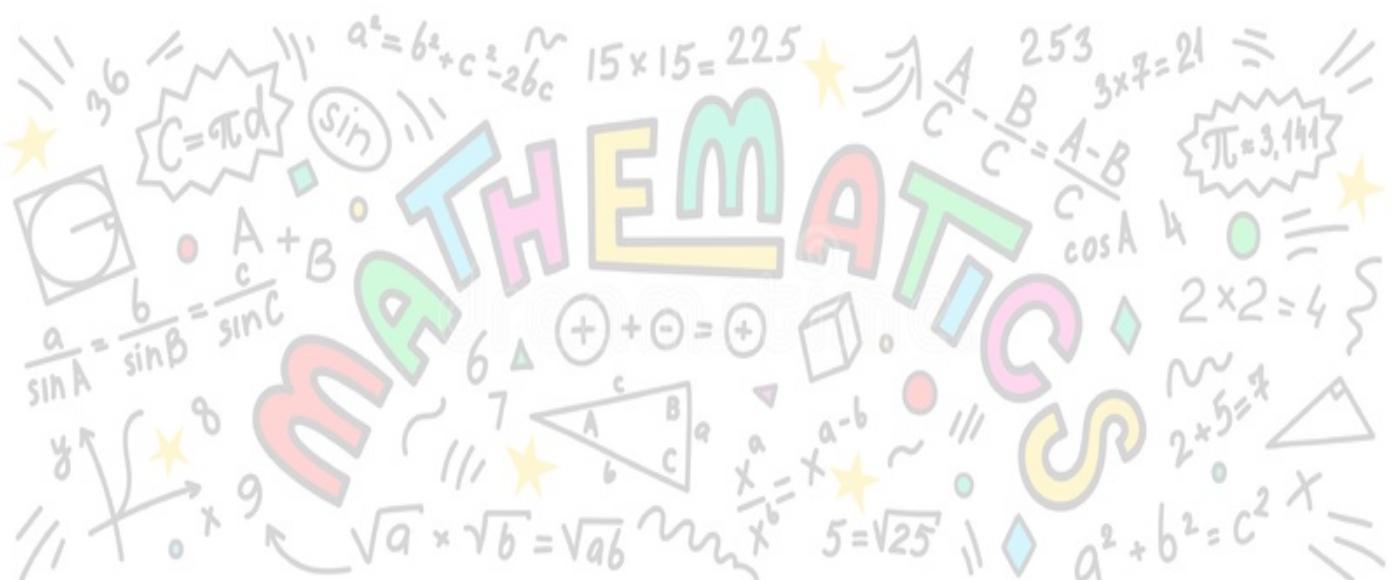


Transition



Maths Practice Y6

There are lots of different types of numbers that you will encounter on your mathematics journey through primary and secondary school. You will be familiar with positive and negative integers and whole numbers but how confident are you with decimals, fractions or percentages?

Decimals and fractions represent part of a whole. Percentages show a value as a proportion of 100 i.e. out of 100. At Sirius Academy North you will learn to convert freely between fractions, decimals and percentages and how these are used in the real world.

You will also learn about specific sequences of numbers such as squares, cubes and triangular numbers. These numbers follow specific rules, can you identify the pattern within the numbers and continue the sequence?

The table below gives you some examples of different types of numbers. Can you give any of your own examples?

Your Turn		
Type of Number	Example	Your Turn
Whole number	0, 1, 2, 3, 4, 5	
Integer	-3, -2, -1, 1, 2, 3	
Decimal number	1.3, 0.44, -2.36	
Fraction	$\frac{1}{6}, \frac{2}{6}, \frac{4}{10}, \frac{5}{7}$	
Percentage	10%, 15%, 17.2%, 1%	
Mixed number	$3\frac{2}{7}, 1\frac{9}{10}$	
Improper fraction	$\frac{10}{9}, \frac{8}{5}, \frac{15}{14}$	
Negative number	-2, -1, -1.5	
Square number	1, 4, 9, 16	
Cube number	1, 8, 27, 64	
Triangular number	0, 1, 3, 6, 10	

WHERE STARS ARE BORN

A digit is one of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9. All numbers are made up of one or more digits. Numbers such as 2 have one digit, whereas numbers such as 89 have two digits. To understand what a number really means, you need to understand what the digits represent in a given number.

The position of each digit in a number tells its value, or place value. We can use a place-value chart like the one below to easily see the place value for each digit. The place values for the digits in 1,456 are shown in this chart.

Place-Value Chart															
Trillions			Billions			Millions			Thousands			Ones			
												1	4	5	6
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Ones

In the number **1,456**, the digit **1** is in the **thousands** place. The digit **4** is in the **hundreds** place. The digit **5** is in the **tens** place, and the digit **6** is in the **ones** place.

