Maths - Year 4

Calculating 1: Using adding and subtracting facts and understanding inverse relationships

Key Vocabulary

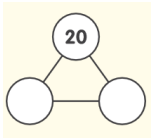
difference	The result of subtracting one number from another.
Number trio 	A set of three numbers that are related together, either by adding and subtracting or by multiplying and dividing.
Double	Multiply a number or amount by 2.
Multiple of 10	Numbers that can be divided exactly by 10, without leaving a remainder.
Multiple of 100	Numbers that can be divided exactly by 100, without leaving a remainder.
Adjust	To make a small change to a calculation, making it easier to solve.
Gram (g)/Kilogram (kg)	Measurement of weight. 1000g = 1kg
Litre (l)/millilitre (ml)	Measurement of capacity. 1000ml = 1l.

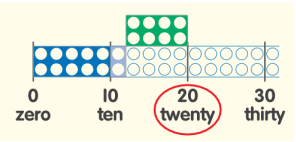
Mathematical Skills

- Predict from a pattern to make a generalisation.
- Explain using an inverse relationship to find missing numbers in adding and subtracting calculations.
- Use the inverse relationship between adding and subtracting to work out change when solving money problems.
- Apply knowledge of number facts to 100 and 1000 in calculations involving measures.

Mathematical Methods

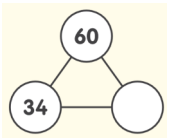
- Using adding and subtracting facts of 10 with larger multiples of 10.

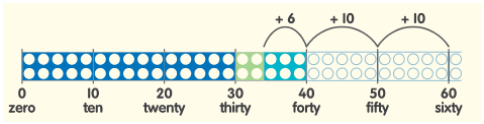




10	20	30
1 + 9	1 + 19	1 + 29
2 + 8	2 + 18	2 + 28
3 + 7	3 + 17	3 + 27
4 + 6	4 + 16	4 + 26
5 + 5	5 + 15	5 + 25
	6 + 14	6 + 24
	7 + 13	7 + 23
	8 + 12	8 + 22
	...	...

- Strategies for finding missing numbers.

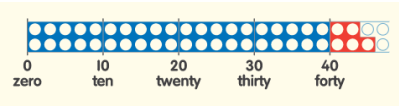


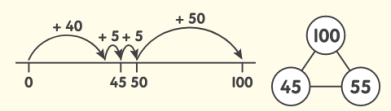


+	37	17
?	55	35
?	65	45

+	37	17
(18)	55	35
(28)	65	45

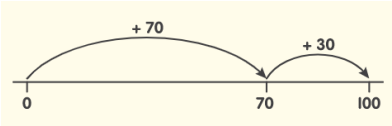
- Using number pairs that total 100 to explore inverse relationships e.g. 45 and 55.



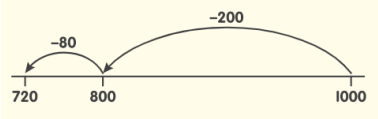


- Using adding and subtracting facts to work out change in money problems e.g. how much change from £1 for a bottle of mineral water?

DRINKS	
Mineral water	£0·70
Cola, lemonade	£1·20
Orange crush, berry crush	£2·20
Tea	£2·40
Fruit tea	£2·60
Milkshake	£3·00



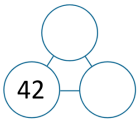
- Using adding and subtracting facts to 1000 in capacity problems e.g. starting with 1 litre and pouring away 200ml.



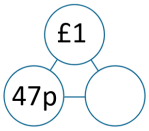
- Using adding and subtracting facts to 1000 in problems involving mass e.g. a bag of sugar weighs 1kg. 650g of sugar has been poured in. How much more is needed?

Can you..?

- Complete the number trio.



- How much change will Kira get from £1?



- Work out the missing number; 455g + ☐ = 1kg

- Can you make 150 with three odd numbers? Explain your thinking.