

Remember to learn your Times Tables

Once you know your tables off by heart, you never have to learn them again! Those of you who mastered that as a child know this to be true, those who didn't probably still have to work them out and can't instantly recall them.

Expectation for children by the end of Year 4 in the New Curriculum is

'By the end of year 4, pupils should have memorised their multiplication up to and including the 12 multiplication table and show precision and in their work.'

that:
tables
fluency
recall)

(This means that they give the answer with a maximum of 6 second

Techniques to help learn their tables:

- Chant them (1 x 2 is 2 etc.).
- Sing the times tables songs we are learning in class, make up their own songs, dances and actions!
- Chant them forwards, backwards, randomly (it may help to have them written in front of them to start with so that chanting in rhythm correctly – remove or cover facts as they get more confident).
- Have flash cards – play pairs with them (e.g. $16 = 4 \times 4$).
- Put their tables up around their bedroom – chant them looking at the tables – take one table down each day – encourage them to still look to where it had been displayed (this helps them to visualise it).
- Online games – they have fun with these and it helps consolidate their learning. Use the school website for links.
- Race against themselves – have random tests – they have to do it quicker each time.

Children will be given a weekly test for the table the whole class is working on. We will be going back to recap all times tables apart from the 2, 5 and 10 times tables, which the children should be secure with. Please test these times tables at random as well



Hello. Try to put the correct answers in the empty boxes. Sets 3 and 4 are on the next page.

1	a	1 x 6 =	<input type="text"/>
	b	2 x 6 =	<input type="text"/>
	c	3 x 6 =	<input type="text"/>
	d	4 x 6 =	<input type="text"/>
	e	5 x 6 =	<input type="text"/>
	f	6 x 6 =	<input type="text"/>
	g	7 x 6 =	<input type="text"/>
	h	8 x 6 =	<input type="text"/>
	i	9 x 6 =	<input type="text"/>
	j	10 x 6 =	<input type="text"/>
	k	11 x 6 =	<input type="text"/>
	l	12 x 6 =	<input type="text"/>

2	a	12 x 6 =	<input type="text"/>
	b	11 x 6 =	<input type="text"/>
	c	10 x 6 =	<input type="text"/>
	d	9 x 6 =	<input type="text"/>
	e	8 x 6 =	<input type="text"/>
	f	7 x 6 =	<input type="text"/>
	g	6 x 6 =	<input type="text"/>
	h	5 x 6 =	<input type="text"/>
	i	4 x 6 =	<input type="text"/>
	j	3 x 6 =	<input type="text"/>
	k	2 x 6 =	<input type="text"/>
	l	1 x 6 =	<input type="text"/>

How did you do? 😊 😐 😞

Score..... Time.....

You are doing really well! Let's see if you can join the two parts with a line. One has been done for you.



1	a	1 x 6	18
	b	2 x 6	36
	c	3 x 6	66
	d	4 x 6	6
	e	5 x 6	30
	f	6 x 6	54
	g	7 x 6	60
	h	8 x 6	12
	i	9 x 6	42
	j	10 x 6	72
	k	11 x 6	24
	l	12 x 6	48

2	a	3 x 6	72
	b	10 x 6	30
	c	6 x 6	12
	d	9 x 6	42
	e	2 x 6	18
	f	11 x 6	36
	g	8 x 6	24
	h	7 x 6	60
	i	5 x 6	6
	j	1 x 6	54
	k	12 x 6	66
	l	4 x 6	48

How did you do?



Score..... Time.....

3

- a = 10 x 6
- b = 5 x 6
- c = 2 x 6
- d = 12 x 6
- e = 8 x 6
- f = 1 x 6
- g = 11 x 6
- h = 6 x 6
- i = 9 x 6
- j = 4 x 6
- k = 3 x 6
- l = 7 x 6

4

- a 12 x 6 =
- b 3 x = 18
- c 48 = x 6
- d x 6 = 30
- e = 11 x 6
- f 2 x = 12
- g 9 x 6 =
- h = 6 x 6
- i 4 x 6 =
- j x 6 = 60
- k 1 x = 6
- l x 6 = 42

Take care...
some of them
have been
turned around.



How did you do? 😊 😐 😞

Score..... Time.....

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Challenge

Once you have learnt your tables, practise using this knowledge to learn the 0.7, 0.8 times tables, or your 90 times tables!

Things to try with your child to help them with their mathematical skills.

