Reasoning and Problem Solving
Step 1: Add by Counting On

National Curriculum Objectives:

Mathematics Year 1: (1C2a) Add and subtract one-digit and two-digit numbers to 20, including zero
Mathematics Year 1: (1C4) Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Find all the possible combinations when adding two 1-digit numbers from a selection of three. Numerals only. Pictorial support.
Expected Find all the possible combinations when adding a given 1-digit number to three 1-digit numbers. Numerals only.
Greater Depth Find all the possible combinations when adding three given numbers to a possible six 1-digit numbers. Numerals only.

Questions 2, 5 and 8 (Reasoning)
Developing Identify the odd one out of three addition calculations. Addition calculations involve adding two 1-digit numbers or a 1-digit and a 2-digit number. Numerals only. Pictorial support.
Expected Identify the odd one out of three addition calculations. Addition calculations involve adding two 1-digit numbers or a 1-digit and a 2-digit number. Numerals only. Pictorial support, including use of bar models.
Greater Depth Identify the odd one out of three addition calculations. Addition calculations involve adding two 1-digit numbers or a 1-digit and a 2-digit number. Numerals and words. Use of number lines only, some unmarked.

Questions 3, 6 and 9 (Problem Solving)
Developing Add a 1-digit number to 1-digit and 2-digit numbers and identify totals more than/less than 15. Numerals only. Pictorial support.
Expected Add a 1-digit number to 1-digit and 2-digit numbers and identify totals more than/less than 15. Numerals and use of Base 10 to represent numbers.
Greater Depth Add a 1-digit number to 1-digit and 2-digit numbers and identify totals more than/less than 15. Numerals and words.

More Year 1 Addition and Subtraction resources.

Did you like this resource? Don't forget to review it on our website.

Add by Counting On

1a. Max has 3 cards.

He chooses two of the cards and adds the numbers by counting on.

What could his score be?
Find all the possible answers.

D PS

2a. Count on to find the odd one out.

A.	9 +	
B.	7 +	
C.	11 +	

Explain your answer.

D R

3a. Count on 5 from each number. If the answer is more than 15, colour the box.

7	9	8
6	14	11
13	12	10

D PS

Add by Counting On

1b. Eva has 3 cards.

She chooses two of the cards and adds the numbers by counting on.

What could her score be?
Find all the possible answers.

D PS

2b. Count on to find the odd one out.

A.	12 +	
B.	11 +	
C.	8 +	

Explain your answer.

D R

3b. Count on 6 from each number. If the answer is less than 15, colour the box.

8	9	12
14	11	13
7	10	6

D PS

Add by Counting On

4a. Molly chooses a number card.

8	7	9

Then she rolls a dice and counts on the number she rolls.

What could her score be?
Find all the possible answers.

E PS

Add by Counting On

4b. Jack chooses a number card.

6	9	7

Then he rolls a dice and counts on the number he rolls.

What could his score be?
Find all the possible answers.

E PS

5a. Count on to find the odd one out.

A.

?	
8	●●●●●

B.

?	
9	●●●●

C.

?	
●●●	11

Explain your answer.

E R

5b. Count on to find the odd one out.

A.

?	
12	●●●●●●

B.

?	
16	●●●●

C.

?	
●●●●●	13

Explain your answer.

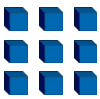
E R

6a. Count on 5 from each number. If the answer is <u>more</u> than 15, colour the box.

7		8
	14	
15		10

E PS

6b. Count on 6 from each number. If the answer is <u>less</u> than 15, colour the box.

8		12
	11	
7		6

E PS

Add by Counting On

7a. Charlie is playing a board game.
He has landed on a number between 10 and 14.

If he throws a dice, which numbers could he land on next?
Find all the possible answers.

