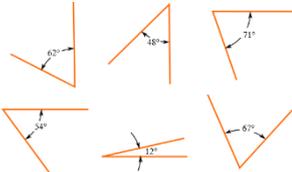
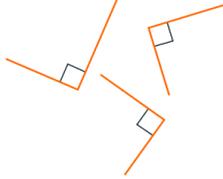
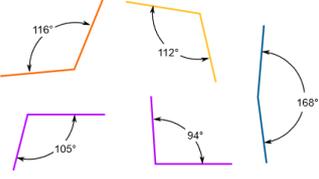
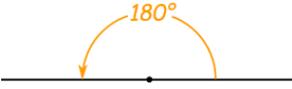


Maths- 15.6.20

Here are your maths tasks for this week- please use the book provided to complete the tasks ☺ We normally do maths Monday-Thursday, with Friday being our day for Mathletics and Times table rockstars to consolidate other areas of learning. Please see the Times table sheet for suggested activities. I've attached an arithmetic paper for Friday to complete this week too ☺

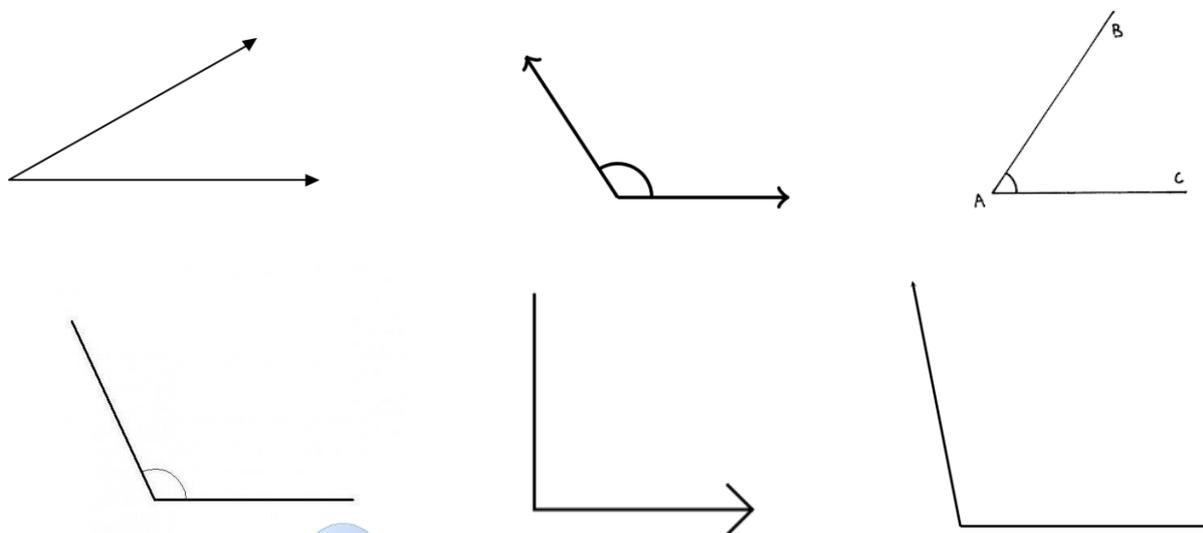
Monday

This week, we will be looking at geometry- comparing and classifying shapes and looking at angles. Today, we will be having a look at angles and whether they are acute, obtuse, right angles or straight angles. When we think about angles, we need to understand these rules below:

<u>Acute angles</u>	<u>Right angles</u>	<u>Obtuse angles</u>	<u>Straight angles</u>
<p>These angles are smaller than 90 degrees. You can normally tell which one is an acute angle because they are 'cute' and small.</p> 	<p>These angles are 90 degrees. The horizontal and vertical lines are both straight (not diagonal).</p> 	<p>These angles are bigger than 90 degrees, but smaller than 180 degrees (straight angle).</p> 	<p>These angles are 180 degrees, which is the same as a straight line (two 90 degrees angles together).</p> 

Task

Today, I would like you identify what these angles are- are they right angles, obtuse or acute angles? Label them below.



