

Addition and Subtraction Unit 1

Problem solving and reasoning questions

Write an addition of five *different* numbers, all less than 10, where the total is 28.

Which number less than 10 fits the gaps in this sentence?

$$6 + \square + 7 + \square + \square = 25$$

Solve each of these additions using a different method.
Say how you did each one.

- $30 + 9 =$
 - $17 + 5 =$
 - $4 + 7 + 6 =$
-

Solve each of these subtractions using a different method.
Say how you did each one.

- $25 - 5 =$
- $14 - 6 =$
- $58 - 4 =$

These questions should be provided for children to do once the unit has been completed.
They assess the children's mastery of the skills and concepts in this unit.

Addition and Subtraction Unit 1

Problem solving and reasoning **answers**

Write an addition of five *different* numbers, all less than 10, where the total is 28.

e.g. $9 + 8 + 7 + 3 + 1$ or $8 + 7 + 6 + 4 + 3$.

NB it is impossible to do this unless the 8 or 9 are included since 7, 6, 5, 4, 3 totals only 25.

Do children have a strategy, e.g. starting with the larger numbers?
Have they checked their answers by adding the five numbers in a different order?

Which number less than 10 fits the gaps in this sentence?

$$6 + \boxed{4} + 7 + \boxed{4} + \boxed{4} = 25$$

Solve each of these additions using a different method.

Say how you did each one.

- $30 + 9 = 39$ – place value addition.
- $17 + 5 = 22$ – bridging 20, i.e. solving as $17 + 3 + 2$.
- $4 + 7 + 6 = 17$ - spotting the number bond to 10 ($4 + 6$).

These, and for the following question, are examples only, children may use other strategies. Where they have simply given an answer, challenge them to explain; some may be able to verbalise their strategies without being able to give a written explanation.

These questions should be provided for children to do once the unit has been completed. They assess the children's mastery of the skills and concepts in this unit.

Solve each of these subtractions using a different method.
Say how you did each one.

- $25 - 5 = 20$ – place value subtraction.
- $14 - 6 =$ bridging 10, i.e. solving as $14 - 4 - 2$.
- $58 - 4 =$ using the number fact for $8 - 4$.

These questions should be provided for children to do once the unit has been completed.
They assess the children's mastery of the skills and concepts in this unit.