# Reasoning and Problem Solving Step 15: Counting Back 

## National Curriculum Objectives:

Mathematics Year 1: (1N4) Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
Mathematics Year 1: (1N2c) Read and write numbers from 1 to 20 in numerals and words 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 Write number sentences to match the jumps on the number line. Up to 5. Expected Write number sentences to match the jumps on the number line. Up to 10. Greater Depth Write number sentences to match the jumps on the number line. Up to 20.

Questions 2, 5 and 8 (Reasoning)
Developing Identify the starting number, using the clues given. Up to the value of 5 . Expected Identify the starting number, using the clues given. Up to the value of 10.
Greater Depth Identify the starting number, using the clues given. Up to the value of 20.
Questions 3, 6 and 9 (Problem Solving)
Developing Identify the starting number from a one-step word problem, up to 5 (numerals only).
Expected Identify the starting number from a two-step word problem, up to 10 (numerals and words).
Greater Depth Identify the starting number from a two-step word problem, up to 20 (numerals and words).

More Year 1 Addition and Subtraction Resources.

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

1a. The frog starts on 3 . It makes 2 jumps back.

Which number does it land on?
Write a number sentence to match.


1b. The frog starts on 5. It makes 3 jumps back.

Which number does it land on?
Write a number sentence to match.


2b. Samuel is thinking of a number.

## If I make 2 jumps

 backwards, I will land on 1.Which number am I thinking of?

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| 5 |  |  |  |

Explain your answer.
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3b. Andrew is sharing a bag of sweets. He gives 4 sweets to Amy. He has 1 sweet left.

How many sweets did Andrew have to start with? Write a calculation to match.

Use the number track to help.

| 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- |

4a. The frog starts on 6. It makes 4 jumps back.

Which number does it land on?
Write a number sentence to match.


5a. Clara is thinking of a number.


6a. Kate is sharing a bag of sweets. She gives two sweets to Marcus. She gives one sweet to Georgia. She has 2 sweets left.

How many sweets did Kate have to start with? Write a calculation to match.

Use the number track to help.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4b. The frog starts on 8 . It makes 3 jumps back.

Which number does it land on?
Write a number sentence to match.

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |

5b. Ross is thinking of a number.
If I make 6 jumps backwards, I will land on 3. Which number am I thinking of?

$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
Explain your answer.

6b. Martin is sharing a bag of sweets. He gives two sweets to Sharron. He gives three sweets to Noreen. He has 4 sweets left.

How many sweets did Martin have to start with? Write a calculation to match.

Use the number track to help.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



8a. Nicola is thinking of a number.
If I make 5 jumps backwards, I will land on 12.

Which number am I thinking of?
$\begin{array}{lllllllll}10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18\end{array} 19$
Explain why.

9a. Lola is sharing a bag of sweets. She gives three sweets to Joseph. She gives two sweets to Cath. She has 14 sweets left.

How many sweets did Lola have to start with? Write a calculation to match.

Use the number track to help.

| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

8b. Craig is thinking of a number.
If I make 6 jumps backwards, I will land on 13. Which number am I thinking of?

$\begin{array}{lllllllllll}10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19\end{array}$
Explain why.

9b. Nick is sharing a bag of sweets.
He gives one sweet to Poppy.
He gives one sweet to Katy.
He has 16 sweets left.

How many sweets did Nick have to start with? Write a calculation to match.

Use the number track to help.

| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Reasoning and Problem Solving

## Counting Back

## Developing

1a. The frog will land on 1; 3-2 = 1
2a. Tina is thinking of the number 5;
$5-3=2$.
3a. Gemma had 4 sweets to start with;
4-2 = 2 .

## Expected

4a. The frog will land on 2; 6-4 = 2
$5 a$. Clara is thinking of the number 7;
$7-5=2$
6a. Kate had 5 sweets to start with; 5-2-1=2

## Greater Depth

7a. The frog will land on 13; 17-4=13
8 a . Nicola is thinking of the number 17; $17-5=12$
9a. Lola had 19 sweets to start with;
19-3-2 = 14

## Reasoning and Problem Solving

 Counting Back
## Developing

1b. The frog will land on 2; 5-3 = 2
2b. Samuel is thinking of the number 3;32 = 1
3b. Andrew had 5 sweets to start with; 5 $4=1$

## Expected

4b. The frog will land on 5; 8-3 = 5
5b. Ross is thinking of the number 9;9-6= 3
6b. Martin had 9 sweets to start with; 9 - 2 $-3=4$

## Greater Depth

7b. The frog will land on 10; 14-4=10
8b. Craig is thinking of the number 19; 19 $6=13$
9b. Nick had 18 sweets to start with; 18-1
$-1=16$

