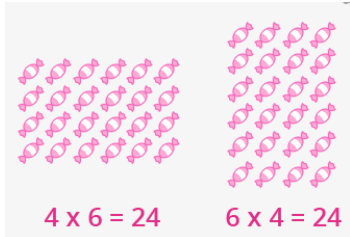
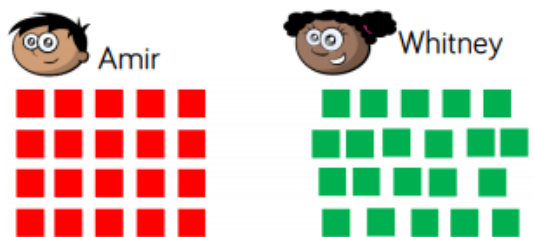
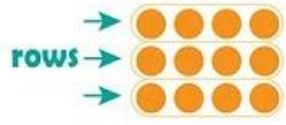
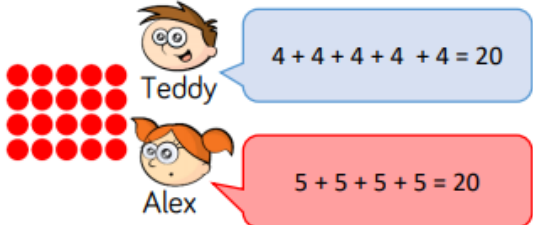
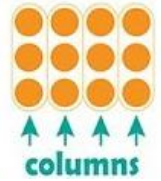

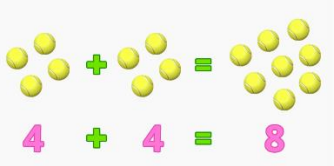
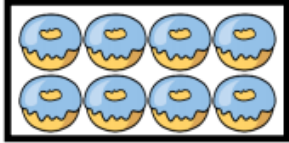





Power Maths Key Vocabulary
Year 1 – Block C

Key Vocabulary	Explanation of Terms	Example Question(s)
array	<p>An array is an arrangement of objects, numbers or pictures in columns or rows. The purpose of an array is to help children understand multiplication and division.</p> 	<p>Amir and Whitney are making arrays.</p>  <p>Who has made a mistake? Explain why.</p> <p>(Possible answer: Whitney has made a mistake because her array is not in columns. There are an unequal amount of squares in each row.)</p>
row	<p>In an array, rows represent the number of groups.</p> 	<p>Teddy and Alex are writing number sentences to describe the array.</p> 
column	<p>In an array, columns represent the number in each group or the size of each group.</p> 	<p>Who do you agree with? Explain why.</p> <p>(Possible answer: They are both right. Teddy has counted the columns. Alex has counted the rows.)</p>

		<p>Eva begins to make an array with 40 counters. She has finished her first row and her first column. Complete her array.</p>  <p>Write two different number sentences to describe the finished array. (Possible answer: Array showing $10 + 10 + 10 + 10 = 40$ or $4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = 40$)</p>
<p>double twice</p>	<p>To double of a number, we add the same number to itself. For example, double of 2 is $2 + 2 = 4$.</p>  <p>Twice means two times; on two occasions.</p>	<p>Louise doubles her donuts. The picture shows what she had after she doubled her donuts.</p>  <p>Whitney</p>  <p>Louise started with 4 and ended with 8 donuts.</p> <p>Eva</p>  <p>Louise started with 8 and ended with 16 donuts.</p> <p>Mo</p>  <p>Louise started with 2 and ended with 4 donuts.</p> <p>Who do you agree with? Explain why.</p> <p>(Possible answer: Whitney is correct because the image shows what she was left with. She had 8 after she doubled and double 4 is 8.)</p>

Complete the table by doubling each number.