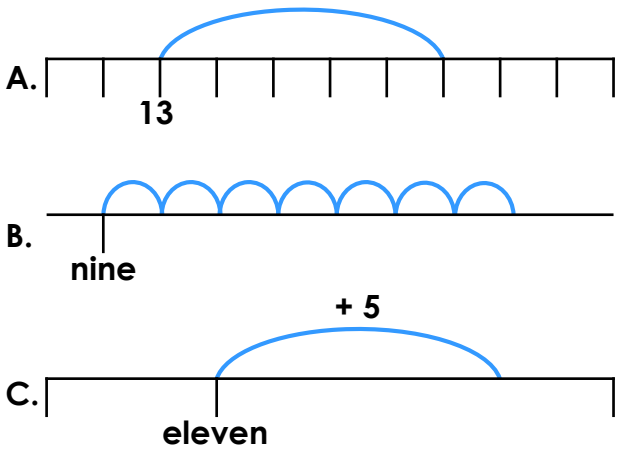
GD PS

7b. Emily is playing a board game.
She has landed on a number between 8 and 12.

She rolls the dice again. Which numbers could she land on next?
Find all the possible answers.

GD PS

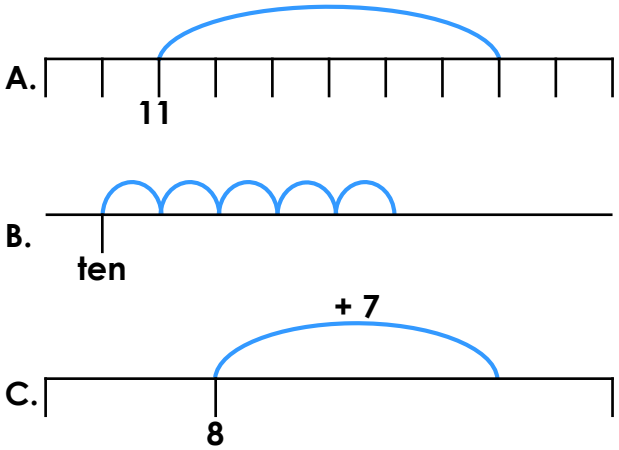
8a. Count on to find the odd one out.



Explain your answer.

GD R

8b. Count on to find the odd one out.



Explain your answer.

GD R

9a. Solve the calculations by counting on.
If the answer is more than 15, colour the box.

7 + 5	twelve add two	9 + 7
Nine add three	14 + 5	8 + 4
15 + 3	ten add five	12 + 4

GD PS

9b. Solve the calculations by counting on.
If the answer is less than 15, colour the box.

9 + 6	six add five	12 + 6
8 + 3	11 + 3	eight add five
13 + 4	ten add four	14 + 4

GD PS

Reasoning and Problem Solving
Add by Counting On

Developing

1a. 13, 14, 15

2a. B is the odd one out. A and C equal 15 but B equals 14.

3a.

7	9	8
6	14	11
13	12	10

Expected

4a. 12, 13, 14

5a. C is the odd one out. A and B equal 13 but C equals 14.

6a.

7		8
	14	
15		10

Greater Depth

7a. 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

8a. A is the odd one out. B and C equal 16 but A equals 18.

9a.

7 + 5	twelve add two	9 + 7
Nine add three	14 + 5	8 + 4
15 + 3	ten add five	12 + 4

Reasoning and Problem Solving
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Developing

1b. 15, 16, 17

2b. C is the odd one out. A and B equal 16 but C equals 15.

3b.

8	9	12
14	11	13
7	10	6

Expected

4b. 12, 13, 15

5b. B is the odd one out. A and C equal 18 but B equals 20.

6b.

8		12
	11	
7		6

Greater Depth

7b. 9, 10, 11, 12, 13 ,14, 15, 16, 17, 18

8b. A is the odd one out. B and C equal 15 but A equals 17.

9b.

9 + 6	six add five	12 + 6
8 + 3	11 + 3	eight add five
13 + 4	ten add four	14 + 4