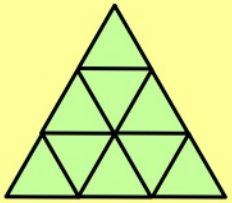
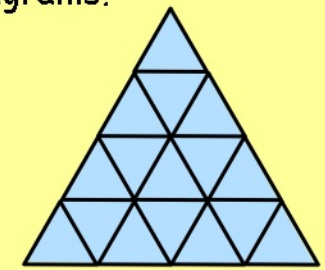
L.O - to analyse your prior knowledge of shape and apply this knowledge to different contexts.

How many triangles in these diagrams?





Convince me that you are correct.

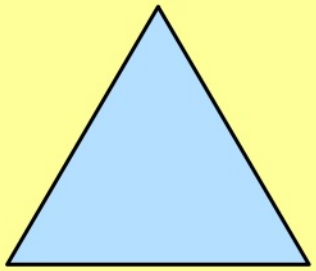
L.O - To analyse your knowledge of triangles to name them and identify their properties. To extend this knowledge to include the proper notation

In your groups: Show everything you know about the types of triangles.

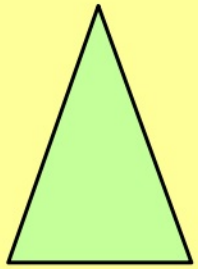
Convince me that you are correct:

What should we include?

Convince me... that this is an equilateral triangle:



Convince me... that this is an isosceles triangle



L.O – to analyse and apply your prior knowledge from the angles topic to construct triangles using compasses.

Using a pencil, ruler and pair of compasses construct a triangle with side lengths 5cm, 6cm and 7cm.

7cm

Construct these triangles using your ruler and compasses:

1) 6cm, 6cm and 6cm
What type of triangle is this?

2) 5cm, 5cm and 7cm
What type of triangle is this?

3) 3cm, 4cm and 5cm
What type of triangle is this?

4) 6.5cm, 5.5cm and 5cm
What type of triangle is this?

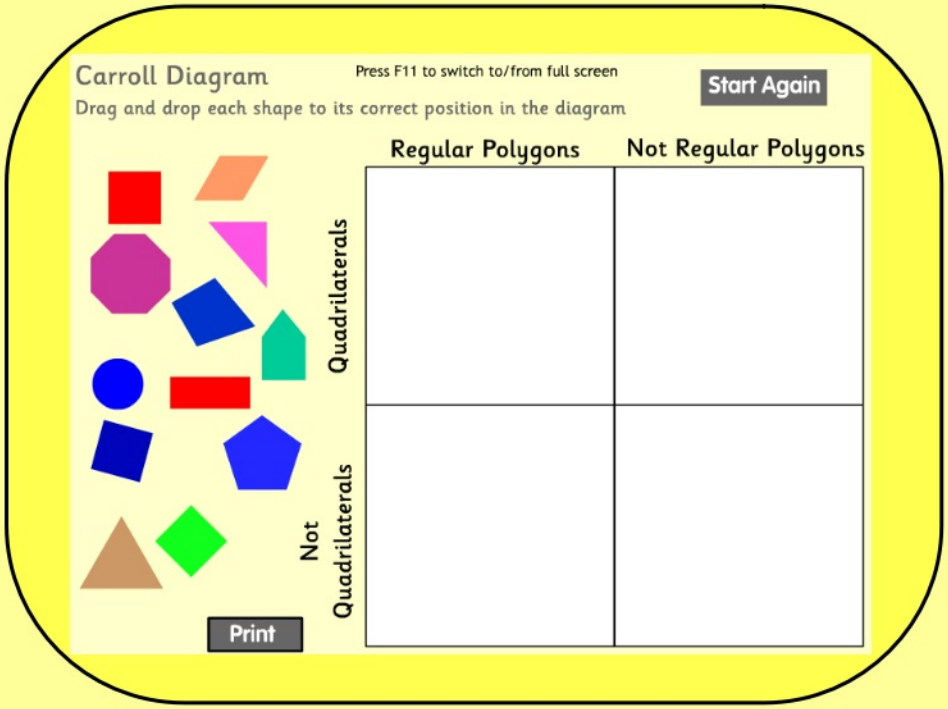
Triangle construction challenge:

Create a triangle that is both **isosceles** and **right angled**.

- How did you decide on what angles to use?
- What side lengths did you decide to use and why?

