
Sorting Shapes

1. Sort these shapes from biggest to smallest. Write numbers.
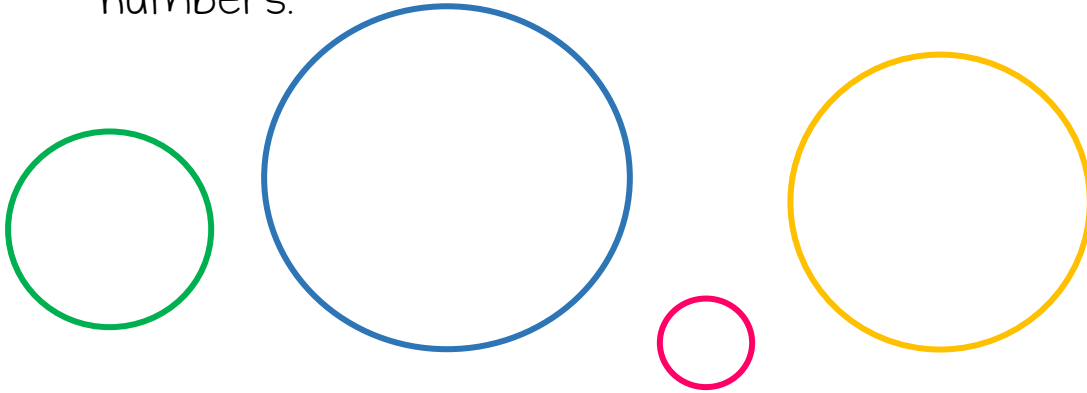
2. Sort these according to size, from smallest to biggest. Write numbers.

3. Sort these according to size, from tallest to shortest. Write numbers.

Sample   2

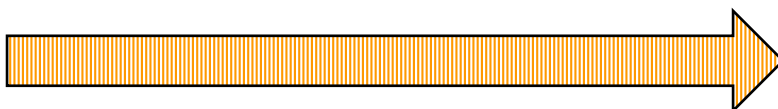11. Find 3 objects that are longer than your pen / pencil, and find 3 objects that are shorter than your pencil.

Write the items in the table below:

Longer	Shorter
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

12. Is your pen / pencil longer or shorter than this line below? _____
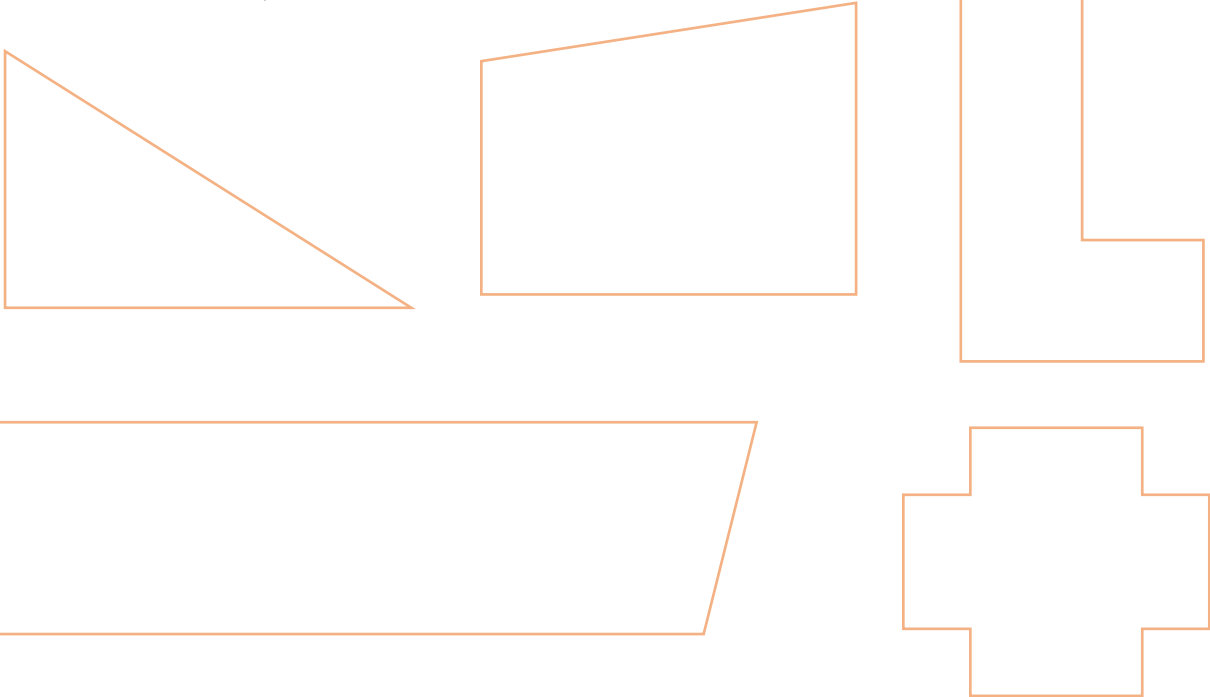
13. Is your thumb longer than or shorter than this line below? _____

