Year 5 Remote Learning
Maths Week 17

Message	This Week's Learning	Website Links
Hello everyone, This week, we are starting a unit on **angles**. There are **5 daily lessons** again. You can choose when to do them, but just make sure you do them **in order**. On each day, there is a **starter activity**. This may or may not be the same topic we are focussing on in the rest of the lesson. The main point of this is to keep all your other maths skills sharp. In the main part of the lesson, there will be a **Part A** and a **Part B**. First, have a go at Part A and use the answer sheets to check your work. If you are feeling confident, then have a go at Part B. For each of the lessons, there are teaching resources to help you along the way. All lessons have a teaching presentation and video made by Ms Razimbaud. If you have any questions or comments, please send us an e-mail at year5@coleridgeprimary.net. We hope you enjoy yourselves! ***Ms Razimbaud, Mr Breuer, Ms Horton and Mr Chamberlain***	Lesson 1 **Measuring Angles in Degrees** Lesson 2 **Angles on a Straight Line** Lesson 3 **Angles around a point** Lesson 4 **Calculating Lengths and Angles in Rectangles** Lesson 5 **Regular and Irregular Polygons**	**Video Tutorials** Introduction: https://www.youtube.com/watch?v=3JOATwONZdA&feature=youtu.be Lesson 1: https://www.youtube.com/watch?v=EZEU7I_ZNBY Lesson 2: https://www.youtube.com/watch?v=TUCqZ8WRSSw Lesson 3: https://www.youtube.com/watch?v=KvNUdaqF2s8 Lesson 4: https://www.youtube.com/watch?v=3WWfyuGzpQo Lesson 5: https://www.youtube.com/watch?v=OBrownn1ho0

Lesson 1 - Measuring Angles in Degrees

Warm up those maths brain cells…

Laura buys 3,500 grams of potatoes and 1,500 grams of carrots.

She pays with a £5 note.
How much change does she get?

Part A.

1. Watch **Ms Razimbaud's introduction and Video Tutorial** for today's lesson:
   https://www.youtube.com/watch?v=3JOATwONZdA&feature=youtu.be
   https://www.youtube.com/watch?v=EZEU7l_ZNBY
2. Have a go at solving the problems and then check your answers in the document titled **Y5 Maths- Lesson 1- Questions Part A**
3. You can get some extra help solving these problems by looking at the document titled **Y5 Maths Extra Teaching - Lesson 1.**

Part B.

1. Have a go at solving these two Reasoning and Problem Solving problems.
2. When you have finished, check your answers by looking at:
   Y5 Maths - Lesson 1- ANSWERS

Which angle is the odd one out?

180° 45° 79° 270°

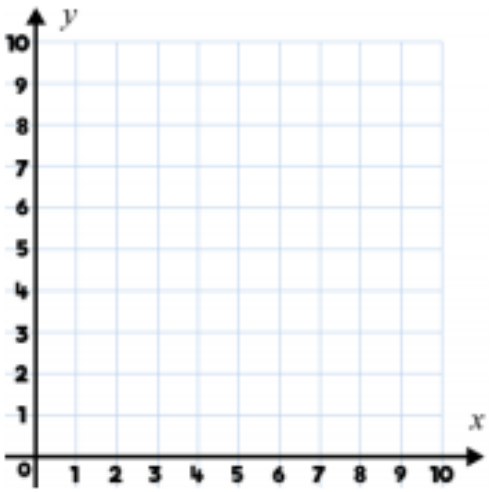
Could another angle be the odd one out for a different reason?

Always, sometimes, never.

- If I turn from North East to North West it will be 180°
- If I turn from East to North West it will be an obtuse angle.
- If I turn from South West to South my turn will be larger than 350°

Lesson 2 - Angles on a Straight Line

Warm up those maths brain cells…



Tanya is finding co-ordinates whose digits add up to 8.
For example: (3, 5) ⟶ 3 + 5 = 8

Find all of Tanya's co-ordinates and plot them on the grid.
What do you notice?

Try numbers that sum to a different number, e.g., 9. What happens?

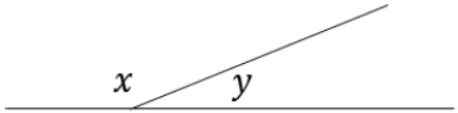
Part A.