Can you think of a set of side lengths that would lead to a triangle that is impossible to construct?
Why is it impossible to construct?

Construct a regular triangle. Convince me that your triangle is regular.



What is a quadrilateral?

How many can you name?

How many can your draw?

L.O - to work collaboratively to solve a problem that involves quadrilaterals.

Aim of the task:

Every member of the team has to end up with a set of four cards in front of them that are related to each other in a similar way.

Rules:

- No one can talk or give non-verbal signals to other members of the team.
- Each member of the team starts with four cards in front of them.
- Team members can only give cards; they cannot take cards from someone else.
- Each team member must have at least two cards in front of them at all times

L.O - to recognise and understand the properties of quadrilaterals

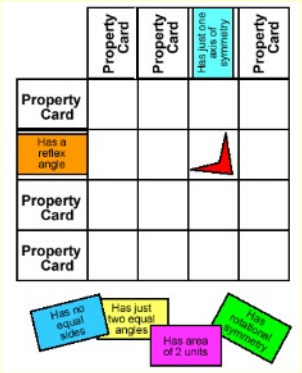
Shape	Name	Properties of sides	Angles properties	Number of lines of symmetry

Using the following headings match the shape to its name and properties.

Use this information to complete your sheet - these are your learning log notes. Make sure it goes in your learning log.

L.O - to analyse the properties of quadrilaterals to group and sort them.

- Shuffle eight cards, and lay them on the grid in the spaces marked "property card".
- Your challenge is to draw a quadrilateral in each square, so that the quadrilateral has both the properties at the top of the column and at the start of the row.
- There might be some that aren't possible!



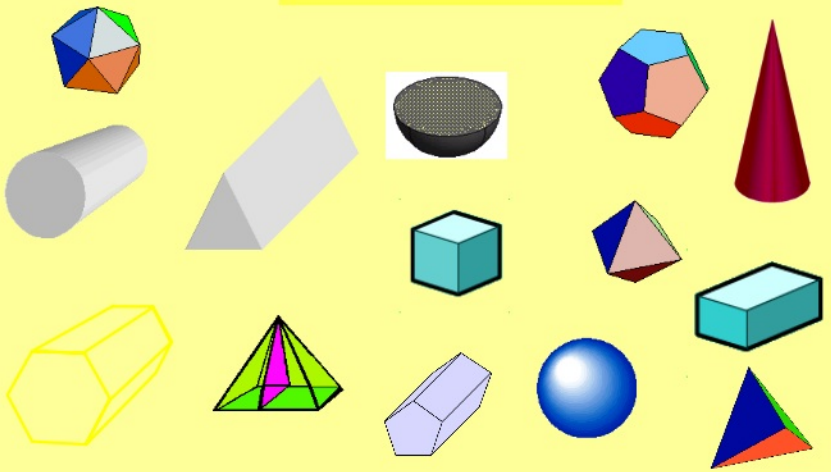
Challenge Questions

Can you select 8 cards and arrange them so that you can fill in all of the squares? What cards did you use? What about none of the squares?

What's the smallest number of different shapes you need to fill in the grid? What shapes are these, and what cards did you use?

L.O - To identify 3D solids and create them by drawing their nets

Name the 3D solids



L.O - to create models of 3D shapes by analysing their properties and creating their nets.

Your task:

Build models of the following 3D shapes. You will need to show all of your workings:

- Sketches of each model - with dimensions labelled
- Sketches of nets - with dimensions labelled

Cube

Cuboid

Triangular Prism

Square based pyramid

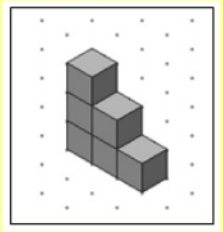
Cylinder*

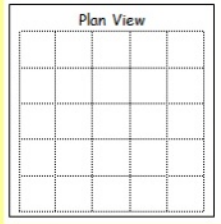
Tetrahedron

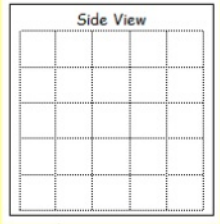
Don't forget the flaps!!!

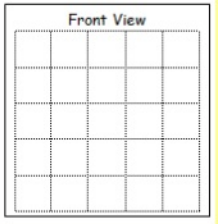
L.O - to create isometric drawings, and analyse shapes to sketch its plan view and elevations.

Using your multilink - create this shape:









Try the other three... then create you own. Make them as difficult as you can!