

# Discussion Problems

## Step 1: Count Objects to 100

### National Curriculum Objectives:

Mathematics Year 2: (2N2a) [Read and write numbers to at least 100 in numerals and in words.](#)

Mathematics Year 2: (2N3) [Recognise the place value of each digit in a two digit number \(tens, ones\)](#)

Mathematics Year 2: (2N4) [Identify, represent and estimate numbers using different representations including the number line.](#)

### About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 2 Place Value](#) resources.

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

## Count Objects to 100

1. Lily is exploring numbers in a game. She has to find numbers which obey the following rules. Each number must be:

**A two digit  
number**

**Between  
50 and 100**

**Tens digit is  
one more  
than the  
ones digit**

Investigate the numbers she can make.

What do you notice about the sum of the two digits of each number?

DP

2. Charlie is trying to make different numbers using eight counters.

Tens	Ones



Charlie thinks there are ten possibilities, when all 8 counters are used.  
Is he correct? Investigate the different possibilities.

DP

## Count Objects to 100

1. Lily is exploring numbers in a game. She has to find numbers which obey the following rules. Each number must be:

**A two digit number**

**Between 50 and 100**

**Tens digit is one more than the ones digit**

Investigate the numbers she can make.

**Various answers, for example: 54**

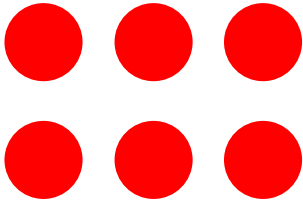
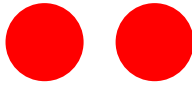
What do you notice about the sum of the two digits of each number?

**Various answers, for example: 54; 65, 76, 87, 98**

**The digit sums are going up by 2 each time.  $5 + 4 = 9$ ;  $6 + 5 = 11$ ;  $7 + 6 = 13$ ;  $8 + 7 = 15$ ;  $9 + 8 = 17$**

DP

2. Charlie is trying to make different numbers using eight counters.

Tens	Ones
	

**Various answers, for example: 62**

Charlie thinks there are ten possibilities, when all 8 counters are used. Is he correct? Investigate the different possibilities.

**False, there are only 9 possibilities.**

DP