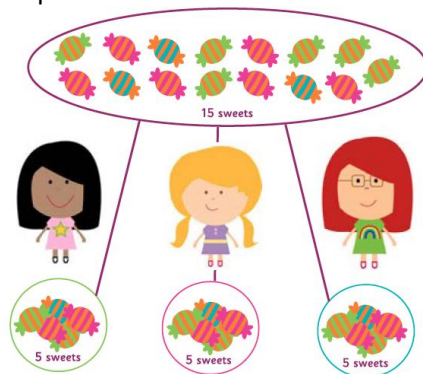
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

What patterns do you notice?

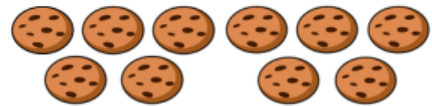
(The doubles increase by 2 each time. The doubles are all even. The doubles end in 2,4,6,8 or 0.)

share

To share is to split into equal parts or groups.



Dora has 10 biscuits.



She wants to share them equally at her party.

How many people could be at the party?

(Possible answers: There could be: 10 people, 5 people, 2 people, 1 person (Dora))

There are 10 cakes and 2 boxes.

An equal amount needs to be put into each box.



Jack

Put them into groups of 2



Eva

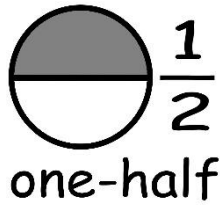
Share them into 2 groups.

Who is correct?
Explain your answer.

(Possible answer: Eva is correct. She has shared the cakes equally and put 5 into each box.)

half
halves

A half is one part of something divided into two equal parts.



The plural of half is halves.

Eva and Jack are both attempting to split a rectangle in half.



Eva



Jack thinks he can find three more ways.

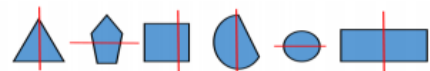


Jack

Find Jack's three examples.

Sort the shapes into the table.

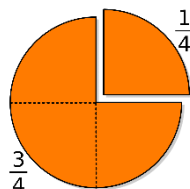
Shapes that are split in half	Shapes that are not split in half



Can you add any more shapes to the table?

quarter

A quarter is one of four equal parts. Written as $\frac{1}{4}$. This circle has been cut into quarters, and one quarter has been removed.

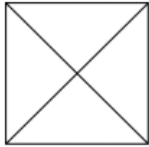
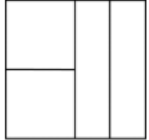
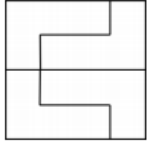
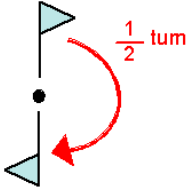


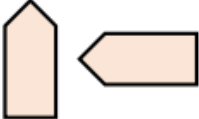
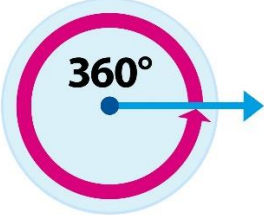




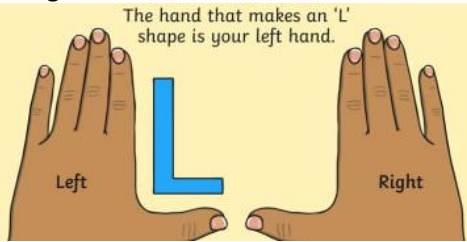
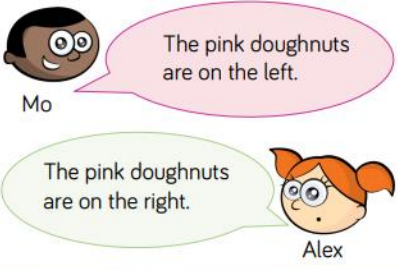

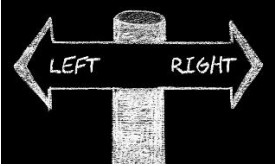

One cube  is a quarter, what could the whole look like?

Two cubes  are a quarter, what could the whole look like?

