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
Factual fluency (to aid fluency)	https://www.topmarks.co.uk/maths-games/daily10 level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	https://www.topmarks.co.uk/maths-games/daily10 level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	https://www.topmarks.co.uk/maths-games/daily10 level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	https://www.topmarks.co.uk/maths-games/daily10 level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	https://www.topmarks.co.uk/maths-games/daily10 level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10
Problem/activity of the day	Addition Maze – Find a way through the maze by adding. Can you find a way of adding that equals 100?	Roll a dice 6 times (or use digits 1, 2, 3, 4, 5, 6,) to make two 3-digit numbers. Or use: https://www.random.org/dice/?num=1 Create a subtraction calculation. Put the highest digit at the start of the first number in your calculation. Use the formal written method to solve (layout below). **Complete 10** different formal subtraction calculations.	Use the formal method (layout below) to complete the following calculations: 1. 13 x 3 = 2. 25 x 3 = 3. 47 x 4 = 4. 39 x 5 = Finished? Well done! Write an **explanation** of how you solved question 1 and question 4. What is different in how you solved them?	My friend says she used this fact: 4 x 3 =_____ to work out these facts: 40 x 3 = ____ 30 x 4 = ____ And this challenge fact: 4 x 30 x 10 = ____ **Complete** the calculations and **explain** how these facts could have been linked by my friend.	**Check, prove, explain:** Explain which problems can be solved using the calculation: 8 ÷ 2 1. Two bags of bread rolls have 8 rolls in each bag. How many rolls are there altogether? 2. A boat holds 2 people. How many boats are needed for 8 people? 3. I have 8 pencils and give 2 pencils to each person. How many people receive pencils? 4. I have 8 pencils and give 2 away. How many do I have left?
Resources you will need	Maze image (below) Paper and pencil	Dice (or digits above) Paper and pencil	Paper and pencil	Paper and pencil	Paper and pencil
Tips, clues or methods to help	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: https://www.belleville-school.org.uk/our-learning/calculation-videos	Need help with calculation? Check: https://www.belleville-school.org.uk/our-learning/calculation-videos	Need help with calculation? Check: https://www.belleville-school.org.uk/our-learning/calculation-videos	Draw a picture or bar model for each problem and write out the calculation for each statement first.
Want to check?	Use the inverse to check	Use the inverse to check.	Use the inverse to check.	Use the inverse to check.	Check each calculation
Theme	4 operations	4 operations	4 operations	4 operations	4 operations

See below for: addition maze, formal subtraction layout example, formal multiplication method

Additional activities below: problem solving using the 4 operations

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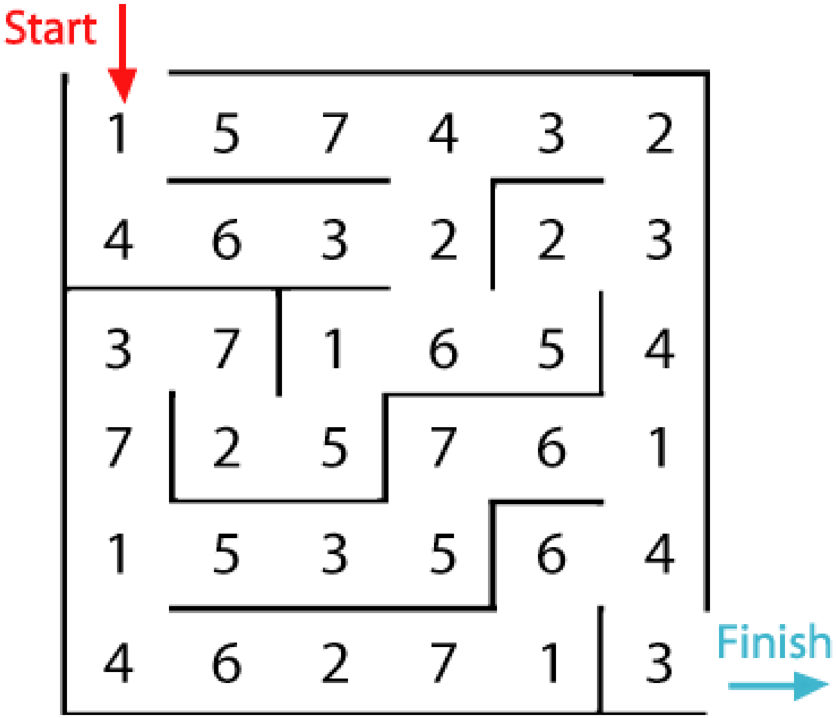
Day 1 – Addition Maze Challenge



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.

Find a way through the maze in which the numbers add to exactly 100.

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

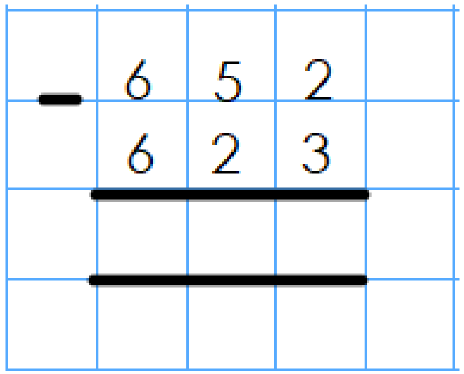
What is the highest number you can make going through the maze?

Day 2 – Subtraction Dice Challenge

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?



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

$$
\begin{array}{rrrr}
 & & \underline{T} & \underline{O} \\
 & & 4 & 3 \\
\times & & & 4 \\
\hline
 & & 1 & 2 \\
+ & 1 & 6 & 0 \\
\hline
 & & & \\
\hline
\end{array}
$$

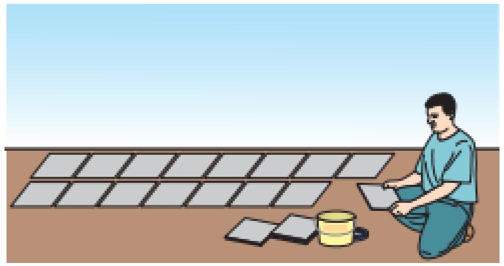
Additional activities:

□ □ × □ = ?

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 x 2, 1 x 4 or 4 x 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 × 4?

What is 13 × 4?