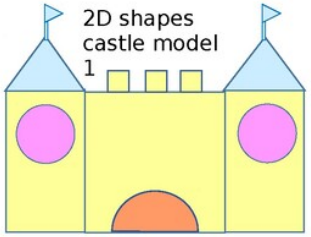
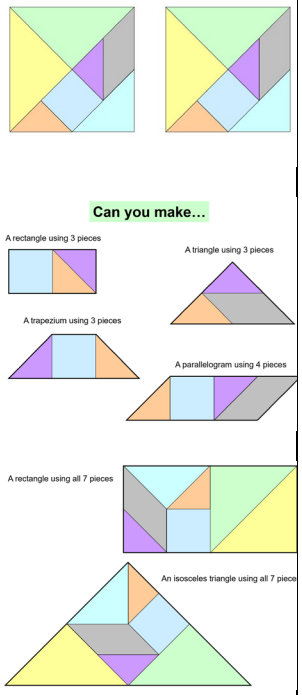
Year 2 - Mathematics - Learn from home timetable

Big Idea Concept: 2 D Shapes

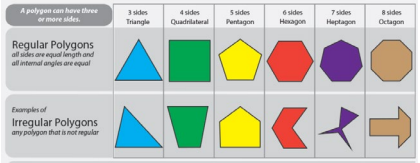
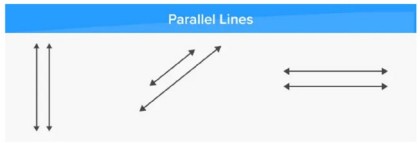
- **I can name and recognise 2D shapes**
- **I can describe 2 D shapes**
- **I can draw representations of 2D shapes**
- **I can compare 2 D shapes**

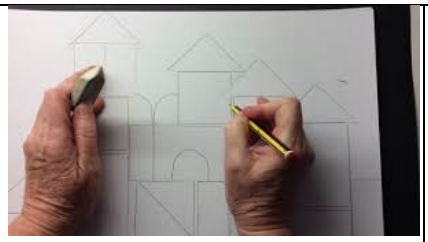
Australian Curriculum Connection: Describe and draw two- dimensional shapes

Monday	Tuesday	Wednesday	Thursday	Friday
Launch and Tune In What two-dimensional shape can you see in this image? Signs are made out of 2D shapes. What other signs can you think of and can you name the 2D shape they are?	**Launch and Tune In** We can find 2D shapes everywhere in nature. What shape do you see in this image? Where else so you see two dimensional shapes in Nature?	**Launch and Tune In** What shape do you see in this picture? Walk around you house and look down. What shapes do you walk over in your house? Are there tiles, pavers or floorboards? What shapes are they? 	**Launch and Tune in** Can you name the 2D shapes in this castle? Choose 2 of the shapes. What is the same about them? What is different?  	**Launch and Tune In** Cut out the Tangram kit and see what images you can create. 

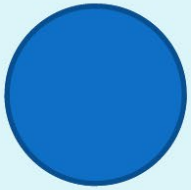
Vocabulary in Mathematics:

Students should be able to communicate using the following language: shape, **two-dimensional shape (2D shape)**, circle, triangle, quadrilateral, square, rectangle, pentagon, hexagon, octagon, orientation, features, **symmetry**
A shape is said to have line symmetry if matching parts are produced when it is folded along a line of symmetry. Each part represents the 'mirror image' of the other.