You can also determine the value of a digit in a **decimal number** using the decimal place value chart. In the number **100.035** the **3** is in the **hundredths** column so that the place value of the 3 is **3 hundredths** and the value is **0.03**.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Decimal point ↴	Tenths	Hundredths	Thousandth	Ten-Thousandth	Hundred-Thousandth	Millionths
Whole part					•	Decimal part							

Your Turn		
Number	Place value of the red digit	Value of the red digit
256		
1764		
13.501		
346,600		
9,000,100		
100.25		
7,890,900.26		
4,690,606.17		

Challenge yourself – GCSE Questions	
Write down a 5 digit number that has 3 as its thousands digit. You can only use the digit 3 once.	
Write down a 6 digit number that has 8 as its hundreds digit. You can only use the digit 8 once.	
Write down a 4 digit number that has 7 as its tens digit. You can only use the digit 7 once.	
Write the following numbers in order of size. Start with the smallest number. (Total for question 14 is 1 mark) 0.35 0.305 0.53 0.053 0.035	
Write the following numbers in order of size. Start with the smallest number. 134 153 203 146 154	
Write the following numbers in order of size. Start with the smallest number. 3.2 3.27 3.72 3.702 3.02	

WHERE STARS ARE BORN

During your time at primary school, you will have been introduced to, and used, many different mathematical tools to help you understand and solve problems. At Sirius Academy North you will use equipment which will help you to:

- Measure the length of a line or an angle.
- Measure the mass (weight) of a 3D object.
- Measure temperature.
- Measure time.
- Accurately draw maps, diagrams and shapes.
- Complete complex calculations.

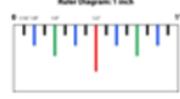
Can you match up the picture of the equipment to it's name and it's function?

Know your mathematical equipment		
Picture	Name	Function
	Calculator	Used for measuring angles.
	Ruler	Used for measuring temperature.
	Trundle Wheel	Used for completing complex calculations.
	Protractor	Used for drawing circles and measuring distances.
	Compass	Used for measuring large distances in meters and centimetres.
	Thermometer	Used for measuring the mass (weight of a 3D object).
	Scales	Used for measuring lengths up to 30 centimetres.

WHERE STARS ARE BORN

Units of measure - There are many ways in which we measure things, some accurate and some not so accurate. Knowing what to use to measure an item with is really important and being able to convert between them to become more accurate is extremely helpful.

In the UK we mainly use metric measures, but you will still see imperial used, for example, miles on a motorway, 6 pints of milk, a baby weighing 6lbs, so it is important that you recognise it.

Weight, Length and Capacity	
 <u>Length</u> 1 centimetre (cm) = 10 millimetres (mm) 1 metre (m) = 100 centimetres (cm) 1 kilometre (km) = 1000 metres (m)	 <u>Weight</u> 1 gram (g) = 1000 milligrams (mg) 0.1 kilograms (kg) = 100 grams (g) 1 kilogram (kg) = 1000 grams (g) 1 tonne = 1000 kilograms (kg)
 <u>Capacity</u> 1 litre (l) = 1000 millilitres (ml) 1 litre (l) = 100 centilitres (cl) 1 centilitre (cl) = 10 millilitres (ml) 0.1 litres (l) = 100 millilitres (ml)	 <u>Imperial Units</u>  Ruler Diagram: 1 inch 1 pint = 568ml 1 inch = 2.5 cm or 25 mm 1 foot = 12 inches or 30 cm 1 mile = 1.6 km 1 ounce = 25g 1 pound (lb) = 500g

Units of measure - You need to know some basic facts:

Approximately how tall is the average person? 1.8 metres tall, 180cm tall

Actually, get to know your own height and use that rounded off, 1.7m, 1.6m etc.

Approximately how tall is the average door? 2 metres

Approximately how much liquid is in a bucket? 5 litres



For each, circle the most appropriate measurement.

Width of a garden gate 84m 84cm 84mm	Length of a nail 2.5mm 2.5cm 2.5m	Height of a dining chair 43mm 43cm 43m
Width of a rugby pitch 70mm 70cm 70m 	Distance between motorway services 35cm 35m 35km	Diameter of a tennis ball 65mm 65cm 65m

For each, circle the most likely mass of each object.

Bar of chocolate 2g 200g 2000g 	Sack of potatoes 25g 25kg 25t	Elephant 6g 6kg 6t
Newborn baby 3.5mg 3.5g 3.5kg 	Apple 45g 45kg 45t 	Sheet of paper 5kg 5tonnes 5g

For each, circle the most likely capacity.

Saucepan 3ml 3cl 3litres 	Teacup 250ml 250cl 250litres 	Washbasin 15ml 15cl 15litres
Bottle of sun lotion 200ml 200cl 200litres 	Paddling pool 2000ml 2000cl 2000litres	Teaspoon 5ml 50cl 5litres

Challenge yourself with these questions	
Change 2580 grams to kilograms.	
Change 1.6 kilometres to metres.	
Change 48 cm to mm.	
Change 0.87 kilograms to grams.	
Change 640 cm to metres.	
Change 920 millilitres to litres	

Tricky Conversion Questions	
A recipe asked for 1.72kg of apples, but Penny's scales would only show grams. What number would her scales show?	
Paddy and Kirsty are measuring the amount of rain they have collected in the garden in the last three months. Kirsty's measurement is 3.2cm and Paddy's measurement is 31mm. Who has collected the most?	