Challenge



I know the angle is not obtuse.

Max

I know the angle is acute.

Tina

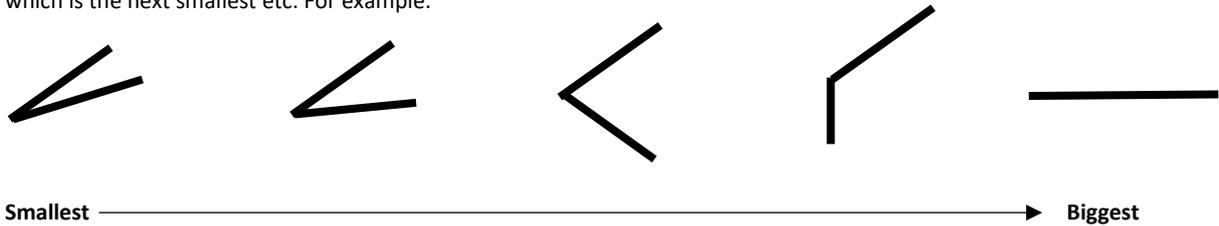
I think the angle is roughly 45°.

Jess

Who do you agree with? Explain why.

Tuesday

Today, we will be having a look at comparing and ordering angles. When we order angles, we will go from the smallest angle to the biggest angle. To do this, we need to look for the smallest angle and then compare the other angles to decide which is the next smallest etc. For example:



Task

Circle the largest angle in each shape or diagram.



Can you label each angle as acute, obtuse or right angle?

Order the angles from largest to smallest.

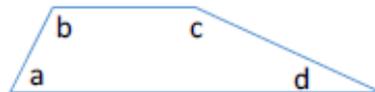


Can you draw a larger obtuse angle?

Can you draw a smaller acute angle?

Order the angles in the shape from smallest to largest.

Complete the sentences.



Angle _____ is smaller than angle _____.

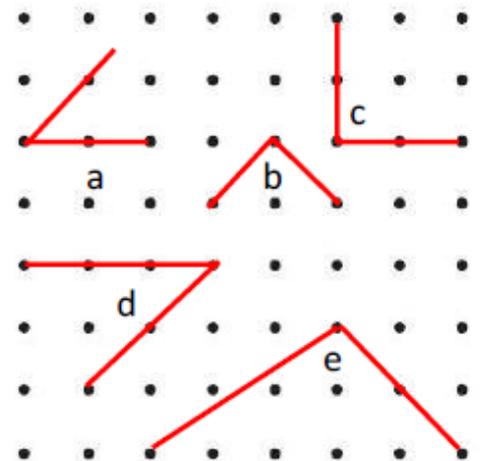
Angle _____ is larger than angle _____.

Here are five angles.

There are two sets of identical sized angles and one odd one out.

Which angle is the odd one out?

Prove it.



Challenge:

Jannat looks at the analogue clock four times during the morning.

The times she sees are:

Eight o'clock

Five past 11

Twenty to eleven

08:15

Draw the times on the clock faces and find the angles less than 180 degrees.



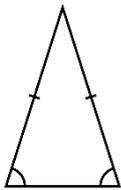
Order the angles from greatest to smallest.

Wednesday

Today, we will look at triangles and the different types of triangles that we have. See the information below to help you:

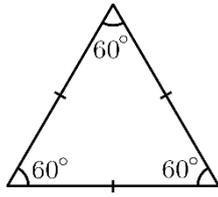
Isosceles Triangle

Isosceles triangles have 2 sides longer than the other. They have 2 angles that are the same and they are called base angles.



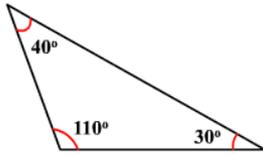
Equilateral Triangle

Equilateral triangles have all sides the same length. All of the angles inside of these triangles are 60 degrees.



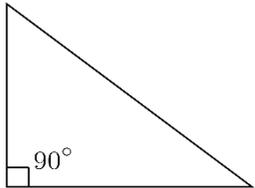
Scalene Triangle

Scalene triangles have all sides different lengths. All of its angles are different but they still add up to 180 degrees.