1. Make and do together

Use maths together at home. Most craft and DIY activities involve maths skills like measuring, calculating, understanding shapes and angles, multiplying, dividing, and so on. Model making, sewing and decorating are great for developing your child's understanding and confidence. Perhaps your child would like to try making some simple clothes for a toy, or their own cardboard box mini-theatre?

Prepare a meal together and ask your child to multiply or divide the quantities of ingredients in a recipe so it makes the right amount for your family. Can they measure all the ingredients and talk about grams, kilograms etc? Help your child to work out at what time things need to stop cooking.

2. Play games together

When you are out together, try playing simple verbal maths games. Spot a number plate and think of a calculation using those numbers. Ask the other person to work it out, or tell them the answer and see if they can work out the calculation. Alternatively, have a quick round of 'One Minute Brain Teasers'. There are also

many games you can make or adapt at home, like bingo, snap and pairs with numbers, e.g. where you have to match a maths question to an answer. Games that involve racing, throwing, scoring, etc, will all build your child's maths skills, as they often involve measuring, comparing, addition and subtraction.

3. Out and about

There are lot of opportunities to help your child with maths when you are out. Ask for your child's help in adding up the shopping bill and working out change. Comparing prices, keeping a record of what you have spent and weighing food are all things that your child may be able to help with. Help your child to look out for and spot different shapes in the world around them. Remind them of the names for 2D and 3D shapes. Do they know that a football is a sphere, or that most tins of food are cylinders?

4. Have fun with fractions

Cake, pizza, or any foods with a regular shape can help children understand what fractions are and how they work. Ask your child questions like, 'If I cut our cake into 8 pieces, what fraction will each piece be?' Foods that people might eat a few of are good for helping your child to understand how to find fractions of amounts: 'We've 12 fish fingers in the packet. There are four of us. What fraction of the fish fingers can we each have? How many fish fingers would that be?'

5. Use charts and tables

Using and talking about simple charts and tables, like reward charts, timetables, or calendars, will help your child get used to how they work. Help them to make their own table or chart to gather information, e.g. the performance of a sports team, or the favourite pop groups in their class. Encourage your child to plan or record their own activities, as this will also help them to become familiar with creating and using charts and tables themselves.

JIGSAW

Cut along the lines. Mix up the pieces. Try to remake the jigsaw.



If you complete it quickly, cut each piece in half and try again.

The jigsaw pieces contain the following multiplication problems:

- $6 \times 6 = 36$
- $4 \times 6 = 24$
- $1 \times 6 = 6$
- $2 \times 6 = 12$
- $3 \times 6 = 18$
- $12 \times 6 = 72$
- $11 \times 6 = 66$
- $7 \times 6 = 42$
- $9 \times 6 = 54$
- $8 \times 6 = 48$
- $10 \times 6 = 60$
- $5 \times 6 = 30$

Adding a single digit

Write the answers down to the sums below as quickly as you can - do not do any working out on paper - TIME YOURSELF

- | | | |
|-----------------|-----------------|-----------------|
| 1. $437 + 4 =$ | 2. $528 + 3 =$ | 3. $735 + 6 =$ |
| 4. $243 + 9 =$ | 5. $348 + 5 =$ | 6. $139 + 2 =$ |
| 7. $685 + 7 =$ | 8. $816 + 8 =$ | 9. $183 + 9 =$ |
| 10. $242 + 9 =$ | 11. $168 + 4 =$ | 12. $534 + 7 =$ |
| 13. $357 + 5 =$ | 14. $712 + 8 =$ | 15. $6 + 317 =$ |
| 16. $5 + 326 =$ | 17. $9 + 349 =$ | 18. $8 + 487 =$ |
| 19. $3 + 199 =$ | 20. $4 + 297 =$ | |

Work out mentally the answers to the next set of sums. Next to each one write down the method you used to do it.

e.g. $538 + 6 = 544$

I added two to make 40 then counted on four more to make 544

1. $279 + 5 =$

Explain:

2. $538 + 8 =$

Explain:

3. $175 + 6 =$

Explain:

4. $429 + 8 =$

Explain:

5. $377 + 6 =$

Explain:

Complete these questions by putting the correct number in the boxes.

1. $328 + \boxed{} 6 =$

2. $646 + 5 = \boxed{}$

3. $292 + \boxed{} = 301$

4. $693 + \boxed{} = 702$

5. $\boxed{} + 3 = 441$

6. $\boxed{} + 5 = 263$

7. $9 + \boxed{} = 370$

8. $6 + \boxed{} = 321$

9. $413 + 9 = \boxed{}$

10. $698 + 4 = \boxed{}$

Work out the next five answers. Write down how you did them.