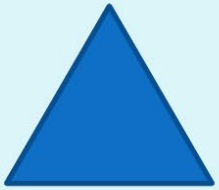
Conceptual Development • Use the 'Shape Map' attached. • Can you see the square and the rectangle? • Point to them. • What is the same about these two shapes? (4 straight sides, the opposite sides are equal length) • What is different about these shapes? (a square has 4 sides all the same length and the rectangle has 2 long sides and 2 shorter sides)	**Conceptual Development** Using the 'shape Mat' can you make some of these shapes using: - With some other people in your home create the shape with your body. - Toothpicks or sticks from the garden? - What else do you have that you could make these shapes? - Can you name the shapes you made?	**Conceptual Development** **Shapes can have different attributes.** **Choose a shape and consider-** **Is it a polygon?**  **Does it have parallel lines?** Parallel lines can be defined as two lines in the same plane that are at equal distance from each other and never meet. 	**Conceptual Development** **Mystery Box** - Cut out a set of shapes - Find a box or container that you can't see through. - Have someone place a shape in the box without the student seeing it. - Can they guess what shape it is by asking clues? Giving clues? Feeling the shape with their eyes shut?	**Conceptual Development** **Mystery Box** - Cut out a set of shapes - Find a box or container that you can't see through. - Have someone place a shape in the box without the student seeing it. - Can they guess what shape it is by asking clues? Giving clues? Feeling the shape with their eyes shut? -
Learning Journal a **two-dimensional shape** can be **defined** as a flat shape or a **shape** that has **two dimensions** – length and width. **Two-dimensional** or **2-D shapes** do not have any thickness and can be measured in only **two** faces.	**Learning Journal** Using the 'shape sort' cut out the shapes and sort them into piles of shapes which have similar attributes. Ask the students to record their reasoning.	**Learning Journal** • Compete the Shape sorting activity. Consider the attributes of each shape and where you might sort them.	**Learning Journal** Kingdoms and Castles Using 2 dimensional shapes and a ruler, can you design a castle for a dragon to live in?	**Learning Journal** In the mystery box game write and/ or draw: - What types of descriptions were most helpful in naming the shape and seeing the

• Draw and name as many 2 D shapes as you can? • Using the 'shape mat', what other shapes could you have included?				shape in your mind? - Were there any problems with different understandings of meanings of words?

2D Shape Word Mat


circle

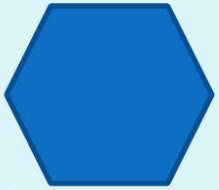
square

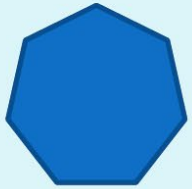

triangle

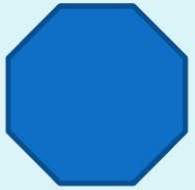
rectangle

pentagon

semi circle

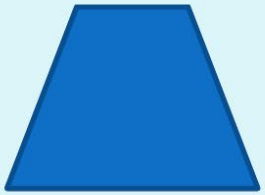

hexagon


heptagon


octagon

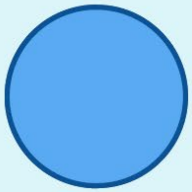
rhombus

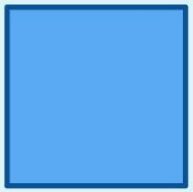
right angled triangle

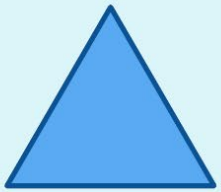

trapezium

tes resources

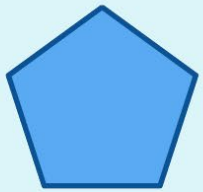
2D Shape Word Mat

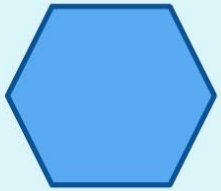

circle

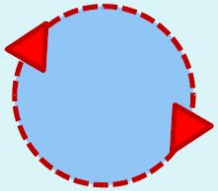

square

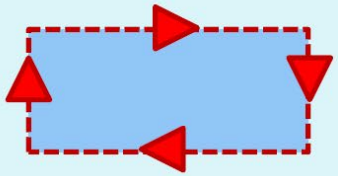

triangle

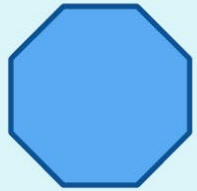
rectangle

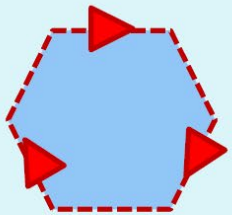

pentagon


hexagon

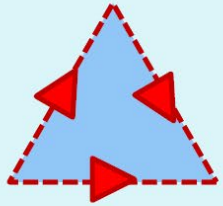

circular


rectangular


octagon


hexagonal

star


triangular

tes resources

Word Bank

triangle	octagon
quadrilateral	circle
pentagon	oval
hexagon	square
rectangle	kite

