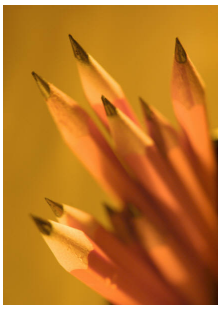
More Addition and Subtraction Unit 2

Problem solving and reasoning: Questions

Year 2



Pencils
A 34p
B 22p
C 45p
D 55p
E 41p

The total is 79p. Which two pencils did you buy?
What is the most you can spend on two different pencils?
What is the least you can spend on two different pencils?

What's the same, what's different?
54 + 32 = 76 52 + 34 = 76 32 + 54 = 76 34 + 52 = 76

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 3

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

Write the missing digits:

7 ☐ + 4 8 = ☐ 2 4

☐ 5 + 8 7 = 1 4 ☐

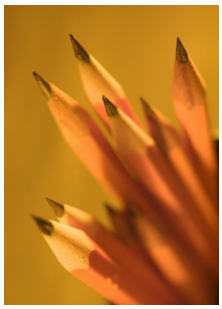
How many pairs of numbers between 20 and 30 can you find that total 51?

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.

More Addition and Subtraction Unit 2

Problem solving and reasoning: Answers

Year 2



Pencils
A 34p
B 22p
C 45p
D 53p
E 41p

The total is 79p. Which two pencils did you buy? A and C.
What is the most you can spend on two different pencils? 98p (C and D).
What is the least you can spend on two different pencils? 56p (A and B).

What's the same, what's different?
54 + 32 = 76 52 + 34 = 76 32 + 54 = 76 34 + 52 = 76
The answers are all the same.
The first and third questions have the numbers switched around, i.e. 54 + 32 / 32 + 54.
The second and fourth questions also have the numbers switched around, i.e. 52 + 34 / 34 + 52.
The difference between the first and second questions is that the 1s digits have swapped places, i.e. instead of 54 + 32 it is now 52 + 34. Similarly, the third and fourth questions.

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 3

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

6 + 85, 16 + 75, 26 + 65 etc. 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.

