

Maths Isolation pack - Week 1

Message

Hi Year 4!

Welcome to your Maths isolation learning pack.

These activities are only a suggestion of what you could complete in one day. You might want to do all the starter activities in one go or just focus on the longer tasks at first.

Each task can be done without a printer but there are extra activities for you to print out if you can. You can write the questions and tasks out from the computer onto paper; this will help other family members have access to the technology you are currently using to view this.

Good luck and stay well!

Mr Shiel, Ms Davies, Ms Schmidt, Mr Goddard

Teaching

To start our remote learning in Maths we are going to look at addition. In Year 4 we have practised using mental and written methods to solve addition problems. This week we want you to use the written column method for addition.

We can do addition by writing one number below the other and then add **one column at a time**, like this:

$$\begin{array}{r} 13 \\ + 23 \\ \hline 36 \end{array} \quad \begin{array}{r} 16 \\ + 16 \\ \hline \end{array}$$

Sometimes when numbers add to over ten you need to split the number and 'carry' it over to the next column, like this:

$$\begin{array}{r} 1 \\ 16 \\ + 16 \\ \hline 32 \end{array}$$

Did you see how we split the 12 into **1 Ten** and **2 Ones**? We then sent the **1 Ten** to the **top of the Tens column**, so we will remember to add it when we do the Tens.

Questions to answer are below!

Website Links

Here are some useful teaching videos:

<https://www.mathsisfun.com/numbers/addition-column.html>

<https://www.bbc.co.uk/bitesize/topics/zy2mn39/articles/z3kmrwx>

<https://www.youtube.com/watch?v=rL9qX57BzsA>

Here are some website where you can practise your skills.

<https://www.mathsisfun.com/worksheets/print.php?w=34170&ID=5450>

<https://www.mymaths.co.uk/>

<http://www.snappymaths.com/addition/addw100/resources/addw100ear1.pdf>

You can print additional worksheets for free from this website. Make sure you look for Year 4 resources on addition:

<https://www.twinkl.co.uk/>

Day one - Quick Questions

Today we are splitting your maths session into 3 parts. Our first is quick questions, which might be times table practice, number bonds to certain amounts or other quick-fire calculation questions.

If you have squared paper or an exercise book with squared paper, then it will help to use that.

Quick Questions Lesson 1 – The 3 times table practise

$$4 \times 3 =$$

$$3 \times 6 =$$

$$7 \times 3 =$$

$$9 \times 3 =$$

$$4 \times 3 =$$

$$6 \times 3 =$$

$$8 \times 3 =$$

$$5 \times 3 =$$

$$7 \times 3 =$$

$$12 \times 3 =$$

$$40 \times 3 =$$

$$0.6 \times 3 =$$

$$3 \times 3000 =$$

$$4 \times 300 =$$

You can try an online test as well:

<http://www.timestables.me.uk/>

Column Addition

	2	1			2	8			7	4	
+	3	3			+	3	0		+	1	4

	6	2			4	0			3	5	
+	3	3			+	3	7		+	2	4

	5	6			3	2			4	8	
+	1	6			+	4	9		+	1	7

	4	5	3			8	8	3			1	5	7
+		8	2		+		9	3		+	3	5	1

	1	6	9			2	6	5			4	3	4	
+	1	5	1			+	3	8	5		+	2	8	9

$$\begin{array}{r} 5,282 \\ + 1,991 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 3,768 \\ + 2,241 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 2,739 \\ + 2,429 \\ \hline \end{array}$$

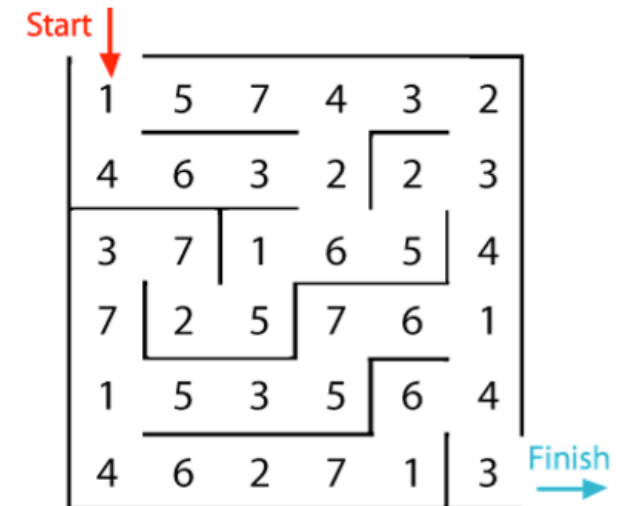
Apply it

In this maze there are numbers in every direction. You go through the maze by adding all the numbers you pass. You may not go through any number more than once.

A: Can you find a way through in which the numbers add to exactly 100?

B: Can you find a way through the maze that equals the highest amount?

C: Can you find a route through the maze that gives you the lowest amount?