6 sides

8 sides

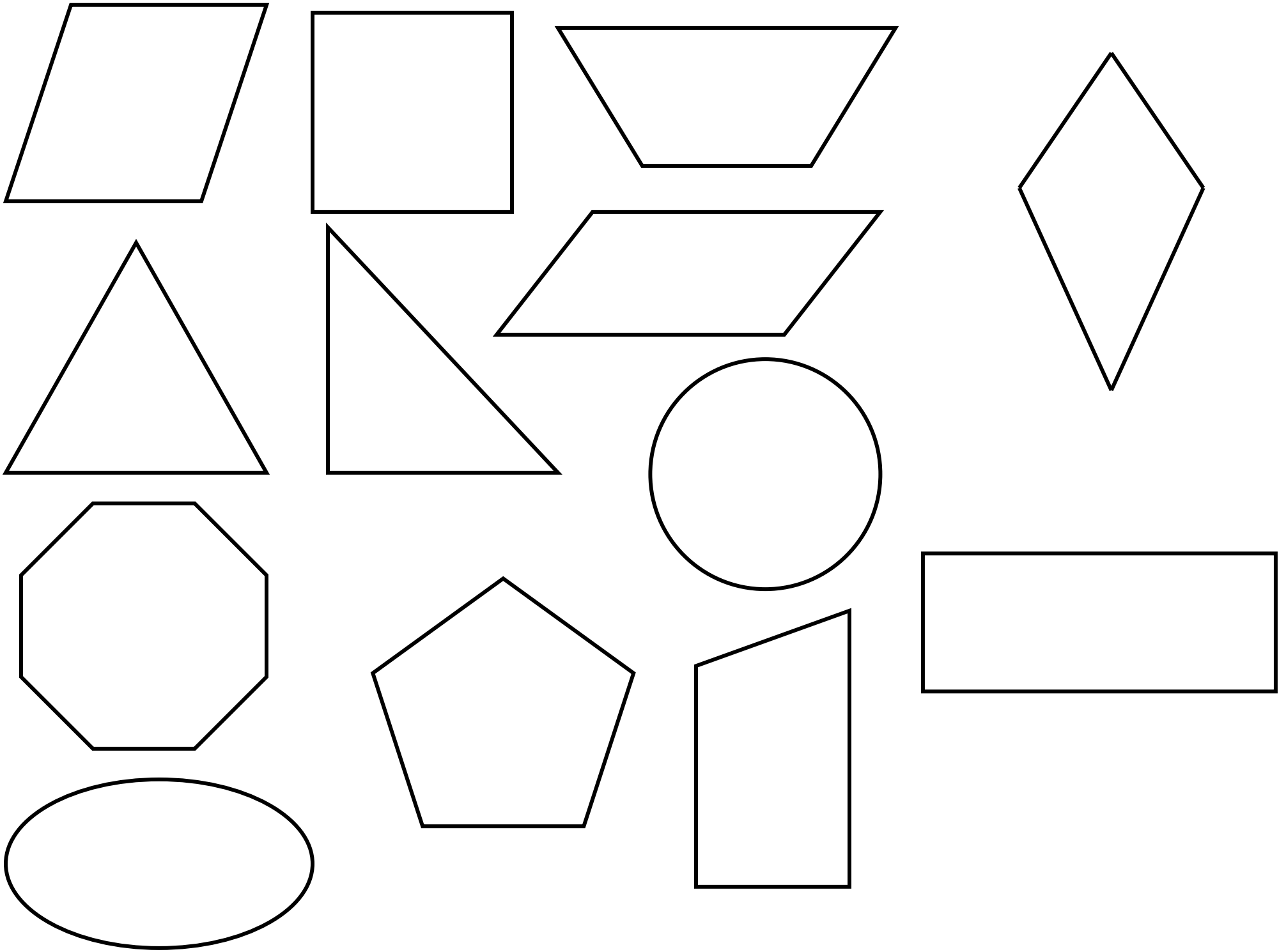
4 straight sides

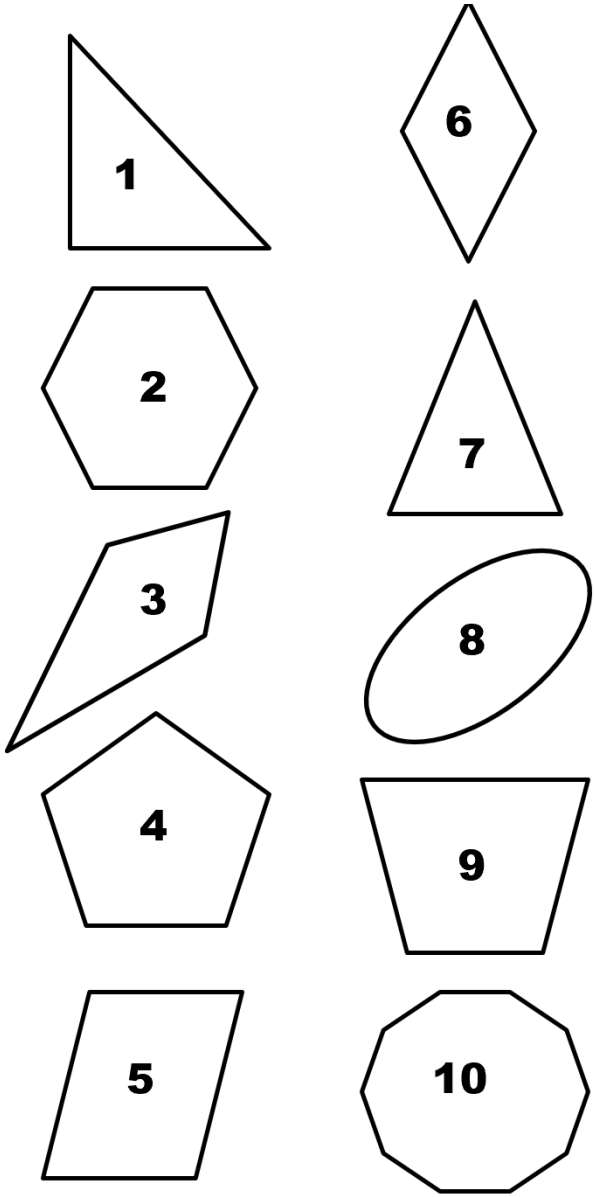
Sorting Shapes

3 sides

1 curved side

5 sides





Cut out each shape and stick it in your book.

Next to each shape, describe the properties of the shape.

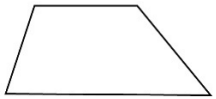
Use the answers to all of these questions to list as many properties as you can.