10. $372 + \boxed{} = 381$

Explain: I counted on 8 up to 380 and then added one more.

12. $816 + \boxed{} = 824$

Explain:

13. $\boxed{} + 6 = 722$

Explain:

14. $\boxed{} + 8 = 651$

Explain:

15. $642 + 9 \quad \boxed{} =$

Explain:

Subtraction crossing the hundreds boundary

Write the answers in the boxes below to make the sums correct.

1. $206 - 8 =$ 2. $105 - 7 =$

3. $803 - 8 =$ 4. $207 - 8 =$

5. $602 - 3 =$ 6. $301 - 2 =$

7. $505 - 6 =$ 8. $902 - 4 =$

Now try these:

9. $503 -$ $= 497$

10. $604 -$ $= 598$

11. $702 -$ $= 695$

12. $307 -$ $= 299$

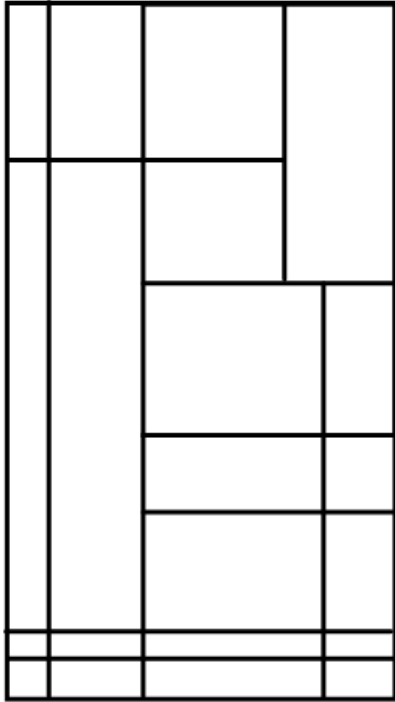
13. $- 8 = 293$

14. $- 7 = 594$

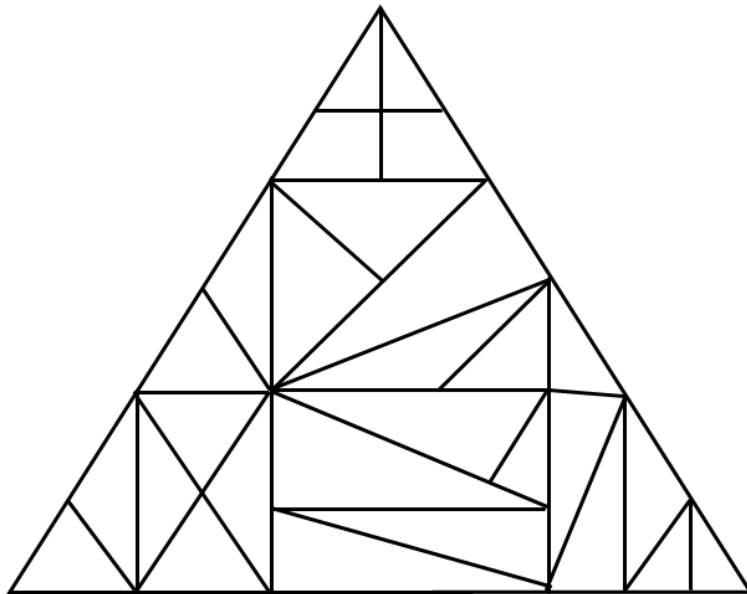
15. $- 5 = 298$

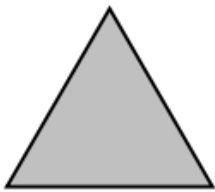

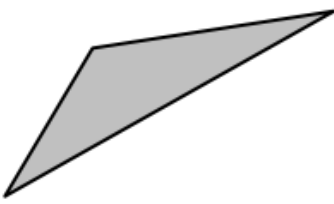
16. $- 7 = 299$

How many rectangles can you find in this shape?

