

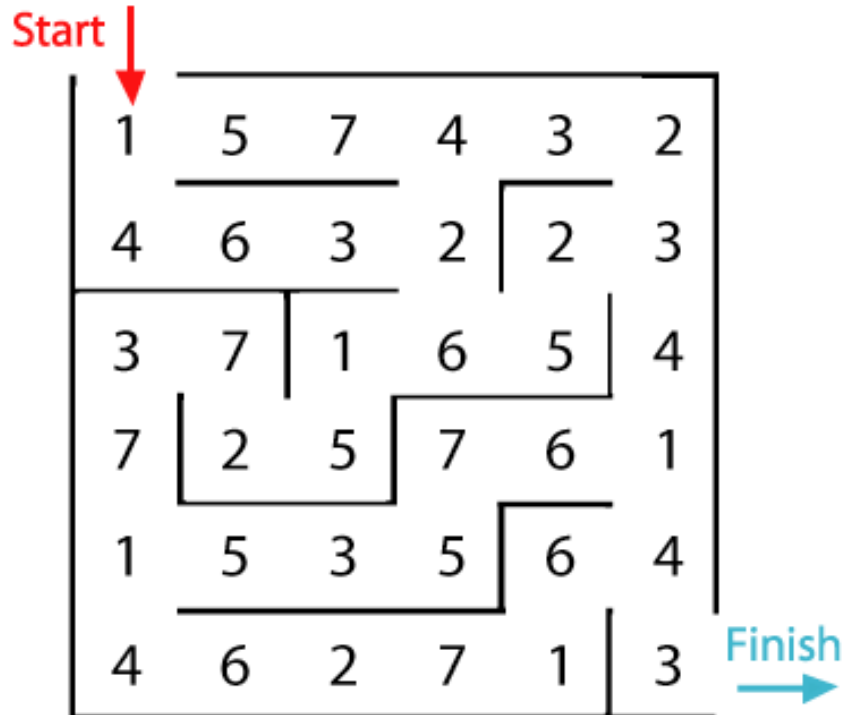
## Year 3 maths week 2

5 days of problem solving	Day 1 Activity	Day 2 Activity	Day 3 Activity	Day 4 Activity	Day 5 Activity
<b>Factual fluency</b> (to aid fluency)	<a href="https://www.topmarks.co.uk/maths-games/daily10">https://www.topmarks.co.uk/maths-games/daily10</a> level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	<a href="https://www.topmarks.co.uk/maths-games/daily10">https://www.topmarks.co.uk/maths-games/daily10</a> level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	<a href="https://www.topmarks.co.uk/maths-games/daily10">https://www.topmarks.co.uk/maths-games/daily10</a> level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	<a href="https://www.topmarks.co.uk/maths-games/daily10">https://www.topmarks.co.uk/maths-games/daily10</a> level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	<a href="https://www.topmarks.co.uk/maths-games/daily10">https://www.topmarks.co.uk/maths-games/daily10</a> level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10
<b>Problem/activity of the day</b>	<p>Addition Maze – Find a way through the maze by adding.</p> <p>Can you find another way through the maze?</p>	<p>Use the formal method to complete the warmup calculations below. Now roll a dice 6 times (or use digits 1, 2, 3, 4, 5, 6,) to make two 3-digit numbers. Or use: <a href="https://www.random.org/dice/?num=1">https://www.random.org/dice/?num=1</a> Create a subtraction calculation. Put the highest digit at the start of the first number in your calculation.</p> <p>Use the formal written method to solve (layout below). <b>Complete 5</b> different formal subtraction calculations.</p>	<p>Use the formal method (layout below) to complete the following calculations:</p> <ol style="list-style-type: none"> <li>1. <math>13 \times 3 =</math></li> <li>2. <math>25 \times 3 =</math></li> <li>3. <math>47 \times 4 =</math></li> <li>4. <math>39 \times 5 =</math></li> </ol> <p><u>Finished? Well done!</u> Write an <b>explanation</b> of how you solved question 1.</p>	<p>My friend says she used this fact: <math>4 \times 3 = \underline{\quad}</math> to work out these facts: <math>8 \times 3 = \underline{\quad}</math> <math>40 \times 3 = \underline{\quad}</math></p> <p><b>Complete</b> the calculations and <b>explain</b> how these facts could have been linked by my friend.</p>	<p><b>Check, prove, explain:</b> Solve each of these problems.</p> <ol style="list-style-type: none"> <li>1. Two bags of bread rolls have 8 rolls in each bag. How many rolls are there altogether?</li> <li>2. A boat holds 2 people. How many boats are needed for 8 people?</li> <li>3. I have 8 pencils and give 2 pencils to each person. How many people receive pencils?</li> <li>4. I have 8 pencils and give 2 away. How many do I have left?</li> </ol> <p>Explain which problems can be solved using the calculation: <math>8 \div 2</math></p>
<b>Resources you will need</b>	Maze image (below) Paper and pencil	Dice (or digits above) Paper and pencil	Paper and pencil	Paper and pencil	Paper and pencil
<b>Tips, clues or methods to help</b>	Keep a record of the addition calculations as you go.	Draw a place value grid to keep the digits in place. Need help with calculation? Check: <a href="https://www.belleville-school.org.uk/our-learning/calculation-videos">https://www.belleville-school.org.uk/our-learning/calculation-videos</a>	Need help with calculation? Check: <a href="https://www.belleville-school.org.uk/our-learning/calculation-videos">https://www.belleville-school.org.uk/our-learning/calculation-videos</a>	Need help with calculation? Check: <a href="https://www.belleville-school.org.uk/our-learning/calculation-videos">https://www.belleville-school.org.uk/our-learning/calculation-videos</a>	Draw a picture or bar model for each problem and write out the calculation for each statement first.
<b>Want to check?</b>	Use the inverse to check	Use the inverse to check.	Use the inverse to check.	Use the inverse to check.	Check each calculation
<b>Theme</b>	4 operations	4 operations	4 operations	4 operations	4 operations