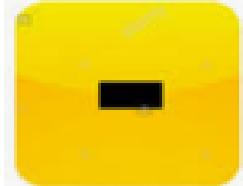
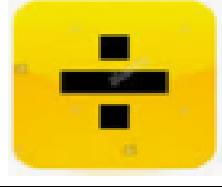
The following estimates are incorrect. State why and for each one give a better estimate.	
My cat weighs 4.5g	
Your teacher is 5 $\frac{1}{2}$ m tall	
I put about 20l of milk into my cup of tea	
A feather weighs about 10kg	
A tablecloth measures 180mm by 160mm	

The 4 Operations

During your time at primary school you should have learnt how to confidently add, subtract, divide and multiply 1 and 2 digit numbers.

At Sirius Academy North you will develop your skills by using more advanced mathematical language, learning how to apply the 4 operations (add, subtract, divide and multiply) with negative numbers, decimals and fractions. You will also learn how to apply these to worded problems.

The table below is a reminder of how to identify which operation you should use in a calculation and gives an example of how to successfully complete the calculation using a written method.

Mathematical Language – Know your operations			
Add Sum Increase Together More Plus Total		$ \begin{array}{r} 567 \\ +199 \\ \hline 766 \end{array} $	$ \begin{array}{r} 567 \\ +199 \\ \hline 766 \end{array} $
Subtract Difference between Reduce Decrease Fewer Minus Take away		$ \begin{array}{r} 341 \\ -178 \\ \hline 172 \end{array} $	$ \begin{array}{r} 341 \\ -178 \\ \hline 172 \end{array} $
Product Multiply Groups of Times table Lots of Times		$ \begin{array}{r} 324 \\ \times 46 \\ \hline 1944 \\ +12960 \\ \hline 14904 \end{array} $	$ \begin{array}{r} 324 \\ \times 46 \\ \hline 1944 \\ +12960 \\ \hline 14904 \end{array} $
Division Divided by Share equally Divide into Share		$ \begin{array}{r} 042 \\ 17 \overline{)71951} \end{array} $	$ \begin{array}{r} 042 \\ 17 \overline{)71951} \end{array} $



Challenge yourself with these worded calculations

There were 34 coins in a bag. Jim took 15 coins out of the bag. Rose put 17 coins into the bag. How many coins are now in the bag?	
33 people were on a bus. 19 people got off. 15 people got on. How many people are now on the bus?	
Chris buys 1 map costing £4.50 1 whistle costing £1.35 2 bars of chocolate costing £0.55 each He pays with a £10 note. Work out how much change he should get.	
Rizwan buys 6 stamps at 25p each 2 packs of postcards at 89p per pack 1 pack of labels at £1.09 He pays with a £10 note. Work out how much change Rizwan should get.	
487 is divided by 23 What is the remainder?	
Richard paid 56p for 7 pencils. The cost of each pencil was the same. Work out the cost of 4 of these pencils.	
'Jet Tours' has an aeroplane that will carry 27 passengers. Each of the 27 passengers pays £55 to fly from Liverpool to Prague. Work out the total amount that the passengers pay.	

Complete the bill from Michael's Cycle Repairs

Michael's Cycle Repairs



Description	Number	Cost of each item	Total
Brake blocks	4	£4.12	£16.48
Brake cables	2	£5.68	£
Pedals	2	£	£45.98
Labour charge $1\frac{1}{2}$ hours at £12.00 an hour		£	
		Total	£

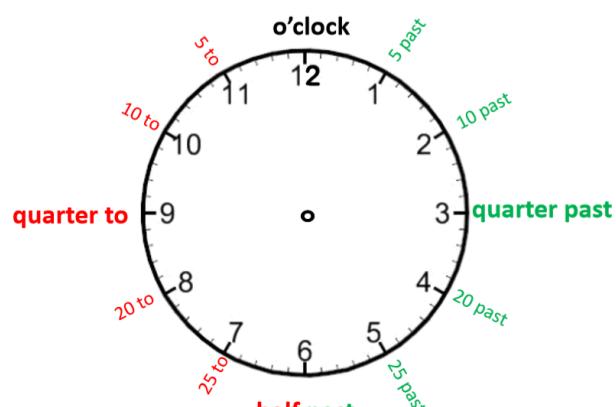
WHERE STARS ARE BORN

Time, is one of the most important measures for helping us to structure our daily lives. Without measures of time, how we would know what time to get to school, or how long cookies need to bake?

Analogue Clocks

Analogue clocks display the time using an hour, minute and second-hand.

The longest widest hand shows the hour, the shortest hand shows the minutes and the long thin hand, which appears to be constantly moving, shows the seconds.



Hour hand; between 11 and 12

Minute hand = 19

Second hand = 22

The time is 19 minutes and 22 seconds **past** 11.

Digital Clocks

The problem with analogue clocks is that they do not tell you if it is 11 o'clock in the morning or evening. A 24 hour digital clock (like the ones on your phone and alarm clocks) can give us more information.

11: 19

23:19

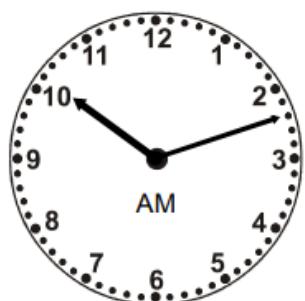
19 minutes past 11 o'clock in the morning

19 minutes past 11 o'clock at night



Write the time shown by each clock as a 24 hour digital time.

