Year 2 - Bridge Through a Multiple of 10

When to choose this strategy

When adding takes us past a multiple of 10, add enough to reach it first. Then add the rest.

Worked example

27 + 5



1. We can add 3 to reach 30 from 27. Split 5 into 3 and 2. Start at 27 and add 3 to reach 30.

2. Add the remaining 2 to get 32. Check that 3 and 2 make the original 5.

> **Remember:** The first jump uses part of the number you are adding. Add only the part that is left.

Check understanding

43 + 8

Which multiple of 10 will you reach first? How much of the number is left to add?

Expected answer 43 + 8 = 51

Year 2 - Bridge Through a Multiple of 10

When to choose this strategy

When subtracting takes us past a multiple of 10, subtract enough to reach it first. Then subtract the rest.

Worked example

32 − 5



1. We can subtract 2 to reach 30 from 32. Split 5 into 2 and 3. Start at 32 and subtract 2 to reach 30.

2. Subtract the remaining 3 to get 27. Check that 2 and 3 make the original 5.

> **Remember:** The first jump uses part of the number you are subtracting. Subtract only the part that is left.

Check understanding

53 − 7
Which multiple of 10 will you reach first? How much is left to subtract?

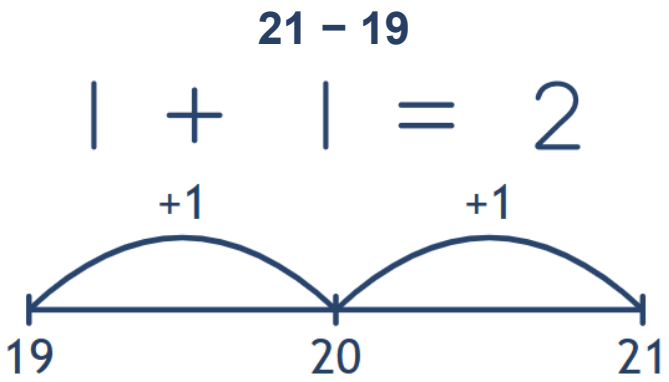
Expected answer 53 − 7 = 46

Year 2 - Count Up to Find the Difference

When to choose this strategy

When the numbers are close together, count up from the smaller number to the larger one. The amount you add is their difference.

Worked example



1. 21 and 19 are close together, so count up to find the difference. We count up from 19 to 20. That jump is 1.

2. Then we count up from 20 to 21. That jump is 1. The two jumps together give the difference. The difference is 2.

> **Remember:** The difference is the total of the jumps between the two numbers.

Check understanding

81 − 78
Where will you start counting up? How do your jumps give the difference?

Expected answer 81 − 78 = 3

Year 2 - Choose a Pair to Add Three Numbers

When to choose this strategy

When adding three numbers, look at all three before choosing a pair. Use number bonds or doubles to make the next step easier. The useful pair can be anywhere in the question. Use the remaining number once after the first calculation.

Worked example

8 + 6 + 2



1. Choose 8 and 2 because they make 10, which is easy to add to. Add that pair first.

2. Add the remaining 6 to 10. The sum is 16.

> **Remember:** Use each of the three numbers once. After adding your pair, add the remaining number.

Check understanding

3 + 7 + 7
Which pair gives you a helpful total? What will you add to that total?

Expected answer 3 + 7 + 7 = 17

Year 2 - Use a Related Fact

When to choose this strategy

When the numbers are multiples of 10, think in tens. Use a number fact you know, then keep the place value of the answer.

Worked example

50 + 20



1. 50 is 5 tens. 20 is 2 tens. Use the known fact 5 + 2 = 7.

2. The result is 7 tens, which is 70.

> **Remember:** Name the unit in the answer. For example, seven tens is seventy.

Check understanding

40 + 20

Which fact will you use? What place value does your answer have?

Expected answer 40 + 20 = 60

Year 2 - Use a Related Fact

When to choose this strategy

When the numbers are multiples of 10, think in tens. Use a number fact you know, then keep the place value of the answer.

Worked example

50 − 20



1. 50 is 5 tens. 20 is 2 tens. Use the known fact 5 − 2 = 3.

2. The result is 3 tens, which is 30.

> **Remember:** Name the unit in the answer. For example, three tens is thirty.

Check understanding

40 − 20

Which subtraction fact helps? How do you turn that fact into the answer?

Expected answer 40 − 20 = 20

Year 2 - Partition to Add Without Exchanges

When to choose this strategy

When the digits add without an exchange, partition the number you add. Add one part at a time.

Worked example

43 + 25



1. The matching digits in 43 and 25 add to less than 10 in each place, so we can add without exchanging. Partition 25 into 20 and 5. When we partition to work mentally, we start with the largest place value. Add 20 to 43 to get 63.

2. Then add 5 to 63. The sum is 68. Check that the two parts make 25.

> **Remember:** Add each part once. Start with the largest place value.

Check understanding

28 + 11
How will you partition the number you add? Which part will you add first?

Expected answer 28 + 11 = 39

Year 2 - Partition to Subtract Without Exchanges

When to choose this strategy

When there is enough to subtract in each place, partition the number you subtract. Subtract one part at a time.

Worked example

57 − 14



1. In each place, the digit in 57 is large enough to subtract the matching digit in 14 without exchanging. Partition 14 into 10 and 4. When we partition to work mentally, we start with the largest place value. Subtract 10 from 57 to get 47.

2. Then subtract 4 from 47. The difference is 43. Check that the two parts make 14.

> **Remember:** Check that each place has enough to subtract. Start with the largest part when you partition the number you subtract.

Check understanding

63 − 23

How will you partition the number you subtract? Which part will you subtract first?

Expected answer 63 − 23 = 40

Year 2 - Use a Near Double

When to choose this strategy

When the two numbers are one apart, double the smaller number and add 1.

Worked example

7 + 8



1. 8 is one more than 7. Start with double 7, which is 14.

2. Add the extra 1 from 8 to 14. The sum is 15.

> **Remember:** Add 1 to the double of the smaller number because the larger number is 1 more.

Check understanding

5 + 6

Which number will you double? Why will you add 1?

Expected answer 5 + 6 = 11

Year 2 - Double to Multiply by 2

When to choose this strategy

To multiply by 2, double the number. You can double the tens and ones separately, then add the two amounts.

Worked example

14 × 2



1. Multiplying by 2 means we can double. Split 14 into 10 and 4. When we partition to work mentally, we start with the largest place value. First, double 10 to get 20.

2. Then double 4 to get 8.

3. Put the two parts together. 20 plus 8 gives 28.

> **Remember:** Double each place-value part. Add those doubled amounts to find the product.

Check understanding

22 × 2

How will you split the number? Which part will you double first?

Expected answer 22 × 2 = 44

Year 2 - Halve to Divide by 2

When to choose this strategy

To divide by 2, find half. If the tens and ones both divide exactly by 2, halve them separately and add the two amounts.

Worked example

28 ÷ 2



1. Dividing by 2 means we can halve. Split 28 into 20 and 8. When we partition to work mentally, we start with the largest place value. First, halve 20 to get 10.

2. Then halve 8 to get 4.

3. Put the two parts together. 10 plus 4 gives 14.

> **Remember:** When both parts halve exactly, halve each part and add the halves.

Check understanding

44 ÷ 2

Which part will you halve first? How will you combine the halves?

Expected answer 44 ÷ 2 = 22