

Maths Plan

Week 01.03.21

Topic- $\div 2$, Doubling and halving money and Continue Problem solving

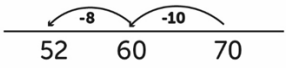
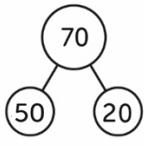
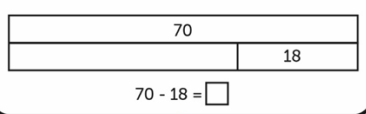
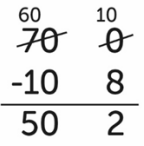
Monday

L.O- Choosing a strategy

Continuing on from last week's problem solving, the children need to develop their strategies for mental and written calculations. It is important that the children are provided with time to explore the most efficient and most appropriate strategy to solve a given problem.

On zoom we give the children a problem, we will recap Part/whole bar models.

There were 70 children on the playground. 18 children went inside to eat their lunch. How many children were left on the playground?

	$70 - 18 = 72 - 20$
	
$50 + 20 - 18$ $50 + 2$	$70 - 18 = 52$
	

The most efficient/appropriate strategy for the calculation is...
because ...

<p>4 🌟</p> <p>Show 4 different ways to calculate the answer to:</p> <table border="1"><tr><td>43</td><td>38</td></tr><tr><td colspan="2"></td></tr></table>	43	38			<p>5 🌟</p> <p>Lunch break is one hour (60 minutes) long. Twenty five minutes have passed. How many minutes are left?</p>
43	38				

Task- Destination 4 and 5

Challenge

Activities for exploring ideas at greater depth

There are 86 cakes. 19 boys and 14 girls take a cake. How many cakes are left?

I will solve $19 + 14$ mentally by rebalancing.

$$19 + 14 = 20 + 13$$

This equals 33. Then, I will use expanded written subtraction to solve $86 - 33$.

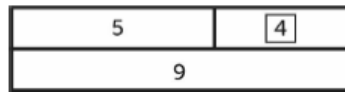
Tuesday

L.O-Strategies to solve missing number problems

$$\square + 5 = 9$$

What is the unknown?

I represented this using a bar model. I knew that 'something' plus 5 is equal to 9. The 'something' is my unknown part. I know that 9 minus 5 equals 4. The unknown must be 4.



I have drawn the 5 that I know I have. I know that I need 'some more' to make 9. I know that '5 and 4 more' equals 9. The missing part must be 4.

Now that the children are familiar with the part whole model for solving problems, they can deepen their understanding further by thinking about mental strategies to find a starting point.

For example, present children with a missing number calculation. Ask them to represent this using a part whole model and in a pictorial representation. This will be discussed on zoom.

Task-

- $60 - \square = 30$
- $\square = 31 + 17$
- $65 + \square = 93$

Destination 6 and 7

6

\square	62	9
30	30	\square
41	\square	51

The sum of each row and column is 100. Can you find all of the missing numbers?

7

Write a calculation to match the bar model.

9	4	4
7	\square	3

Wednesday-

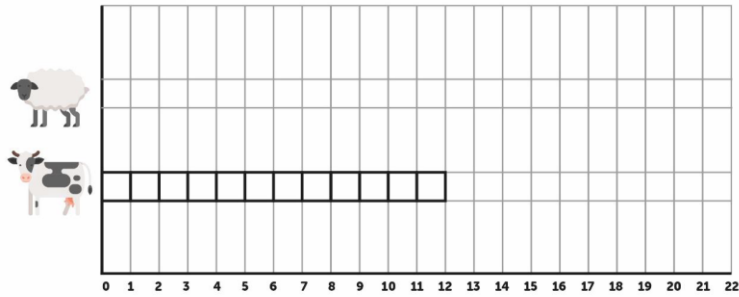
L.O-Further problem solving with statistics

The children will now explore the concept of part whole using familiar statistical representations. Language linked to addition and subtraction from previous sequences will be rehearsed and refined.

Discuss with the children-

The difference between the number of sheep and number of cows on the farm is 9. There are 12 cows. How many sheep could there be?

Prove it.
Represent this on a part whole model.
What is the same? What is different?