Perimeter
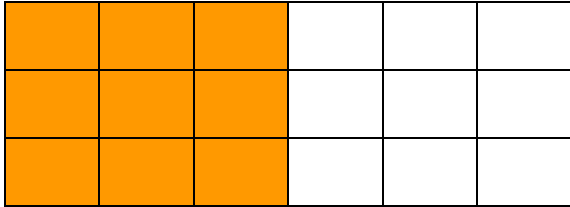
1. Draw the perimeters in red. (freehand)

2. Draw, in red, the perimeters of these shapes.
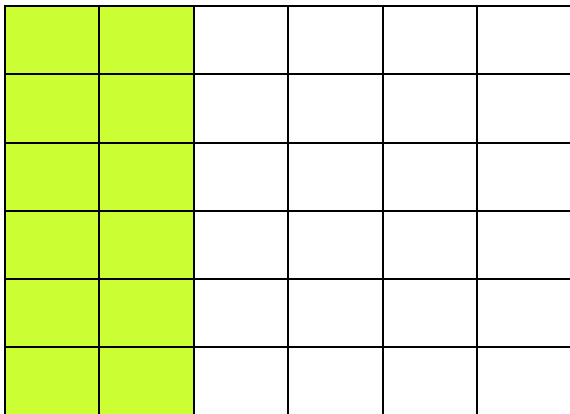   (freehand)

Sample

4

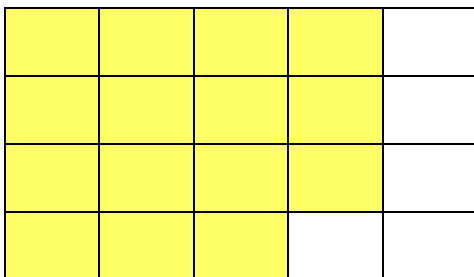1. Work out the shaded area by counting the units that are shaded.

Example:
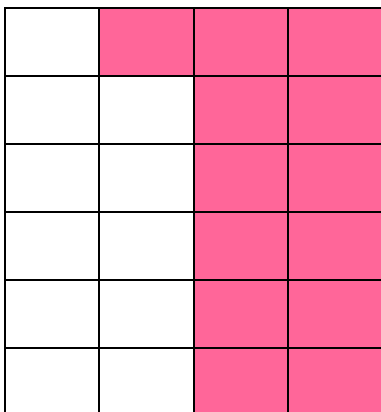
Shaded area

= 9 square units

Shaded area

= __ square units

Shaded area

= __ square units
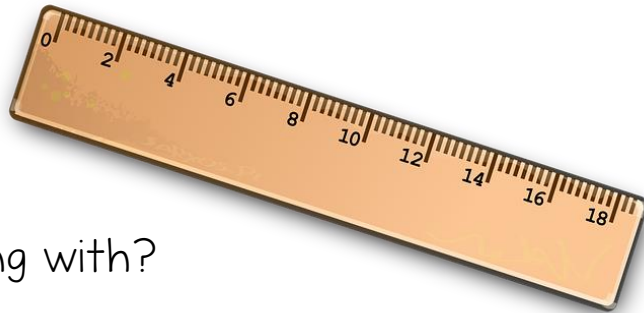
Shaded area

= __ square units

1. Complete the sentences.

volume, perimeter, area

a) _____ is the size of a 2D surface.

b) _____ is the distance around a 2D shape.

c) _____ is the measure of space a 3D object

takes up.

2. What are you working with?

perimeter, area, volume

a) I am laying new carpet in my living room. I will be

using _____.

b) I am adding milk to my cake mixture. I will be using

_____.

c) I am making a frame for a

photo. I will be using

_____.

d) I am putting petrol in my car. I will be using

_____.

e) I am putting a fence around my vegetable garden. I

will be using _____.

Mapping of Learning Outcomes

1. Name common shapes and forms in everyday life, e.g. circles, rectangles, cubes, cylinders and spheres.   Pages 6 to 20 (2D shapes), Pages 21 to 23 (different perspectives), Pages 25 to 27 (3D shapes), Pages 30 to 33 (3D shapes)

2. Describe the properties of common 2D shapes and 3D forms, e.g. number of faces, edges, area, and volume. Pages 11 and 12 (properties of 2D shapes), Pages 28 and 29 (properties of 3D shapes), Pages 35 and 36 (2D or 3D), Page 37 (3D drawing), Pages 38 to 40 (what shapes have in common), Pages 28 to 50 (perimeter), Pages 51 to 53 (area), Pages 54 to 56 (volume), Pages 57 to 60 (perimeter, area and volume)

3. Recognise the relationship between area and volume. Pages 30 and 31 (perimeter), Page 32 (area), Page 33 (volume), Pages 34 to 36 (perimeter, area and volume), Pages 51 to 53 (area), Pages 54 to 56 (volume), Pages 57 to 60 (perimeter, area and volume)

4. Sort 2D and 3D shapes and forms in relation to size.   Pages 41 to 46 (sorting shapes)

Sample