Day Two - Quick Questions

Number patterns.

Can you say which numbers are next in these patterns?

$$3 - 6 - 9 - 12 - 15 - ?$$

$$40 - 35 - 30 - 25 - ?$$

$$2 - 4 - 8 - 16 - ?$$

$$1 - 3 - 5 - 7 - ?$$

$$72 - 66 - 60?$$

$$11 - 22 - 44 - ?$$

$$23 - 26 - 29 - ?$$

$$81 - 77 - 73 - ?$$

$$45 - 52 - 59 - ?$$

$$93 - 85 - 77 - ?$$

$$19 - 20 - 22 - 25 - 29 - ?$$

Column Addition

We have a mixture of addition questions for you today. Start by filling in the missing boxes to make these calculations correct.

$$\begin{array}{r} 6 \square 5 \square \\ + 23 \square 3 \\ \hline \square 577 \end{array} \quad \begin{array}{r} 4 \square 6 \square \\ + 25 \square 1 \\ \hline \square 789 \end{array} \quad \begin{array}{r} 6 \square \square 8 \\ + \square \square 8 \square \\ \hline 9,325 \\ 1 \quad 1 \quad 1 \end{array} \quad \begin{array}{r} \square 3 \square 7 \\ + 3 \square 8 \square \\ \hline 9243 \end{array}$$

Solve these calculations and work out which is bigger!

$$3,456 + 789 \quad \bigcirc \quad 1,810 + 2,436$$

$$2,829 + 1,901 \quad \bigcirc \quad 2,312 + 2,418$$

$$7,542 + 1,858 \quad \bigcirc \quad 902 + 8,496$$

$$1,818 + 1,999 \quad \bigcirc \quad 3,110 + 707$$

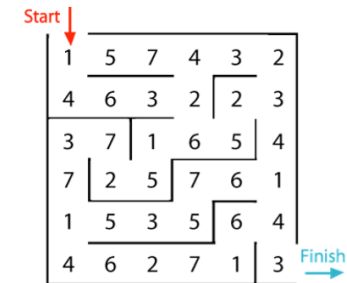
Number Problems

The W7 bus picked up 23 passengers at the first stop, 143 passengers at the second stop and another 45 passengers at the 3rd stop. Including the driver, how many people are on the bus?

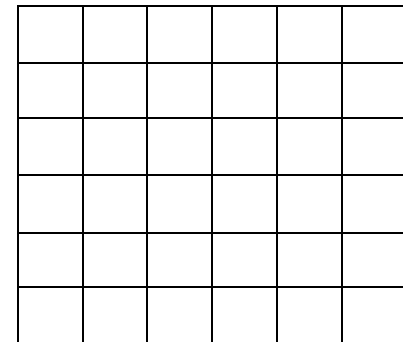
Joe starts by thinking of the number 2134. He doubles it and then adds another 2399. What number is he on now?

Colin is entering the Smarties eating world championship. In the first round he scoffs 234 smarties. In the next round he guzzles 2349 smarties and in the final round he swallows a whopping 4399! How many has he eaten?

Apply it - Create your own Maze



Yesterday you were asked to find different routes through this maze. Today we want you to create your own maze to test a member of your family. You can also take a phot and send it to your teachers!



Using squared paper, draw a square that measures 6 x 6 cm. Each square can have a number in and use the lines of the squares to create the routes of your maze.

Can you make a maze that has a route that equals exactly 200?

Day three - Quick Questions

Here are 33 times table questions. How quickly can you answer them?

$12 \times 3 =$
 $4 \times 2 =$
 $5 \times 5 =$
 $7 \times 3 =$
 $9 \times 2 =$
 $4 \times 3 =$
 $12 \times 5 =$
 $11 \times 10 =$
 $10 \times 3 =$
 $4 \times 5 =$
 $6 \times 10 =$
 $8 \times 5 =$
 $9 \times 2 =$
 $4 \times 4 =$
 $6 \times 10 =$
 $12 \times 3 =$
 $4 \times 4 =$
 $5 \times 3 =$
 $7 \times 5 =$
 $9 \times 10 =$
 $4 \times 12 =$
 $12 \times 3 =$
 $8 \times 2 =$
 $10 \times 10 =$
 $4 \times 5 =$
 $5 \times 6 =$
 $8 \times 2 =$
 $9 \times 10 =$
 $4 \times 4 =$
 $6 \times 3 =$
 $9 \times 3 =$
 $2 \times 5 =$
 $9 \times 4 =$

Addition word problems Have a go at these 5 questions:

1. Josephine has 73 toy cars. At a car boot sale she finds another 48 toy cars. How many does she have now?
2. Grace is collecting Lego cards every time she goes to the shops. On Monday she got 14 cards. On Tuesday she got double that amount. How many cards did she get altogether?
3. The W7 bus picked up 23 passengers at the first stop, 143 passengers at the second stop and another 45 passengers at the 3rd stop. Including the driver, how many people are on the bus?
4. Kwami starts by thinking of the number 2134. He doubles it and then adds another 2399. What number is he on now?
5. Sunni is entering the Smarties eating world championship. In the first round he scoffs 234 smarties. In the next round he guzzles 2349 smarties and in the final round he swallows a whopping 4399! How many has he eaten?