1.



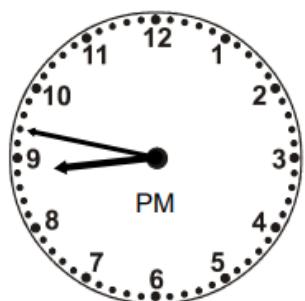
2.



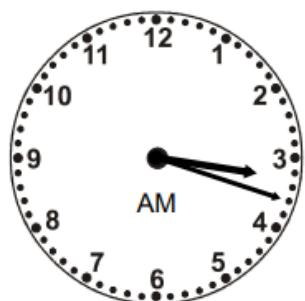
3.



4.



5.

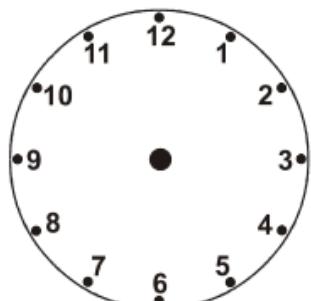


6.



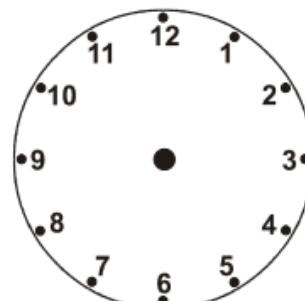
Accurately draw the correct time on the clock.

1.



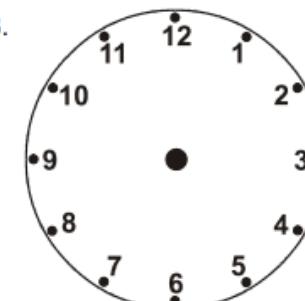
19:25

2.



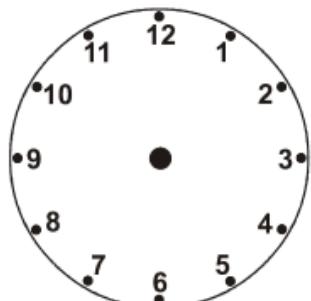
23:50

3.



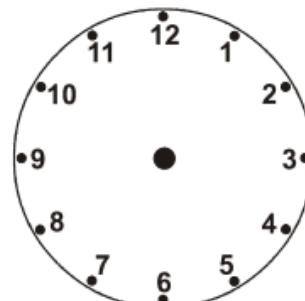
16:30

4.



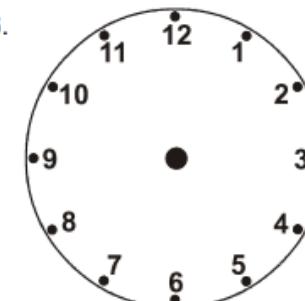
01:00

5.



10:20

6.



21:20

In order to correctly calculate with time there are a few key facts to remember:

60 seconds : 1 minutes

60 minutes : 1 hour

24 hours : 1 day

Example Question

<p>Robin sets off from his house at 08:25, it takes him 45 minutes to walk to school. Robin needs to be at school before the bell at 09:00. Will he be on time?</p>	<p>From 08:25 to 9:00 is 35 minutes, therefore Robin will be 10 minutes late.</p> <p>Remember – there are 60 minutes in 1 hour not 100 so be careful when you calculate!</p>
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Challenge yourself with these trickier GCSE questions!

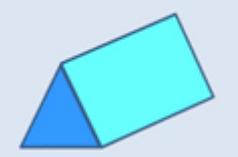
<p>Work out the difference, in minutes, between 2 hour 25 minutes and hours.</p>	
<p>Hayley left her home at 10.40 am. She walked from her home to the shop. It took her 14 minutes to walk to the shop. Hayley was at the shop for 10 minutes. Then Hayley walked from the shop to her friends house. It took Hayley 22 minutes to walk to her friends house. What time did Hayley arrive at her friends house?</p>	
<p>A film starts at 7.45 pm. The film lasts 98 minutes. What time does the film finish?</p>	
<p>Natalie drives from London to Sheffield. Natalie leaves London at 9.15 am. Natalie drives for hours before stopping for a break. The break lasts for 20 minutes. Natalie then takes another 85 minutes to reach Sheffield. What time does Natalie arrive in Sheffield?</p>	

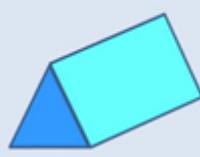
'2D' stands for 2-dimensional. A **2D shape** is any shape that has two dimensions.

Think about what it means to have two dimensions for a moment. If we had only one dimension to work with, we could only move backwards or forwards in a line. A line is one-dimensional. If we had two dimensions, on the other hand, we could go forwards and backwards in a line and turn in any direction to start a new line. We are essentially able to travel anywhere on a flat surface. In mathematics, a flat surface is called a **plane**. A plane is one example of a two-dimensional shape. A plane is essentially the largest sheet of paper you will ever find. In fact, it is a sheet of paper so large that it never ends. One way of thinking about 2D shapes is anything that lays flat on a piece of paper.