1. Watch **Ms Razimbaud's Video Tutorial** for today's lesson: https://www.youtube.com/watch?v=TUCqZ8WRSSw
2. Have a go at solving the problems and then check your answers in the document titled **Y5 Maths- Lesson 2- Questions Part A**
3. You can get some extra help solving these problems by looking at the document titled **Y5 Maths Extra Teaching - Lesson 2.**

Part B.

1. Have a go at solving these two Reasoning and Problem Solving problems.
2. When you have finished, check your answers by looking at: **Y5 Maths - Lesson 2- ANSWERS**

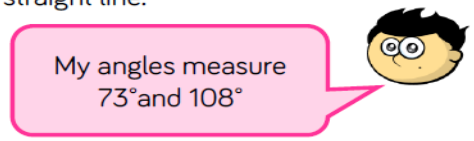
Here are two angles.



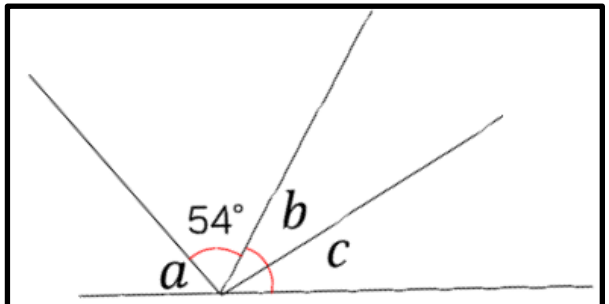
Use the clues to calculate what the missing angles could be worth.

Angle x is larger than 130°
Angle y is a prime number between 40 and 50

Bradley is measuring two angles on a straight line.



Explain why Bradley's angles must be wrong.



- The total of angle b and c are the same as angle a
- Angle a is 9° more than the size of the given angle.
- Angle b is 11° more than angle c

What are the angles worth?

Lesson 3 - Angles Around a Point

Warm up those maths brain cells…

Clare's age is a multiple of 7 and is 3 less than a multiple of 8
She is younger than 40

How old is Clare?

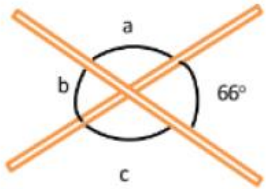
Part A.

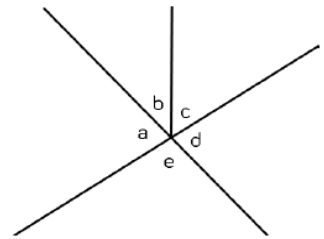
1. Watch **Ms Razimbaud's Video Tutorial** for today's lesson: https://www.youtube.com/watch?v=KvNUdaqF2s8
2. Have a go at solving the problems and then check your answers in the document titled **Y5 Maths- Lesson 3- Questions Part A**
3. You can get some extra help solving these problems by looking at the document titled **Y5 Maths Extra Teaching - Lesson 3.**

Part B.

1. Have a go at solving these two Reasoning and Problem Solving problems.
2. When you have finished, check your answers by looking at: **Y5 Maths - Lesson 3- ANSWERS**

Two match sticks are on a table. Without measuring, find the three missing angles.





$a + b + c + d + e = 360°$
What other sentences can you record?

The code for the lock is 50, 25, 75, 0, 50

Write instructions of the turns in degrees that you must do to open the lock.

Can you create your own combination for your partner to record instructions?

Lesson 4 - Calculating Lengths and Angles in Rectangles

Warm up those maths brain cells…

Cola is sold in bottles and cans.

Yasmin buys 5 cans and 3 bottles.
She sells the cola in 100 ml glasses.
She sells all the cola.
How many glasses does she sell?

Yasmin charges 50p per glass.
How much profit does she make?

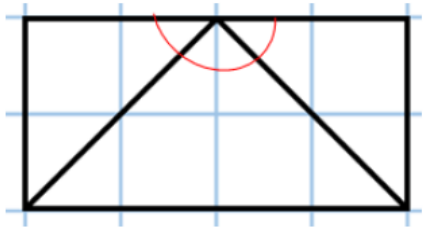
Part A.