Three cubes  are a quarter, what could the whole look like?

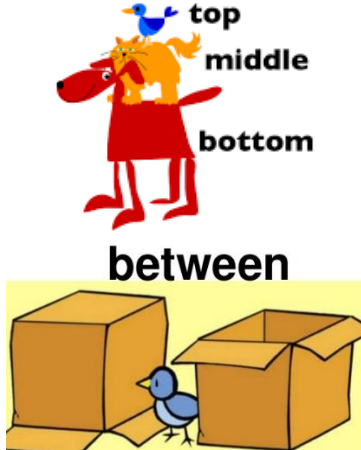
How many different possibilities can you make?

		<p>Three children are splitting a square into equal parts.</p> <p>Teddy </p> <p>Alex </p> <p>Mo </p> <p>Who has split the square into equal parts? Explain why.</p>
<p>half turn</p>	<p>A half turn results in the object facing the opposite direction (or backwards) to the direction it was originally facing.</p>  <p>The object will have turned 180°.</p>	<p>Are these statements correct? Is there more than one answer? Explain how you know.</p> <p>The shape has made a quarter turn.</p>  <p>The shape has made a half turn.</p>  <p>The shape has made a three-quarter turn.</p> 
<p>whole turn</p>	<p>A whole turn is 360 degrees (360°).</p>  <p>It means turning around until you point in the same direction again.</p>	
<p>quarter turn</p>	<p>If the object is facing upwards then a quarter turn will mean that the object is then facing left or right, depending which direction it turns.</p> 	

	<p>The object will have turned 90°.</p>	<p>Alex turns her number shape and it finishes facing this direction.</p>  <p>What direction could it have started facing?</p> <p>What turn could it have made?</p>
<p>left</p>	<p>If you are holding a compass and facing north, the direction to the west of you is also to your left. Left is the opposite of right.</p> 	  <p>Who is correct? Explain how you know.</p> <p>(Both children could be correct because they have not stated what the pink doughnuts are left or right in relation to.)</p>
<p>right</p>	<p>If you are holding a compass and facing north, the direction to the east of you is also to your right. Right is the opposite of left.</p> 	
<p>forwards</p>	<p>Forward means in the direction that one is facing or travelling; towards the front.</p>	<p>How many different ways can you describe the position of the 2p coin?</p> 
<p>backwards</p>	<p>If you move or look backwards, you move or look in the direction that your back is.</p>	
<p>above</p>	<p>Above is a preposition or an adverb. When we use above as a preposition, it means higher than.</p>	
<p>below</p>	<p>Below is a preposition or an adverb. We use below most commonly as a preposition meaning lower than. It has a similar meaning to under.</p>	

top
middle
bottom
between


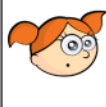
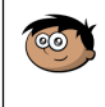

These prepositional words can be confusing for children, but they are important concepts to understand for later geometry.



(The 2p coin is: Below the 50p. Above the 10p. In between the £1 and 5p. To the left of the 5p. To the right of the £1.)

Use 5 cubes to build a tower.


- Start with a yellow cube.
- Place a blue cube on top of the yellow cube.
- Place a white cube below the yellow cube.
- Place a red cube on the top of the tower.
- Place the green cube in between the yellow and white cube.

Whitney		
		
		Dora

Jack is directly above Alex.
Eva is directly below Alex.
_____ is to the right of Eva.
There is no-one above Amir.
What are the missing names?
Add people to complete the grid and describe where they are.

up
down

Down means moving towards a lower place or position.



Up means moving towards a higher place or position.

place value grid

A standard place value grid or place value chart is a simple pictorial guide to support pupils' understanding of digit value in a number.

Tens	Ones

Show these numbers using a place value chart, Base 10 or straws.

Tens	Ones

73	50	88	79
91	85	62	93

Use Base 10 to make these numbers on place value charts. Write how many tens and ones are in each number.