Take out a piece of paper, and place it on your desk. Notice how flat it is. Now take any nearby object, place it on your piece of paper, and trace around it. Look at your shape. What does it look like? Congratulations, you have just drawn a 2D shape! This is another way you can think of 2D shapes: 2D shapes are any shape you can trace from an object on a flat piece of paper.

Take a cube and trace it on a piece of paper and you will get a square shape. Take a drink can and trace it on a piece of paper. Depending on how you lay the can down, you will get either a circle or a rectangle. Try it out and see for yourself.

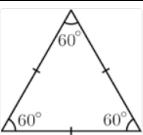
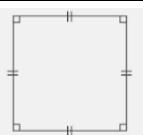
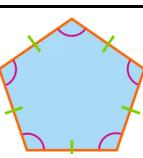
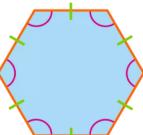
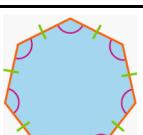
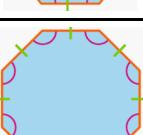
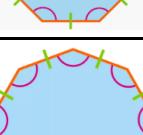
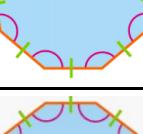
If you draw around the following 3D shapes, what 2D shape will you draw? Can you draw more than one 2D shape?	
Cone 	
Triangular Prism 	
Sphere 	



2D Shapes - Practice

Name the 2D shapes - Polygons

Regular polygons are shapes where each side is the same length and each angle is exactly the same. Irregular shapes do not have the same lengths or angles. Can you complete the table by drawing your own examples of irregular shapes. Remember to use a ruler.

Number of sides	Name	Regular	Irregular - Give your own examples
3	Triangle		
4	Quadrilateral		
5	Pentagon		
6	Hexagon		
7	Heptagon		
8	Octagon		
9	Nonagon		
10	Decagon		

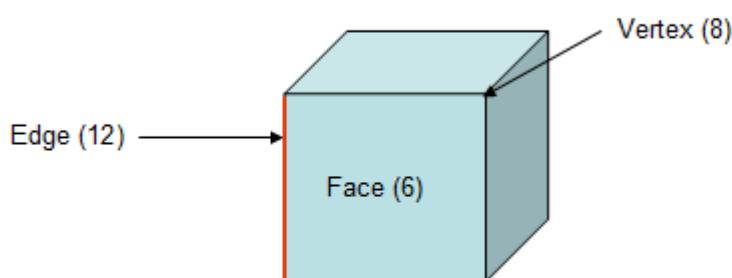
What makes something 3D? Is it the way it looks? An easy way to think of a **3D shape** is any shape or object that takes up air space. Think about your own body for a minute. Your body is a 3D shape. It is not a uniform shape, like a building block, but it is a 3D shape, nonetheless. What makes your body a 3D shape? Does it take up air space? Of course it does; you can't be at the same spot as anyone else. You can't take up the same space as a chair or a dog or anything else. Only you can occupy your space. This is what makes a shape 3D.

A test you can do to check whether something is 3D or not is to try to place something in the exact spot where that shape is. Look around you for something you can grab. Take your pen, for instance. Place it on your desk. Now, try and take another pen and place it in the same exact spot as your first pen. Can you do it? No, you can't. The only way you can do it is if you moved your first pen to make room for the second.

Even a flat piece of paper is a 3D shape in the world. Lay two pieces down, one on top of the other, and look at them. Are both sheets of paper taking up the same space? It may seem so at first, but look carefully. One is actually on top of the other because both take up space.

When identifying and categorising 3D shapes we need to be familiar with the mathematical terms...faces, edges and vertices.

In any geometric solid that is composed of flat surfaces, each flat surface is called a face. The line where two faces meet is called an edge.



For example, the cube above has six faces, each of which is a **square**. Where two squares meet, a **line segment** is formed, which is called an **edge**. In the case of a **cube**, it has 12 such edges.



Use this information about 3D shapes to complete the table below.

Properties of 3D shapes

Cone



2 Faces
1 Edge
1 Vertex

Sphere



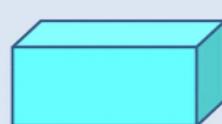
1 Face
1 Edge
0 Vertices

Tetrahedron



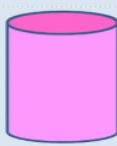
4 Faces
6 Edges
4 Vertices

Cuboid



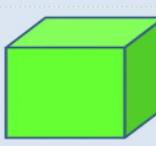
6 Faces
12 Edges
8 Vertices

Cylinder



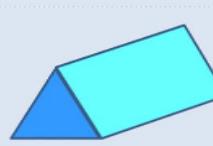
3 Faces
2 Edges
0 Vertices

Cube



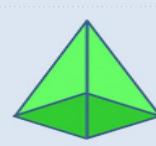
6 Faces
12 Edges
8 Vertices

Triangular Prism



5 Faces
9 Edges
6 Vertices

Square-based pyramid



5 Faces
8 Edges
5 Vertices

Shape

Edges

Vertices

Faces

Curved or flat?