Right-angle Triangle

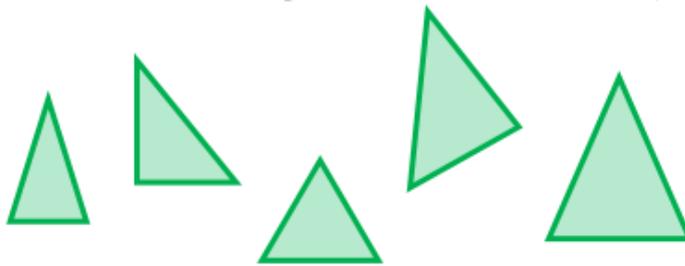
Right angle triangles have one right angle within them.



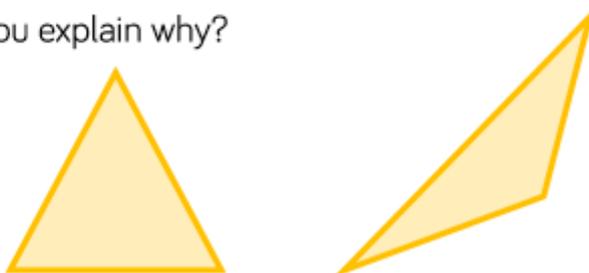
Task:

Use the information above to help you answer these questions below:

1 Label each of these triangles **isosceles**, **scalene** or **equilateral**.



2 Look at these Triangles. What is the same and what is different? Can you explain why?



3 Decide if each statement is true or false.

	True	False
All the sides of an isosceles triangle are equal.		
A right-angled triangle has one angle that is 90°		
A scalene triangle cannot have a right angle.		

Challenge:



If I use a piece of string to make a triangle, all of the sides have to be the same length.

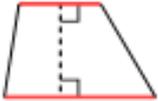
Investigate whether Maisy is correct.

Thursday

Today, we will look at quadrilaterals and the different types of quadrilaterals. Remember that quadrilaterals are shapes with four sides. See this website for more information: <https://www.mathsisfun.com/quadrilaterals.html> or see below.

Trapezium

This shape has 4 corners and 4 sides, but only 2 of the sides are parallel (meaning the sides will never meet- shown in red). It can sometimes have a right angle.



Rectangle

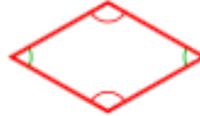
This shape has 4 sides and 4 corners, but two sides are longer than the other two. It has two sets of parallel lines (shown in red).



Rectangle
All angles 90°

Rhombus

This shape has 4 corners and 4 sides, but only the two opposite lines are parallel to each other. This shape has two obtuse and two acute angles.



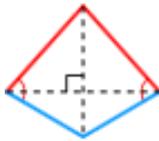
Parallelogram

This shape has 4 sides and 4 corners. It looks like a pushed out rectangle and opposite angles are the same (normally two obtuse and two acute).



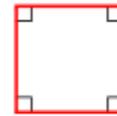
Kite

A kite has 4 sides, 4 corners and normally looks like a kite you would fly in the air! It has a cross section and should look equal on both sides.



Square

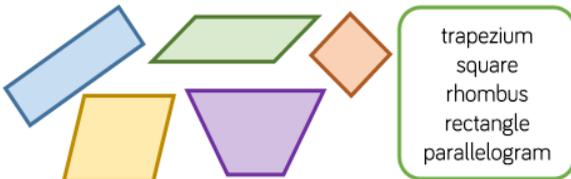
A square has 4 sides, 4 corners and 4 right angles. It has two sets of parallel lines and all sides are the same length.