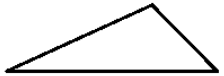
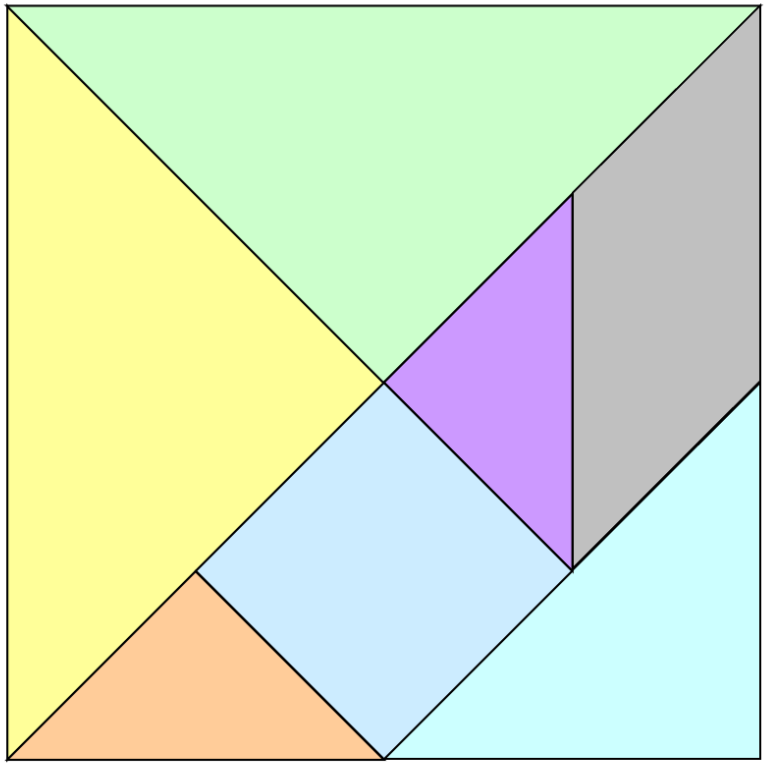
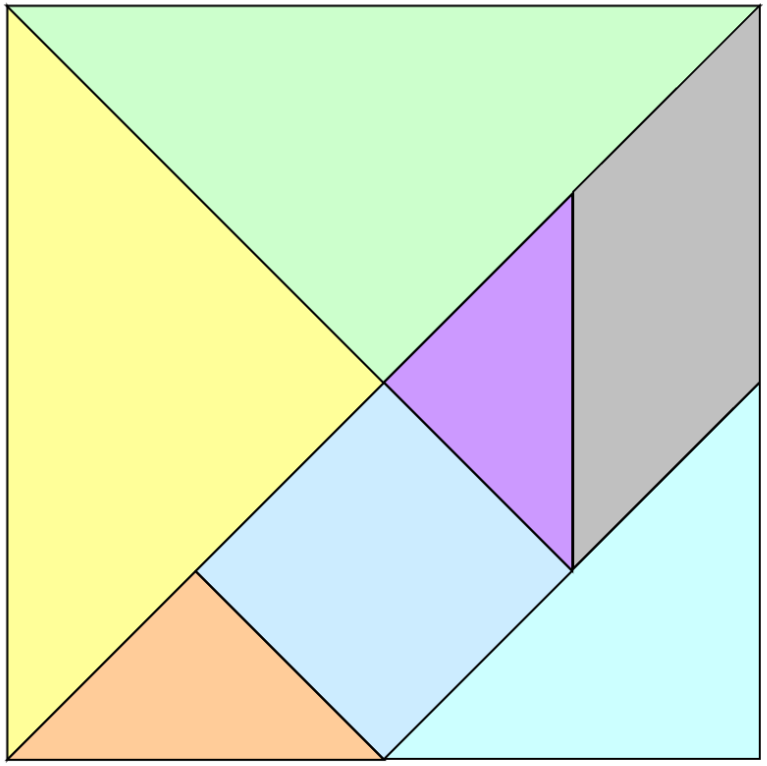
What is the **name** of the shape?

What kind of shape is it and what are the **properties** of the shape?

- Is it a polygon?
- Is it a regular or irregular polygon?
- Are all the sides of equal length and are all the angles equal?
- How many sides are there?
- Are there any parallel sides..... how many pairs of parallel sides?
- Are there any lines of symmetry..... how many?

Name	Picture	Sides	Angles	Parallel sides	Lines of symmetry
Equilateral Triangle		3 sides the same length	3 angles the same size	No pairs of parallel sides	3 lines of symmetry
Square		4 sides the same length	4 right angles	2 pairs of parallel sides	4 lines of symmetry
Rectangle		Opposite sides equal	4 right angles	2 pairs of parallel sides	2 lines of symmetry
Parallelogram		Opposite sides equal	Opposite angles equal	2 pairs of parallel sides	0 lines of symmetry

Trapezium		4 sides		1 pair of parallel sides	
Rhombus		4 sides the same length	Opposite angles equal	2 pairs of parallel sides	2 lines of symmetry
Kite		2 pairs of adjacent sides equal	1 pair of opposite angles are equal	No pairs of parallel sides	1 line of symmetry
Regular Hexagon		6 sides the same length	6 angles the same size	3 pairs of parallel sides	6 lines of symmetry
Regular Pentagon		5 sides the same length	5 angles the same size	No parallel sides	5 lines of symmetry

Regular Octagon		8 sides the same length	8 angles the same size	4 pairs of parallel sides	8 lines of symmetry
Isosceles Triangle		2 sides the same length	2 angles the same size	No parallel lines	1 line of symmetry
Scalene Triangle		No equal sides	No equal angles	No parallel sides	No lines of symmetry