Name of 3d shape



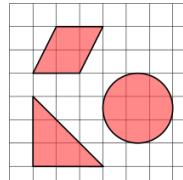
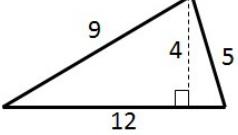
WHERE STARS ARE BORN

Perimeter and **area** are two important and fundamental mathematical topics. They help you to quantify physical space around. **Perimeter** is a measurement of the distance around a shape and **area** gives us an idea of how much surface the shape covers.

Knowledge of area and perimeter is applied practically by people on a daily basis, such as architects, engineers, and graphic designers. Understanding how much space you have and learning how to fit shapes together exactly will help you when you paint a room, buy a home, remodel a kitchen, or build a deck.

The perimeter of a two-dimensional shape is the distance around the shape. You can think of wrapping a string around a triangle. The length of this string would be the perimeter of the triangle. Or walking around the outside of a park, you walk the distance of the park's perimeter. Some people find it useful to think “**peRIMeter**” because the edge of an object is its **rim** and **peRIMeter** has the word “rim” in it.

If the shape is a **polygon**, then you can add up all the lengths of the sides to find the perimeter. Be careful to make sure that all the lengths are measured in the same units. You measure perimeter in linear units, which is one dimensional.

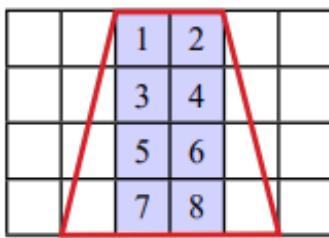
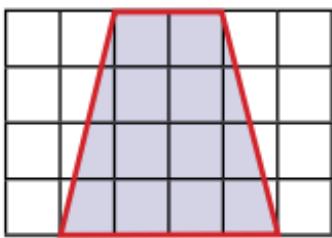
Topic/Skill	Definition/Tips	Example
Perimeter	The total distance around the outside of a shape. Units include: <i>mm, cm, m</i> etc.	 $P = 8 + 5 + 8 + 5 = 26\text{cm}$
Area	The amount of space inside a shape. Units include: <i>mm², cm², m²</i>	
Area of a Rectangle	Length x Width	 $A = 36\text{cm}^2$
Area of a Parallelogram	Base x Perpendicular Height Not the slant height.	 $A = 21\text{cm}^2$
Area of a Triangle	Base x Height ÷ 2	 $A = 24\text{cm}^2$



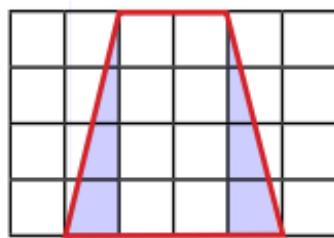
WHERE STARS ARE BORN

Calculating the area by counting

Count the whole squares.



Look at the part squares.

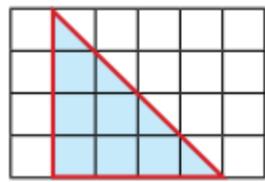


The two triangles are 4 square units.

Area of shape = $8 + 4 = 12$ square units.

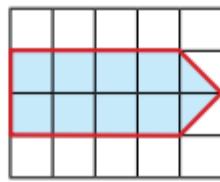
Your Turn - Calculate the area of each shape.

1).



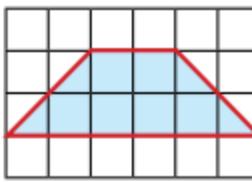
square units

2).



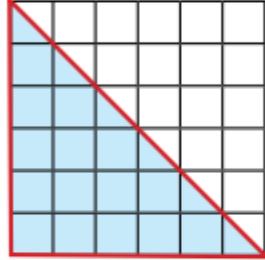
square units

3).



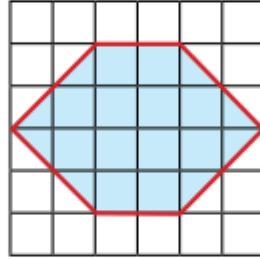
square units

4).



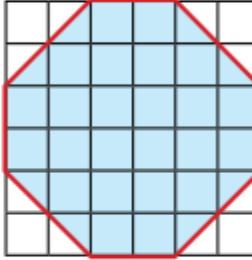
square units

5).



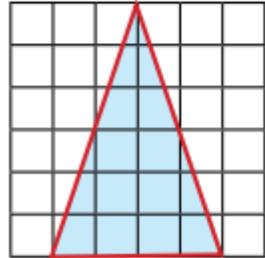
square units

6).



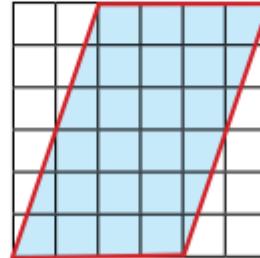
square units

7).



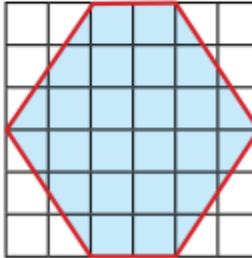
square units

8).



square units

9).