1. Watch **Ms Razimbaud's Video Tutorial** for today's lesson: https://www.youtube.com/watch?v=3WWfyuGzpQo
2. Have a go at solving the problems and then check your answers in the document titled **Y5 Maths- Lesson 4- Questions Part A**
3. You can get some extra help solving these problems by looking at the document titled **Y5 Maths Extra Teaching - Lesson 4.**

Part B.

1. Have a go at solving these two Reasoning and Problem Solving problems.
2. When you have finished, check your answers by looking at: **Y5 Maths - Lesson 4- ANSWERS**

Helena is calculating the missing angles in the shape.

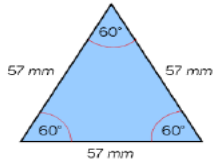


She says,

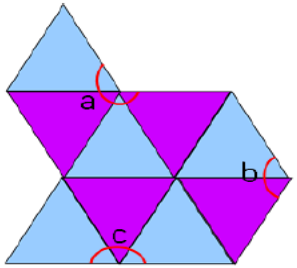
The missing angles are worth 60 because $180 \div 3 = 60$

Do you agree?
Explain why.

Alek has this triangle.



He makes this composite shape using identical triangles to the one above.



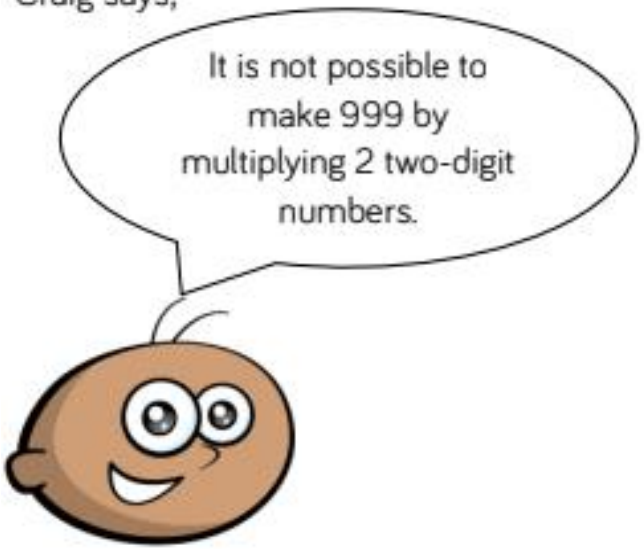
- Calculate the perimeter of the shape.
- Calculate the missing angles.

Can you use your own triangle, square or rectangle to make a similar problem?

Lesson 5 - Regular and Irregular Polygons

Warm up those maths brain cells...

Craig says,



Do you agree with him?
Prove it.

Part A.

1. Watch **Ms Razimbaud's Video Tutorial** for today's lesson: https://www.youtube.com/watch?v=OBrownn1ho0
2. Have a go at solving the problems and then check your answers in the document titled **Y5 Maths- Lesson 5- Questions Part A**
3. You can get some extra help solving these problems by looking at the document titled **Y5 Maths Extra Teaching - Lesson 5.**

Part B.

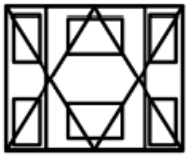
1. Have a go at solving these two Reasoning and Problem Solving problems.
2. When you have finished, check your answers by looking at: **Y5 Maths - Lesson 5- ANSWERS**

Decide which statements are true, sometimes true or false.

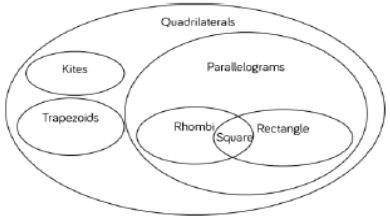
- A regular polygon has equal sides but not equal angles.
- A triangle is a regular polygon.
- A rhombus and square are regular polygons.
- The number of angles is the same as the number of sides in any polygon.

Prove it!

How many regular and irregular polygons can you find in this picture?



Cut out lots of different regular and irregular shapes. Ask children to work in pairs and sort them into groups. Once they have sorted them, can they find a different way to sort them again? Children could use Venn diagrams and Carroll diagrams to deepen their understanding, for example:



	Regular polygon	Irregular polygon
Has right angles		
Doesn't have any right angles		