

# Reasoning and Problem Solving

## Step 1: Count and Write Numbers to 20

### National Curriculum Objectives:

Mathematics Year 1: (1N2c) [Read and write numbers from 1 to 20 in numerals and words](#)

### Differentiation:

Questions 1, 4 and 7 (Problem Solving)

**Developing** Find the way through the maze by circling the missing numbers. Includes numbers up to and including 10. All numbers are represented pictorially, numerically or as words.

**Expected** Find the way through the maze. Includes numbers up to and including 20, where the numbers may count backwards. Numbers are represented pictorially, numerically or as words.

**Greater Depth** Find the way through the maze. Includes numbers up to and including 20, where the numbers may count backwards. Numbers are represented pictorially, numerically or as words with mixed representations within a question.

Questions 2, 5 and 8 (Problem Solving)

**Developing** Identify the number that is being described by counting forwards or backwards up to and including 10. All numbers represented pictorially in addition to numbers and words.

**Expected** Identify the number that is being described by counting forwards or backwards up to and including 20. Numbers are represented pictorially, numerically or as words.

**Greater Depth** Identify the number that is being described by counting forwards or backwards up to and including 20. Numbers are represented pictorially, numerically or as words with mixed representations within a question.

Questions 3, 6 and 9 (Reasoning)

**Developing** Explain if the three pairs of numbers up to and including 10 have been matched correctly. Numbers are represented pictorially in addition to numbers and words.

**Expected** Explain if the four pairs of numbers up to and including 20 have been matched correctly. Numbers are represented pictorially, numerically or as words.

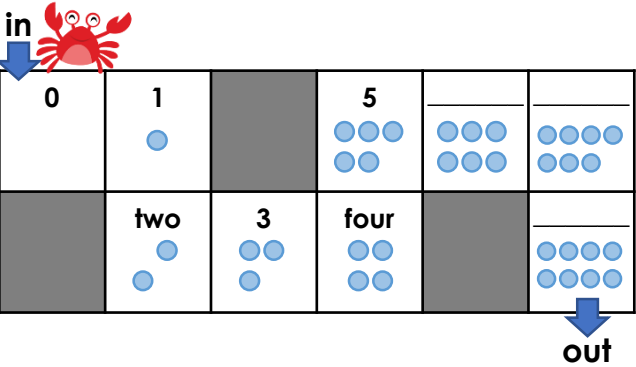
**Greater Depth** Explain if the four pairs of numbers up to and including 20 have been matched correctly. Numbers are represented pictorially, numerically or as words with mixed representations within a question.

More [Year 1 Place Value](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Count and Write Numbers to 20

1a. Carl Crab is making his way through the maze. Circle the missing numbers.



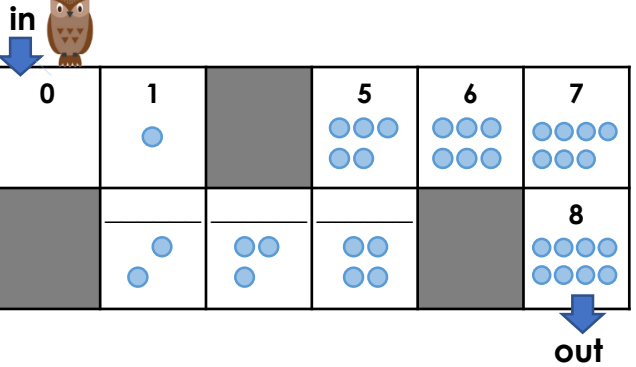
7      six      8      four



PS

Count and Write Numbers to 20

1b. Olly Owl is making his way through the maze. Circle the missing numbers.

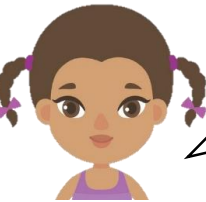


1      four      two      3



PS

2a. Beth thinks of a number.



My number is between 6 and 8.



What could Beth's number be? Give your answer as a number and a word.



PS

2b. Sam thinks of a number.



My number is between 3 and 5.

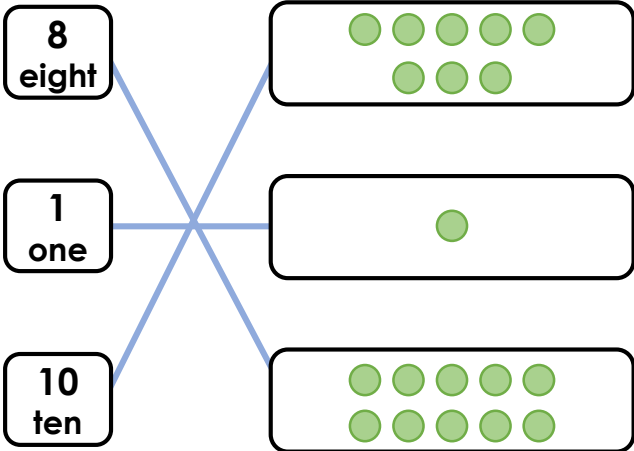


What could Sam's number be? Give your answer as a number and a word.