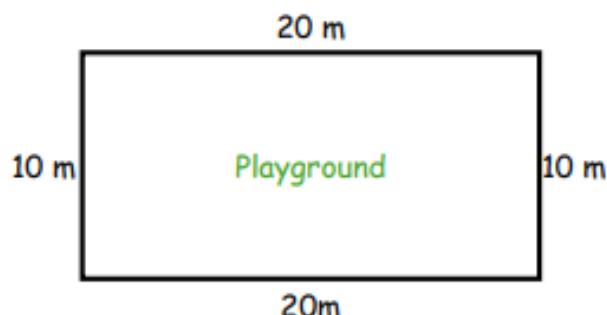


square units



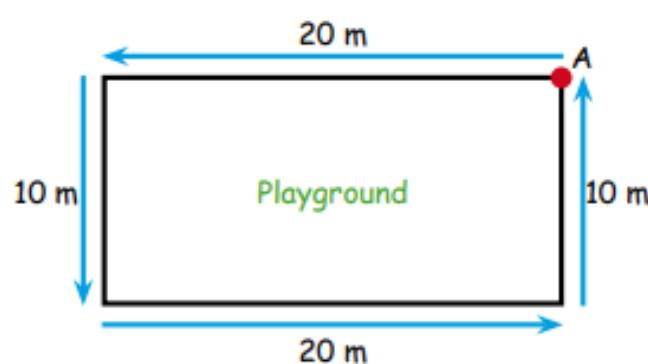
Calculating the perimeter

Every day Peter walks around the very edge of the playground. He wonders how far he walks. This distance is called the **perimeter**.



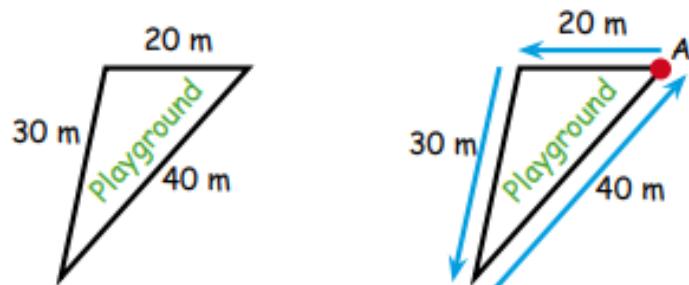
He starts at A and walks 20 m, then 10 m, then 20 m, then 10 m

or $20 + 10 + 20 + 10 = \underline{60 \text{ m}}$



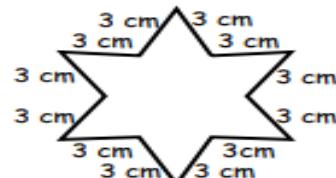
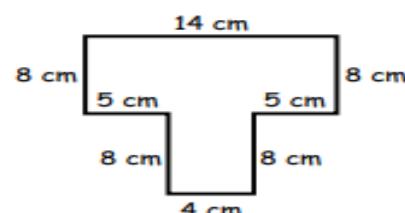
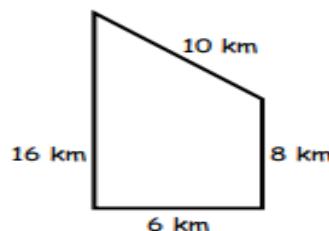
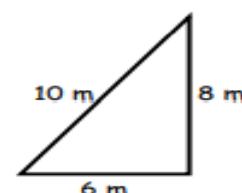
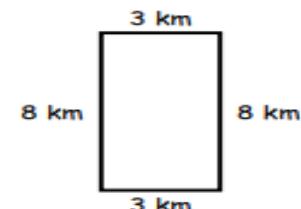
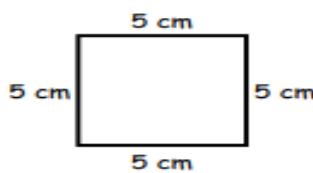
Another playground is in the shape of a triangle. How far would it be to walk around the perimeter of this playground?

Start at A.
Perimeter $= 20 + 30 + 40$
 $= \underline{90 \text{ m}}$



Your Turn - Calculate the perimeter of each shape

Find the perimeter of each figure.



Literacy Task - The Winter Fair

Every December, the town of Saywell has a Winter Fair. Last year 4358 people went to it. Amongst them were Al and Georgia. They wanted to buy Christmas presents.

'There are more people here than when the Fair started,' said Al. 'In the first year there were only about 900 people.'

'It's getting colder,' said Georgia. 'It was 2 degrees Celsius when we left home. I think it's below freezing point now. Let's get some hot chocolate to warm ourselves up!'

Later, Al and Georgia looked at the bookstall. They wanted to get a book for their dad. The bookstall had a sign saying how many books it had. Unfortunately, the number's digits had fallen down. The digits were 4, 1, 7 and 8.

Al laughed. 'There could be 4178 books or 7814.'

'Or there could be 7841 or 4871!' said Georgia.

'Let's get some decorations,' said Al.

They bought boxes of coloured stars. There were 1000 tiny stars in a box. The small stars were in boxes of 100. The large stars were in boxes of 10. The extra large stars were sold individually. They bought 7 boxes of small stars, 3 boxes of large stars, 2 boxes of tiny stars and 6 extra large stars.

Suddenly, it began to snow. 'Wow!' said Georgia. 'It must be really cold now! The temperature must be lower than -4 degrees Celsius! Let's go home and make a snowman!'



