More Addition and Subtraction Unit 2

Problem solving and reasoning questions

Year 3

Write 2 numbers which total 91 where one has a 1s digit of 6.

Write the missing digits:
7☐ + 48 = ☐24
☐5 + 87 = 14☐

How many pairs of numbers between 20 and 30 can you find that total 51?

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.

Year 4

Write 2 numbers which total 391 where one has a 1s digit of 6.

Write the missing digits:
37☐ + 148 = ☐24
5☐5 + 287 = 82☐

How many pairs of numbers between 120 and 130 can you find that total 251?

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.

More Addition and Subtraction Unit 2

Problem solving and reasoning answers

Year 3

Write 2 numbers which total 91 where one has a 1s digit of 6.
The following are possible answers: 6 + 85, 16 + 75, 26 + 65, 36 + 55, 46, + 45, 56 + 35, 66 + 25, 76 + 15, 86 + 5.
Do children realise that the second number must have a 1s digit of 5? (Since 5 + 6 = 11). Can they find all of these in a systematic way?

Write the missing digits:

7 **6** + 4 8 = **1** 2 4 The 1s digit of the first number must be 6 to give 4 as the 1s digit of the answer.

5 5 + 8 7 = 1 4 **2** The 1s digit of the answer must be 2. A possible error here is to think that the missing 10s digit is 6, since 60 + 80 = 140, ignoring the extra 10 from adding the 1s.

How many pairs of numbers between 20 and 30 can you find that total 51? There are four pairs of numbers that meet these criteria, can children list them systematically and see the pattern?

22 and 29, 23 and 28, 24 and 27, 25 and 26.

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.

Year 4

Write 2 numbers which total 391 where one has a 1s digit of 6.

See Y3 answers for pairs of 2-digit numbers that total 91. Additionally the 100s should total 300, so taking 36 + 55 as an example, 136 + 255, 236 + 155, 36 + 355 and 336 + 55 are all possible answers.

Write the missing digits:
37**6** + 148 = **5**24 The 1s digit of the first number must be 6 to give 4 as the 1s digit of the answer.

5**3**5 + 287 = 82**2** The 1s digit of the answer must be 2. A possible error here is to think that the missing 10s digit is 4, since 40 + 80 = 120, ignoring the extra 10 from adding the 1s.

How many pairs of numbers between 120 and 130 can you find that total 251?

122 and 129, 123 and 128, 124 and 127, 125 and 126.

There are four pairs of numbers that meet these criteria, can children list them systematically and see the pattern?

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.