PS

3a. Jay is matching some numbers.

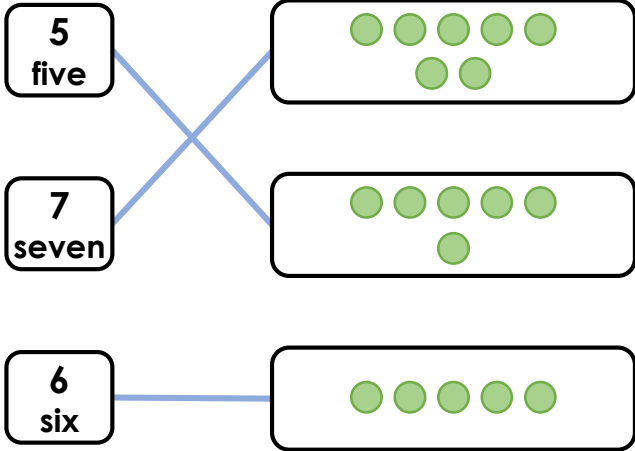


Is he correct? Explain why.



R

3b. Mia is matching some numbers.



Is she correct? Explain why.




R


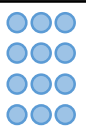
Count and Write Numbers to 20

Count and Write Numbers to 20

4a. Polly Parrot is making her way through the maze.

in



sixteen 	_____		11
	_____	_____	

out

Which numbers are missing? Write them as numbers and words.


☆

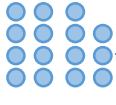
E

PS

4b. Gary Gorilla is making his way through the maze.

out



20	_____		
	eighteen	_____	_____

in


Which numbers are missing? Write them as numbers and words.

☆

E

PS

5a. Jack thinks of a number.



My number is between 17 and 14.


What could Jack's number be? Give your answer as a number and a word.

☆

E

PS

5b. Ella thinks of a number.



My number is between 14 and 11.



What could Ella's number be? Give your answer as a number and a word.

☆

E

PS

6a. May is matching some numbers.

9	seventeen
15	nineteen
17	
19	



Is she correct? Explain why.

☆

E

R

6b. Alex is matching some numbers.

6	twenty
16	
20	
2	six

Is he correct? Explain why.

☆

E

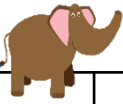
R


Count and Write Numbers to 20

Count and Write Numbers to 20

7a. Ellie Elephant is making her way through the maze.

in



eighteen	_____		13
	_____		

out


Which numbers are missing? Write them as numbers and words.




PS

7b. Fred Fox is making his way through the maze.

out

			fifteen
			16

in




Which numbers are missing? Write them as numbers and words.



PS

8a. Sara thinks of a number.




My number is  
between ten and  
thirteen.

What could Sara's number be? Give your answer as a number and a word.



PS

8b. Ben thinks of a number.



My number is  
between twenty  
and seventeen.


What could Ben's number be? Give your answer as a number and a word.




PS

9a. Zac is matching some numbers.


19



17



15



18

seventeen


Is he correct? Explain why.




R

9b. Kara is matching some numbers.


13



12



11



14

twelve

Is she correct? Explain why.



R

## Reasoning and Problem Solving Count and Write Numbers to 20

### Developing

1a. six, 7, 8

2a. 7 – seven

3a. Jay is not correct because he has matched 8 to 10 counters and 10 to 8 counters.

### Expected

4a. 15 – fifteen, 14 – fourteen, 13 – thirteen

5a. 16, sixteen or 15, fifteen.

6a. May is not correct because she has matched 9 to nineteen and 19 to 9 counters.

### Greater Depth

7a. 17 – seventeen, 16 – sixteen, 15 – fifteen

8a. 11, eleven or 12, twelve.

9a. Zac is not correct because he has matched 19 to eighteen and 18 to nineteen.

## Reasoning and Problem Solving Count and Write Numbers to 20

### Developing

1b. two, 3, four

2b. 4 – four

3b. Mia is not correct because she has matched 5 to 6 counters and 6 to 5 counters.

### Expected

4b. 16 – sixteen, 17 – seventeen, 19 – nineteen

5b. 13, thirteen or 12, twelve.

6b. Alex is not correct because he has matched 6 to sixteen counters and 16 to six.

### Greater Depth

7b. 17 – seventeen, 19 – nineteen, 20 – twenty

8b. 19, nineteen or 18, eighteen .

9b. Kara is not correct because she has matched 11 to twelve and 12 to eleven.