Apply it

Below is a grid of four "boxes". You must choose four different digits from 1–9 and put one in each box. For example

5	2
1	9

This gives four two-digit numbers: 52. 19. 51. 29. When I add them all together I get 151.

Your challenge is to find four different digits that give four two-digit numbers which add to a total of **100**.

Day Four – Quick questions

Let's start by revising our Roman numerals.
You can write them down if it helps.

Roman Numerals			
Can you count by only using letters?			
I	1	XXX	30
II	2	XL	40
III	3	L	50
IV	4	LX	60
V	5	LXX	70
VI	6	LXXX	80
VII	7	XC	90
VIII	8	C	100
IX	9	D	500
X	10	M	1,000
XX	20	MD	1,500

Can you write these numbers in roman numerals? Then work out what these numerals stand for?

120 =	DCV =
153 =	LXXXII =
630 =	XIX =
450 =	MMXXI =
1230 =	XCIV =
1981 =	
2020 =	

Double it up

You can double numbers quickly using mental methods or simply add them together using column addition as they get bigger. Practise doubling these numbers:

Double 3

Double 10

Double 12

Double 14

Double 22

Double 102

Double 205

Double 304

Double 125

Double 1420

Double 2340

Double 3462

Double 12,398

Double 42,896

Apply it - Strike it Out

Watch the video below which shows two people playing the first few turns of a game. [Strike it out](#)

How to play:

- Start by drawing a number line from 0 to 20 like this:



- The first player chooses a number on the line and crosses it out. The same player then chooses a second number and crosses that out too. Finally, he or she circles the sum or difference of the two numbers and writes down the calculation.



$$3 + 8 = 11$$

- The second player must start by crossing off the number that player 1 has just circled. He or she then chooses another number to cross out and then circles a third number which is the sum or difference of the two crossed-off numbers. Player 2 also writes down their calculation.
- Play continues in this way with each player starting with the number that has just been circled. Once a number has been used in a calculation, it cannot be used again. The game ends when one player cannot make a calculation.

Day Five – Quick questions

Here are the quick questions to get us started. They are adding 3 digit numbers together – try to do it mentally.

$$125 + 132$$

$$203 + 124$$

$$105 + 103$$

$$106 + 210$$

$$305 + 102$$

$$415 + 121$$

$$215 + 112$$

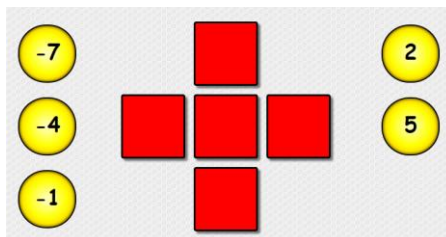
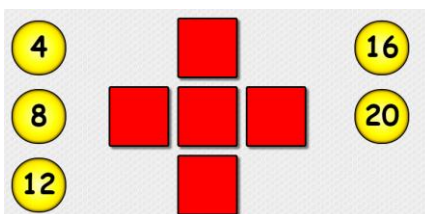
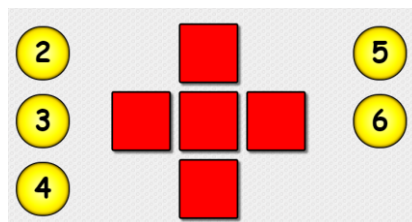
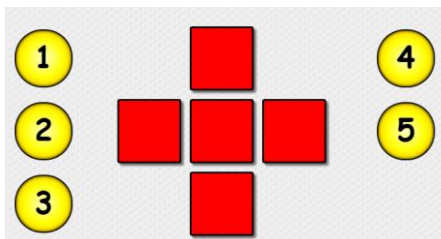
$$340 + 124$$

$$250 + 115$$

$$318 + 102$$

Number Puzzles

Arrange the numbers in the cross so that the numbers in the horizontal line add up to the same total as the numbers in the vertical line. You can draw these out or write the number on the sheet:



Apply it

Always, Sometimes or Never?

Are the following statements always true, sometimes true or never true?

How do you know?

- A. When you add three **even** numbers together it will be a number in the 3 times table
- B. The sum of three consecutive numbers is **odd**
- C. If you add 1 to an **odd** number you get an **even** number
- D. Multiples of 5 end in a 5
- E. If you add two **odd** numbers you get an **odd** number
- F. If you add a multiple of 10 to a multiple of 5 the answer is a multiple of 5
- G. If you add a number to 5 your answer will be bigger than 5
- H. A square number has an even number of factors