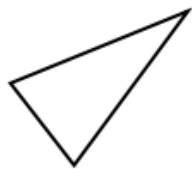
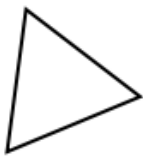
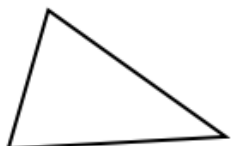
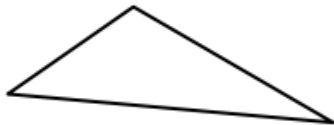
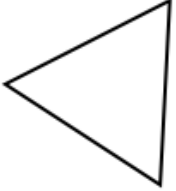
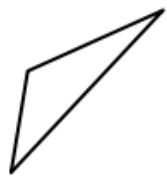
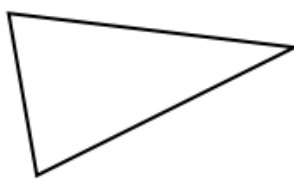
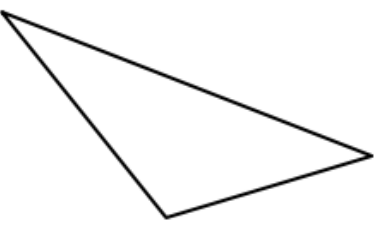
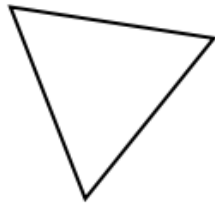


How many triangles can you find in this shape?



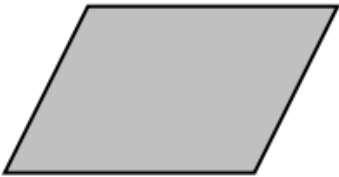

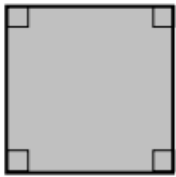


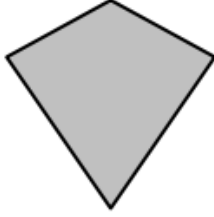
		
An equilateral triangle – all sides are the same length.	An isosceles triangle – two longer sides which are the same length and one shorter side.	A scalene triangle – all sides are different lengths.

- Label the triangles (equilateral, isosceles or scalene)...

- Colour the equilateral triangles green, the isosceles triangles yellow and the scalene triangles red.

A **quadrilateral** is a closed 2D shape with **4** straight sides and **4** corners. Some quadrilaterals have special names. The following shapes are all quadrilaterals.

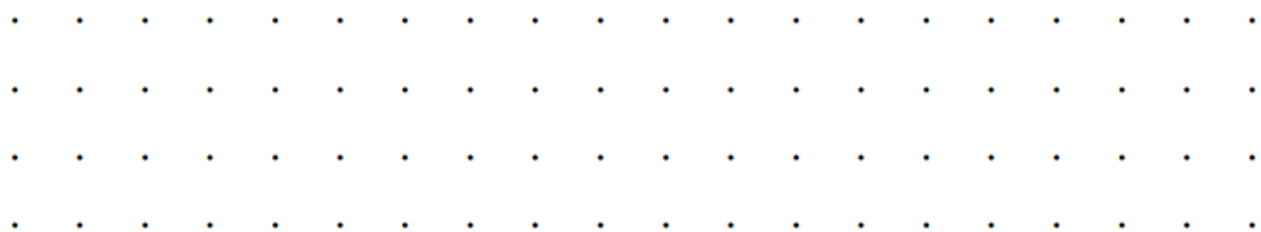
		
<p>A parallelogram has two pairs of parallel sides which are the same length.</p>	<p>A rectangle is a parallelogram which has four right angles (square corners)</p>	<p>A square is a special kind of rectangle where all of the sides are the same length.</p>
		
<p>A rhombus is a parallelogram where all of the sides are the same length. Squares are also rhombuses.</p>	<p>A trapezium looks like a triangle with a corner cut off. It has two parallel sides.</p>	<p>A kite has two pairs of sides which are the same length. The sides in each pair are next to each other rather than parallel.</p>

Rectangles, squares and rhombuses are all parallelograms.

A square is a special type of rectangle in which all the sides are the same length. It is also a rhombus in which all angles are right angles.

A rhombus is a special type of kite in which all the sides are the same length.

- Choose two of the quadrilaterals above and draw them using the dots below.



Challenge yourself



The Witch's Cauldron

The witch needs a 24-leg potion to turn her Maths teacher into a frog. She's got Spiders (8 legs) Lizards (4 legs) and Bats (2 legs)

Try to find all the possible spells to turn her Maths teacher into a frog! e.g. 2 spiders, 1 lizard and 2 bats would do the trick.

Be systematic.

A) Make a table of your results.

B) Look for a pattern.

Extension

1) The witch needs a weaker potion (16-legs) to turn a Head boy or Head girl into a frog.

