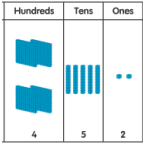


Maths - Year 4

Calculating 3: Developing fluency with mental adding strategies

Key Vocabulary

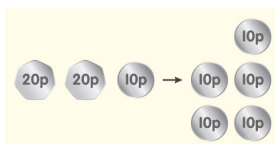
Hundreds/tens/ones	Refers to the value of a digit in a number. 
Bridging	Partitioning (splitting) the number to be added or subtracted to help with calculating, e.g. $8 + 9 = (8 + 2) + 7 = 17$.
Rounding	Increasing or decreasing a number or amount to make it closer to (usually) a multiple of ten, or a whole measuring unit, e.g. rounding 353 to 350 or 89 cm to 1 metre.
Adjusting/compensating	Make a small change to a calculation to support working out.
Multiple of 10	Numbers that can be divided exactly by 10, without leaving a remainder.

Mathematical Skills

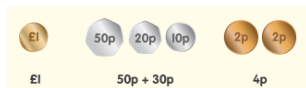
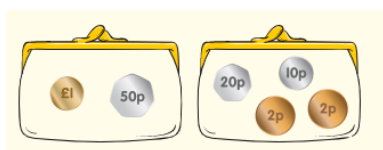
- Quickly carry out calculations involving several multiples of 10.
- Round numbers in a calculation to multiples of 10 and explain their decisions.
- Look carefully at the numbers involved in a calculation and weigh up alternative strategies.
- Round numbers and adjust to make calculations easier.
- Look carefully at a calculation and, without calculating, suggest one that is equivalent.
- Look carefully at a calculation, choose a strategy for carrying out and give reasons for why it is the most appropriate.

Mathematical Methods

- Adding several multiples of 10.

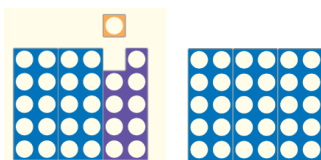


- Using a partitioning strategy to add 2- or 3-digit numbers.

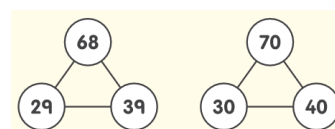


- Adding by rounding and adjusting e.g. if pencils are stored in pots of 10, how can you find a quick way of getting enough pencils for 29 children?

Rounding up to 30.



Or rounding and then balancing equations.
e.g. $29 + 39 = 30 + 40 - 2$.



- Adjusting adding sentences e.g. $31 + 54 = 31 + 55 - 1$ or $30 + 55$.

- Adding 2-digit doubles e.g. double 32.

$$\begin{array}{r}
 30 + 2 \\
 \swarrow \quad \searrow \\
 30 + 30 \quad 2 + 2 \\
 \downarrow \quad \downarrow \\
 60 + 4 = 64
 \end{array}$$

Can you..?

- How much money altogether?



- Calculate the following in your head, $£2.89 + 50p$.

- A teacher gives 32 cups to Hawk class and 29 to Eagle class. Write a balancing equation for this.

- Adjust the number trio to make the calculation easier.