78 and 61	
Tens	Ones

90 and 89	
Tens	Ones

64 and 92	
Tens	Ones

Which number from each pair is the largest? Discuss how you know.

Compare the amounts using <, > or =

Tens	Ones
●●●●	●

 ○

Tens	Ones
●●●●	●●●●

Tens	Ones
	●●●●


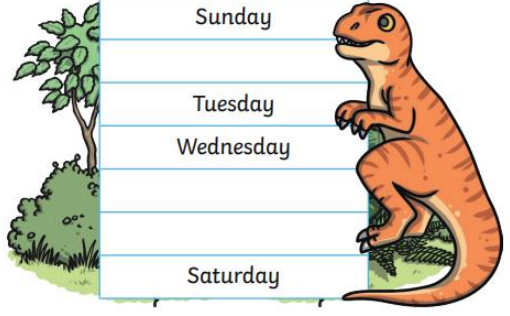
 ○

Tens	Ones
●●	

Tens	Ones
●●●●	●●●●

 ○

Tens	Ones
5	1

<p>slower</p> <p>faster</p>	<p>Slower means an object is moving, happening or doing something with less speed (than another object).</p> <p>Faster means an object is moving, happening or doing something with more speed (than another object).</p>	<p>Tom and Caroline work at the same place. Tom cycles to work and takes half an hour, Caroline walks to work and takes one hour. Who is faster and takes less time to get to work? Who is slower and takes more time to get to work?</p> <p>Mick, Seb and Annie all walk to a football match. Mick takes 8 minutes to walk there. Seb is 3 minutes slower than Mick. Annie is 5 minutes faster than Seb. Who arrives at the football match first? How do you know?</p>																																				
<p>yesterday</p>	<p>Yesterday is the day before today.</p> <p>If today is Monday, then Sunday is an example of yesterday.</p>	<p> Tess the T-Rex is trying to fill in the missing days. Help her complete the table.</p> <table border="1"> <thead> <tr> <th>Yesterday</th> <th>Today</th> <th>Tomorrow</th> </tr> </thead> <tbody> <tr> <td></td> <td>Saturday</td> <td></td> </tr> <tr> <td>Wednesday</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Monday</td> </tr> <tr> <td>Thursday</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Tuesday</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Sunday</td> </tr> <tr> <td>Friday</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Monday</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Wednesday</td> </tr> <tr> <td></td> <td>Sunday</td> <td></td> </tr> <tr> <td>Tuesday</td> <td></td> <td></td> </tr> </tbody> </table>	Yesterday	Today	Tomorrow		Saturday		Wednesday					Monday	Thursday				Tuesday				Sunday	Friday				Monday				Wednesday		Sunday		Tuesday		
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<p>today</p>	<p>Today is the current day or date.</p>																																					
<p>tomorrow</p>	<p>Tomorrow is the day after today.</p>																																					
<p>day</p>	<p>A day is approximately the period of time during which the Earth completes one rotation around its axis.</p> <p>There are 24 hours in a day.</p>	<p>Tess the T. rex has forgotten the days of the week! Fill in the missing days and complete the sentences.</p> <p></p> <p>Sunday</p> <p>Tuesday</p> <p>Wednesday</p> <p>Saturday</p> <p>Fill in the missing months.</p>																																				
<p>week</p>	<p>A week is a period of 7 days.</p>																																					
<p>before</p> <p>after</p>	<p>Before means at or during a time earlier than (the thing mentioned).</p> <p>After means later than and next in time or place.</p>																																					
<p>month</p>	<p>A month is a unit of time, used with calendars. It can also be defined as period of 4 weeks or 30 days.</p>																																					

year A year is a period of 12 months or 365 or 366 days. It is the time taken by the earth to make one revolution around the sun.

calendar A calendar is a chart or series of pages showing the days, weeks and months of a particular year.