2) The witch needs a strong potion (32-legs) to turn a Headmaster into a frog!



Division Word Problems

Write the division calculation and the answer for each of these problems.

- 1) There are 20 bricks. How many towers of 10 can be made?
- 2) 20 books are in a box. Divide them into sets of 4.
- 3) There are 20 children in the hall. Divide them into teams of two.

How many groups can take part in these activities?

4)

Singing
30 children
Groups of 3

5)

Water play
24 children
Groups of 2

6)

Sand play
16 children
Groups of 4

7)

Painting
20 people
Groups of 10

Make up some word problems for these divisions.

- 8) 20 shared by 2
- 9) 20 divided by 4
- 10) 15 split up into 3 groups.

If you have finished, check your answers carefully. Then, make up your own word problems using add, subtract, divide or multiply.

1. Ryan collected football magazines. He has been collecting for five weeks and now had 60 in his collections. How many had he collected each



week?

2. Emma shared out 48 sweets to her friends, they had 8 sweets each. How many friends did she give them to?



3. Isabel had read 99 pages of her book in three days. How many pages did she read each day?



4. Michelle had drawn fifty-six beautiful pictures in eight days. How many did she draw each day?



5. Christopher had winked 144 times in 12 days. How many times did he wink each day?



6. Mark had doodled 108 times in twelve days. How many doodles had he drawn each day?



7. Michael had flashed his cheeky grin ninety-six times in eight days. How many times had he grinned each day?



8. Jennifer had whispered to her friend Alice eighty-four times in twelve days. How many whispers per day?



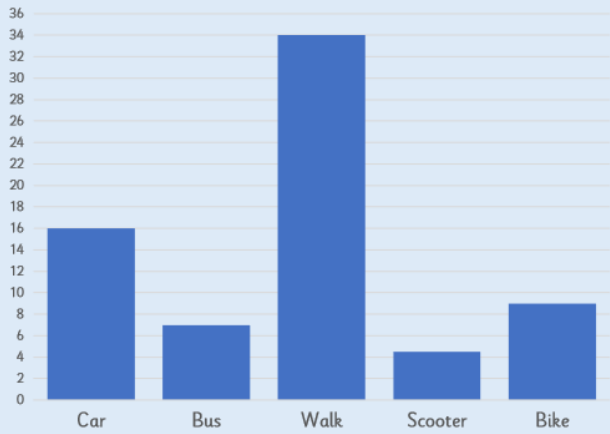
9. George had managed to write seventy-two immaculately presented words in nine minutes. How many words per minute?



Complete the table using the information in the bar chart.

Statistics

4



Transport	Number of children
Car	
Bus	
Walk	
Scooter	
Bike	

What is the most popular way to get to school?

What is the least popular?

How many children scooter to school?

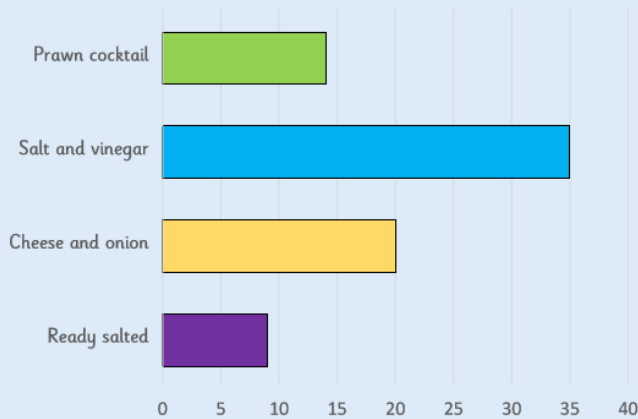
What other questions could you ask about the data?

Produce your own table/bar chart/pictogram showing how the children in your class travel to school. What scale will you use for your bar chart? Why?

What data has been collected?

Statistics

4



What is needed to complete the bar chart?

What is different and what is the same about this bar chart?

What questions could you ask?

Questions

1. _____







2. _____

3. _____

Represent the data in each table as a bar chart.

Statistics

4

Table	Table points  = 20 points
Triangles	
Squares	
Circles	
Rectangles	
Hexagons	

Day	Number of cookies sold
Monday	65
Tuesday	25
Wednesday	40
Thursday	30
Friday	95

What does a full circle represent?
What does a quarter/half/three quarter circle represent?

What scale will you use? Why?

Discuss.

Time

4

What different ways are there to present data?

Are all scales of bar charts the same?

What is the same and what is different about the way in which the data is presented?