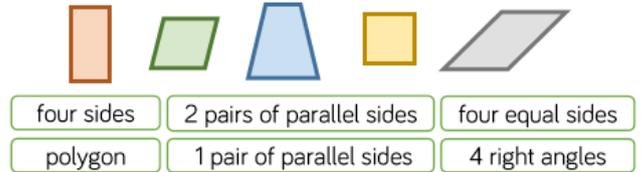
Task:

Using the information above to help you, see if you can complete these questions below:

1 Label the quadrilaterals using the word bank.



2 Use the criteria to describe the shapes.



Which criteria can be used more than once?
Which shapes share the same criteria?
Can you add any more properties to the shapes?

3 Draw and label;
• a rhombus. • a parallelogram. • 3 different trapeziums

Challenge:

Complete each of the boxes in a table with a different quadrilateral.

	4 equal sides	2 pairs of equal sides	1 pair of parallel sides
4 right angles			
No right angles			

Which box cannot be completed?
Explain why.

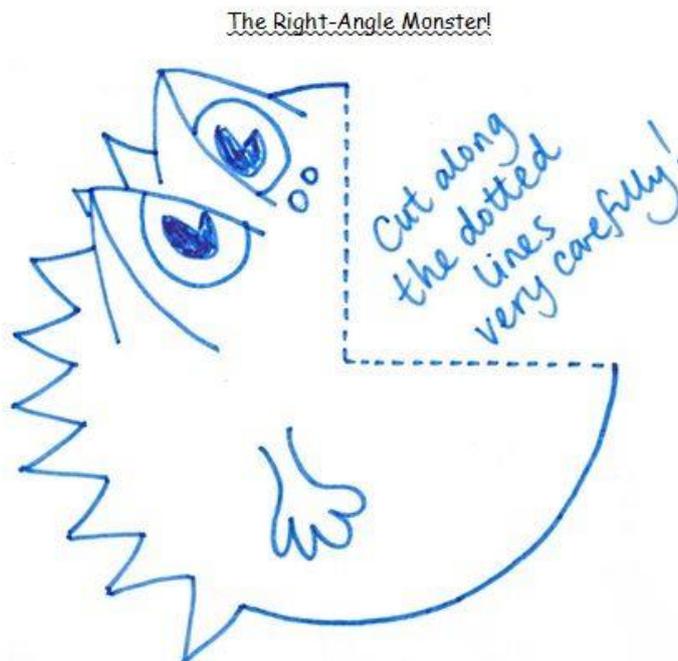
Friday

TT rockstars/Mathletics/Arithmetic test ☺ If you have completed all of the Mathletics activities which I have assigned, please choose on the homepage an activity which relates to the maths you have been doing this week.

Help for this week

Angles

If you are searching for right angles or any angles, in class we have used the below image and cut it out to help us. This is a right angled monster and it helps the children to put it against the actual angle to identify whether it is acute, obtuse or right angled. To do this, just place one of the lines of the monster's mouth along one of the angle lines (outside of the angle if possible) and then the children can physically see if it is bigger or smaller.



Identifying quadrilaterals/triangles

If the children are finding this concept difficult, it may be best to go back to the properties of the shapes and see if they can identify the differences- this could be done in lots of ways as below:

- **Sorting activities-** They could complete sorting activities to say whether shapes are equilateral, scalene, right angle or isosceles. They could sort using the properties e.g. shapes with right angles and shapes without right angles or simply just sorting into the different types of triangle/quadrilateral. This would be a brilliant discussion starter with the children and will get them thinking about what makes the shapes so different.
- **Bingo-** (I will attach copies of this into the home learning tab) This would be brilliant so that the children can now associate the properties with the shape in a quick way, which could lead to them being able to visually spot the differences more easily.

Games relating to this week:

- A lovely Powerpoint for different types of angles- http://www.primaryresources.co.uk/maths/powerpoint/the_angles_family.ppt
- A brilliant sorting game for different types of quadrilateral/triangle- https://garyhall.org.uk/gordons/swf/carroll_shape.swf
- Additional activities for different types of shapes- <https://garyhall.org.uk/maths-objectives/137/compare-and-classify-geometric-shapes-including-quadrilaterals-and-triangles-based-on-their-properties-and-sizes>

If you need any extra support, please email me on michaelsyddallyear4@gmail.com and I will help ☺