**See below for:** addition maze, formal subtraction warm-up questions and layout examples, formal multiplication method

**Additional activities below:** problem solving using the 4 operations

### Day 1 – Addition Maze Challenge



In this maze there are numbers in each of the cells. You go through the maze adding all of the numbers that you pass. You may not go through each cell more than once.

Can you find another way through the maze?

What is the lowest number you can make going through the maze?

What is the highest number you can make going through the maze?

Remember to check your calculations using the inverse.

E.g. I think  $1 + 5 = 6$ . I know I am correct if  $6 - 5 = 1$ .

## Day 2 – Subtraction Dice Challenge

Try these warmup calculations:

1.  $357 - 124 =$
2.  $694 - 342 =$
3.  $74 - 16 =$
4.  $371 - 134 =$
5.  $318 - 127 =$

Solve using the column method for subtraction.

Print or draw your own colour coded support frame to help you.

I rolled a dice 6 times. I generated these numbers:  
6, 6, 2, 3, 2, 5.

With these digits, I made this subtraction calculation.

How many calculations can you make?

Solve using the column method for subtraction.

	H	T	O	

-	6	5	2	
	6	2	3	
	<hr/>			
	<hr/>			

-				

Day 3 and 4: formal multiplication is laid out like this:

$$\begin{array}{r} \text{T O} \\ \hline 43 \\ \times \quad 4 \\ \hline 12 \\ + 160 \\ \hline \\ \hline \end{array}$$

	H	T	O
X			
<hr/>			
+			
<hr/>			
<hr/>			

Print or draw your own colour code support frame to help you.

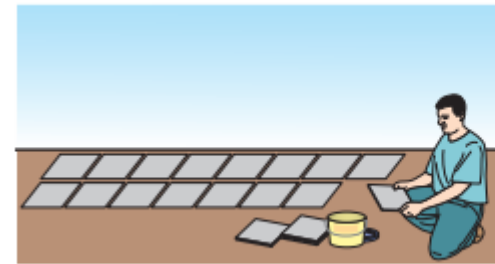
**Additional activities:**

$$\square \square \times \square = ?$$

Putting the digits 1, 2 and 3 in the empty boxes, how many different calculations can you make?

Which one gives the largest answer?

Which one gives the smallest answer?



Roger has 96 patio slabs.  
Using all of the slabs find three different ways that he can arrange the slabs to form a rectangular patio.

Write these addition statements as multiplication statements:

$$2 + 2 + 2 + 2 + 4$$

$$3 + 3 + 3 + 2 + 4$$

**Remember 4 can be made from  $2 \times 2$ ,  $1 \times 4$  or  $4 \times 1$**

**Think what multiplication statements could be made for  $2 + 6$**

**What useful facts do you know to help someone solve these calculations easily?**

What is  $3 \times 4$ ?

What is  $13 \times 4$ ?