September 2018

No.	Sun	Mon	Tue	Wed	Thu	Fri	Sat
24							1
25	2	3	4	5	6	7	8
26	9	10	11	12	13	14	15
27	16	17	18	19	20	21	22
28	23	24	25	26	27	28	29
29	30						

date A date is a reference to a particular day represented within a calendar system. The calendar date allows the specific day to be identified. The number of days between two dates may be calculated. In most calendar systems, the date consists of three parts: the day of the month, the month, and the year.

o'clock When the minute hand points at 12 it is showing the full hour. This time is called o'clock.

January
March
July
August
November



This month is February so last month was _____.

This month is August so next month is _____.

The month before January is _____.

The month that is 3 months after May is _____.

The month that is 5 months before August is _____.

My birthday is in _____.

True or False?

There are 4 months that begin with the letter J.

All the months of the year end with the same letter.

There are 2 months of the year that have 4 letters.

There is only 1 month of the year that has 3 letters.

December has warm weather.















January is the first month of the year.

February comes after March but before January.

December comes before January but after November.

There are 6 months of the year that have more than 7 letters.

- How do you know which is the minute hand?
- How do you know which is the hour hand?

		<ul style="list-style-type: none"> • Where will the minute hand be at half past? • Where will the hour hand be at half past? <p>Match the times to the clocks and complete the sentences.</p>
<p>half past</p>	<p>Half past means 30 minutes past an hour. The number on the clock that the hour hand has just gone past tells us which hour we are half an hour past.</p> 	<div style="border: 1px solid blue; padding: 5px; display: flex; justify-content: space-around;">     </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> half past 9 half past three half past 7 half past ten </div> <p>The time is half past _____.</p> <p>The time is half past _____.</p>
<p>second</p>	<p>The basic unit of time.</p> <p>There are 60 seconds in 1 minute and 3,600 seconds in an hour.</p> <p>In this clock the hand that moves the fastest shows the seconds. It is called the "Second Hand".</p> <p>One second is approximately the time of one heartbeat when you are resting. You can get a rough count of seconds by saying "One cat-and-dog, two cat-and-dog, three cat-and-dog, ..." etc., or you may prefer "a-thousand-and one, a-thousand-and two, a-thousand-and three, ..."</p>	 <p>The time is half past _____.</p>  <p>The time is half past _____.</p>  <p>The time is half past _____.</p>  <p>The time is half past _____.</p> <p>Oh no! Alfie has a dentist's appointment but he tore his card.</p> <div style="border: 1px solid blue; padding: 5px; display: inline-block; background-color: #e0f0ff;"> half past </div> <p>He can remember that it is after 10 o'clock. Which time is his appointment?</p> <div style="display: flex; justify-content: space-around;">    </div> <p>Fred forgot when to meet his mum for tea.</p> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; display: inline-block;"> <p>I know it was half past something. The hour was between 2 and 5.</p> </div>  <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p>Can you find all the times it might be? Can you think of another clue to let him know exactly what time to meet her?</p> </div>
<p>minute</p>	<p>A minute is a period of time equal to sixty seconds or a sixtieth of an hour.</p>	
<p>hour</p>	<p>An hour is a period of time equal to 60 minutes.</p> <p>There are 24 hours in a day.</p>	
<p>pounds (£) pence (p)</p>	<p>Pounds and pence (pennies) are forms of the British currency. There are 100 pennies (100p) in 1 pound (£1).</p>	<p>Tick the coin that is in the wrong place.</p>

Pence						
	1p	2p	5p	10p	20p	50p
Pounds						
	£1	£2	£5	£10	£20	£50

coin
note

Money comes in the form of notes and coins.



Coins are money made from metals. Today, most coins are made with some combination of copper, zinc, and nickel.



Banknotes (notes) are generally made of cotton paper.

pence



pounds



Circle the amount which is equal to the amount on the tens frame.

