National Curriculum Objectives:

Mathematics Year 2: (2C1) **Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100**

Mathematics Year 2: (2C3) **Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems**

Differentiation:

Questions 1, 4 and 7 (Reasoning)
**Developing** Identify the odd one out of four representations of calculations that total within 10, using knowledge of checking calculations.
**Expected** Identify the odd one out of four representations of calculations that total within 20, using knowledge of checking calculations.
**Greater Depth** Identify the odd one out of four representations of calculations that total within 20, using knowledge of checking calculations. Some numbers represented in words.

Questions 2, 5 and 8 (Reasoning)
**Developing** Explain if the method used to check the calculation is correct and why. Use of Base 10 and numbers within 10.
**Expected** Explain if the method used to check the calculation is correct and why. Use of ten frames and numbers within 20.
**Greater Depth** Explain if the method used to check the calculation is correct and why. Mixed representations and numbers within 20.

Questions 3, 6 and 9 (Problem Solving)
**Developing** Rewrite an addition word problem to make it a subtraction word problem. Base 10 and numbers within 10.
**Expected** Rewrite an addition word problem to make it a subtraction word problem. Straw bundles and numbers within 20.
**Greater Depth** Rewrite an addition word problem to make it a subtraction word problem. Mixed representations and numbers written as words, within 20.

More [Year 2 Addition and Subtraction](https://classroomsecrets.co.uk) resources.

Did you like this resource? Don’t forget to [review](https://classroomsecrets.co.uk) it on our website.
1a. Spot the odd one out. Use Base 10 to help you.

\[9 + 1 = 10\]

\[
\begin{array}{c|c|c}
10 & 5 \\
9 & 1 \\
\end{array}
\]

Explain why.

1b. Spot the odd one out. Use Base 10 to help you.

\[7 + 3 = 10\]

\[
\begin{array}{c|c|c}
10 & 7 \\
3 & 1 \\
\end{array}
\]

Explain why.

2a. Dave says,

I know that \(8 + 2 = 10\) because \(10 - 2 = 8\).

Is his method correct? Convince me.

2b. Linda says,

I know that \(5 + 3 = 8\) because \(8 - 3 = 5\).

Is her method correct? Convince me.

3a. Rewrite the following to make it a subtraction word problem.

I have 4 marbles in a bag.
Then I put 6 more marbles in.
Now I have 10 marbles all together.

3b. Rewrite the following to make it a subtraction word problem.

There are 3 apples in a bowl.
I put 2 more apples in.
Now there are 5 apples all together.
**Check Calculations**

4a. Spot the odd one out.

\[
\begin{array}{ccc}
20 & 16 & 4 \\
\end{array}
\]

\[
16 + 4 = 20
\]

20 – 1 = 19

Explain why.

4b. Spot the odd one out.

\[
\begin{array}{ccc}
13 & 10 & 3 \\
\end{array}
\]

\[
13 + 3 = 16
\]

3 + 13 = 16

Explain why.

5a. Nick says,

I know that 9 + 7 = 16 because 16 – 9 = 7.

Is his method correct? Convince me.

5b. Daisy says,

I know that 9 + 9 = 18 because 18 – 10 = 8.

Is her method correct? Convince me.

6a. Rewrite the following to make it a subtraction word problem.

There are 14 fish in my tank.

I add 5 more fish.

Now I have 19 fish all together.

6b. Rewrite the following to make it a subtraction word problem.

There are 13 seeds in the plant pot.

I put 4 more seeds in.

Now I have 17 seeds all together.
7a. Spot the odd one out.

twelve + five = seventeen

\[
\begin{array}{c|cc}
\text{seventeen} & 12 & 5 \\
\hline
6 & 10
\end{array}
\]

Explain why.

7b. Spot the odd one out.

ten + ten = twenty

\[
\begin{array}{c|cc}
\text{six} & 10 \\
\hline
16 & 10
\end{array}
\]

Explain why.

8a. Andrew says,

I know that 15 + 4 = 19 because 19 – 2 = 17.

Is his method correct? Convince me.

8b. Harlin says,

I know that 11 + 2 = 13 because 13 – 2 = 11.

Is her method correct? Convince me.

9a. Rewrite the following to make it a subtraction word problem.

I have fifteen biscuits in my jar.

I add five more biscuits.

Now I have twenty biscuits all together.

9b. Rewrite the following to make it a subtraction word problem.

I have eleven sticks in a pile.

I add six more sticks to the pile.

Now I have seventeen sticks all together.
Developing
1a. The part whole model is the odd one out because the other three represent number facts for $9 + 1 = 10$.
2a. Dave is correct. He has used the inverse and his knowledge of fact families for 8, 2 and 10 to check his answer.
3a. I have 10 marbles in a bag. I take out 6 marbles. I have 4 marbles left in the bag.

Expected
4a. $20 - 1 = 19$ is the odd one out because the other three represent number facts for $16 + 4 = 20$.
5a. Nick is correct. He has used the inverse and his knowledge of fact families for 9, 7 and 16 to check his answer.
6a. I have 19 fish in a tank. I take out 5 fish. I have 14 fish left in the tank.

Greater Depth
7a. $5 = 12 - 17$ is the odd one out because it is incorrect. The other three represent number facts for $12 + 5 = 17$.
8a. Andrew is incorrect. He has not used the inverse correctly or his knowledge of fact families for 15, 4 and 19. The correct use of the inverse to check his calculation would be $19 - 4 = 15$.
9a. I have twenty biscuits in a jar. I take out five biscuits. I have fifteen biscuits left in the jar.

Developing
1b. $7 - 3 = 4$ is the odd one out because the other three represent number facts for $7 + 3 = 10$.
2b. Linda is correct. She has used the inverse and her knowledge of fact families for 5, 3 and 8 to check her answer.
3b. I have 5 apples in a bowl. I take out 2 apples. I have 3 apples left in the bowl.

Expected
4b. The part whole model is the odd one out because the other three represent number facts for $13 + 3 = 16$.
5b. Daisy is incorrect. She has not used the inverse correctly or her knowledge of fact families for 9, 9 and 18. The correct use of the inverse to check her calculation would be $18 - 9 = 9$.
6b. I have 17 seeds in a plant pot. I take out 4 seeds. I have 13 seeds left in the plant pot.

Greater Depth
7b. The bar model is the odd one out because the other three represent number facts for $10 + 10 = 20$.
8b. Harlin is correct. She has used the inverse and her knowledge of fact families for 11, 2 and 13 to check her answer.
9b. I have seventeen sticks in a pile. I take out six sticks. I have eleven sticks left in the pile.