21 sheep		3 sheep	9 fewer
12 cows	9 more	12 cows	

Task

The children will be asked to draw a bar graph to show a set of data.

Destination 8 and 9

8 🍁

Twenty eight children were asked how they travelled to school. Their answers were recorded on the tally table. Complete the table.

Travel	Tallies	Total
Walk		
Car		5
Scooter		2
Other		1

9 🍁

How many birds were counted altogether?

Thursday

L.O- To understand $\div 2$ is the same as halving numbers.

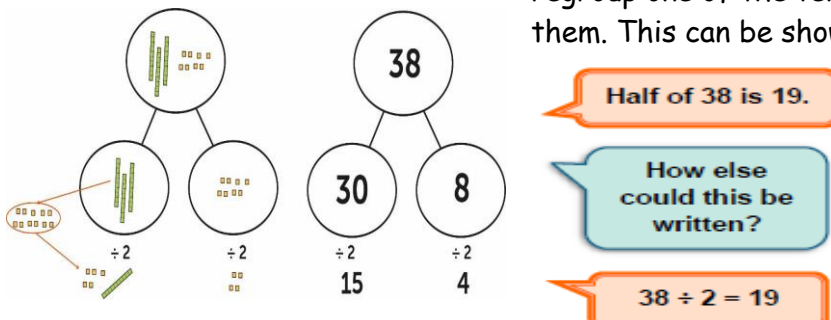
Today we will recap how to halve a 2 digit number. We will remind the children that halving is the same as $\div 2$.

Can 54 and 65 be halved?

We will ask the children

Discuss and clarify if it is an odd number it cannot be halved.

We will model halving a number by first regrouping the number into tens and ones and then halving. Recap this means that if there is an odd number of tens you will need to regroup one of the tens into ones and then halve them. This can be shown as below.



Children practise $\div 2$. Ensuring good understanding that this means halving.

Task-

- | | |
|------------------|-------------------|
| 1) $22 \div 2 =$ | 6) $100 \div 2 =$ |
| 2) $16 \div 2 =$ | 7) $44 \div 2 =$ |
| 3) $30 \div 2 =$ | 8) $76 \div 2 =$ |
| 4) $10 \div 2 =$ | 9) $90 \div 2 =$ |
| 5) $50 \div 2 =$ | 10) $56 \div 2 =$ |

Challenge

3

46 is half of 92.
Is this true or false?

4

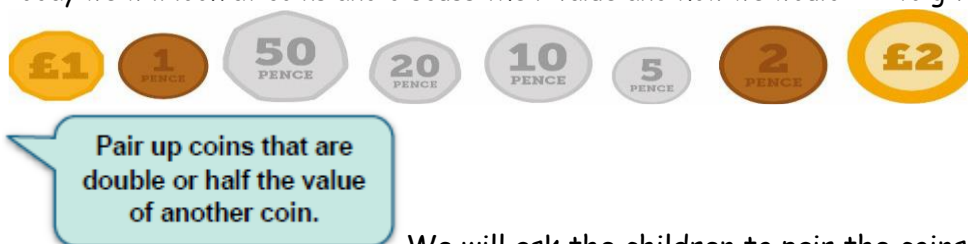
Double 34 > half of 60.
Prove that this is correct.

Extra Challenge- select even 3 digit numbers and $\div 2$.

Friday

L.O- Halving amounts of money

Today we will look at coins and discuss their value and how we would $\div 2$ to give us half. Discuss



We will ask the children to pair the coins.

On zoom we will play the 'Double or halve game' with a given amount.

Provide pupils with problems that involve doubling and halving amounts of money. For example:

- The globe originally cost £58. It is now in the half-price sale. What would be its price now?
- Jenny bought two cupcakes costing 45p each. How much did she spend and what coins could she use?
- An eraser costs 19p in the half price sale. What did it cost originally?

Encourage your child to apply the strategies used in the previous steps to calculate and record their answers.

Task-

Using coins- work on doubling and halving money, selecting the correct coins.

Show your working

Example - $\pounds 20 \div 2 = \pounds 10$

Destination 1



Sam found a magic set to buy online for £17.

How much will he need so that he can buy one for him and one for his sister?

Purple mash 2dos on doubling and halving money.