Comprehension Questions

How many people went to the Winter Fair last year? Give your answer to the nearest 100.	
Give one example of what temperature it could have been when Al and Georgia arrive at the fair.	
Al and Georgia suggested how many books were on the bookstall. Put the numbers in order, smallest to largest.	
How many stars did Al and Georgia buy in total? Show all of your working out.	

WHERE STARS ARE BORN

Charlie runs a chicken farm. His chickens are free range. This means that they can roam around the farm and go wherever they like. They wander through the woods, take a drink from the stream and have a nap under the bushes. They are so happy that Charlie calls them his chuckling chickens.

Charlie has been interested in chickens since he was five years old. His aunt gave him 6 chickens as a birthday present. He used to collect the eggs and sell them to his mother for pocket money.

Three years ago he started his chicken farm with 23 chickens. Now he has 48 more chickens. He would like to have 100 chickens.

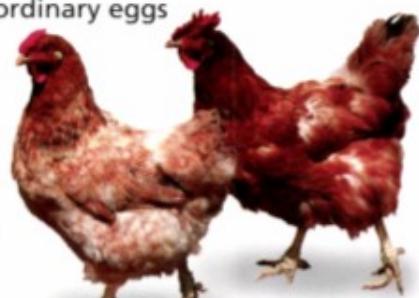
Yesterday, Charlie collected 65 eggs. When he first started, he would usually collect 18 eggs every day. On the day that he collected double that

number, he held a tea party.

The chickens lay more eggs in the summer than in the autumn and winter. In January, Charlie usually collects 54 eggs. In August, he collects 69 eggs.

Charlie feeds the hens a mix of wheat, soya and maize, and he gives them vitamins and marigold extract. They also eat what they find by scratching around. They like frogs, worms and insects.

Recently, Charlie held an egg hunt. He hid 75 eggs. 37 eggs were ordinary eggs and all the rest were chocolate eggs. Charlie likes chocolate eggs, but he says, 'They're not very nice fried!'



Comprehension Questions

How many chickens does Charlie have now?	
What is the difference between the number of eggs Charlie collected yesterday and when he first started the farm?	
How many eggs did he collect on the day of the team party?	
How many chocolate eggs did Charlie hide?	
When Charlie has 100 chickens, how many more will he have than when he started?	
What is the difference between the number of eggs Charlie collected in January and August?	

Literacy Task - Skating under the Stars

Every November, the town of Grantley Wood gets its own outdoor ice rink. It fills the town square near the town hall and the library. It is open every day from then until the New Year. (It is closed on Christmas Day.)

When customers arrive at the rink, they buy their tickets. Then they take off their shoes and put on skates. The rink has 96 pairs of children's skates, and half that number of adults' skates.

In the first year, 2300 people skated on the ice rink. Last year, there were double that number of skaters.

To celebrate the opening of the ice rink there was a special display. 37 skaters took part in an ice dance. The skaters each carried two lanterns. It was a dazzling sight.

There is a café at the ice rink. During one week,

they sell 420 coffees and double that number of mugs of hot chocolate.

Two years ago, the weather was very bad and it snowed for a week. The ice rink gave a discount on tickets. A family ticket was half price and cost £14. Isabel and her family went skating while it was snowing. She said it was very exciting.

Over the last weekend that the ice rink was open, 520 skaters used the ice rink. This was double the number who had used the ice rink during the previous weekend. They had a nice and icy time!



Comprehension Questions

How many pairs of adults' skates does the ice rink have?	
During the special display, how many lanterns were there in total?	
How many mugs of hot chocolate does the café sell in a week?	
How many more people skated on the rink last year?	
How much does a family ticket usually cost?	
How many people used the ice rink during the weekend before the final weekend?	

WHERE STARS ARE BORN

Lewis, Paige, Kai, Emma and Dylan were going to have a joint birthday party. They wanted to make all the cakes themselves.

'We can be the cake company!' said Emma. They made a list of all the ingredients that they needed. Then they each bought different ingredients from the list.

This is how much the ingredients cost:

1 pack of butter	£1.24
Flour	£1.48
Sugar	£1.44
Chocolate	£1.39
Sultanas	£1.54
Raisins	£1.22
Almonds	£1.06
Hazelnuts	£1.37
Walnuts	£1.00



Paige bought the raisins and sultanas. Lewis bought the flour and 2 packs of butter.

Emma had to buy 12 eggs. At the shop, 6 eggs cost £1.57 and a box of 12 eggs cost £2.87. She bought the box of 12 eggs.

Kai bought the sugar and chocolate. He paid with a £5 note.

They made 36 fairy cakes in trays. Each tray held 9 fairy cakes. They also made chocolate brownies. Dylan bought the almonds, hazelnuts and walnuts. He paid with a £10 note.

On the day before the party, they met at Kai's house. They each took out what they had bought. They did a lot of measuring, stirring, pouring and baking. When the cakes were ready, they were each allowed to taste one cake.

'Yum!' said Lewis, 'I can't wait until the party!'

Comprehension Questions

How much did Paige pay for the raisins and sultanas?	
How much did Lewis pay?	
How much change did Kai receive?	
Emma bought a box of 12 eggs instead of 2 boxes of 6 eggs, how much did she save?	
How much change did Dylan receive?	