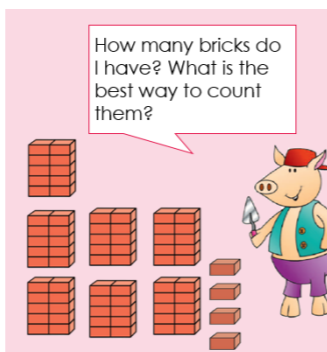


# Year 1 Unit 12: Numbers 50 to 100 and beyond (2 weeks)

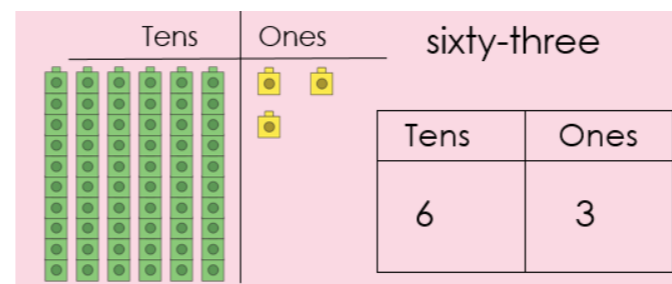
## Before you start...

- How secure are your pupils in counting, reading and writing numbers up to 50?
- How familiar are your pupils with using bead strings and cubes to count in tens and ones?
- What experience have pupils had using a place value chart before?



## Introducing Dienes

*Dienes* are introduced for the first time in this unit. They differ from previous representation in that the tens stick is fixed and cannot be broken down into ones. Some pupils may not be ready to work with this representation yet, but for those who are, support them by introducing the Dienes alongside and parallel to other more familiar representations.



## 'More and fewer' or 'greater and less'?

When working with discrete data we use the comparison words 'more' and 'fewer'.

For example:

- There are fewer children in the Smith family than in the Dean family
- There are more cars in the garage than on the drive.

When working with continuous data we use the comparison words 'greater' and 'less'. For example:

- My pet cat weighs less than my pet dog
- The height of the school building is greater than the height of my house.

See this [guidance](#) for more on this.

## Identifying 2-digit numbers

L1 Count groups of ten then count in ones to identify 2-digit numbers

Pupils practice counting in groups of ten and then on in ones, which is a skill they will apply in subsequent lessons. They will write the numeral alongside their representations.

- ? Which representations are pupils familiar with and which are new? How will you support pupils to make connections between them?
- ? How will you use the information gathered in Lesson 1 to inform and adapt Lessons 2-4?

## Representing 2-digit numbers

L2 Represent numbers using Dienes on a place value chart  
L3 Represent the number 100 and understand that it is made up of 10 tens  
L4 To represent numbers to 100 as number bonds

Pupils explore how numbers are represented in a place value chart, including an introduction to the 'Hundreds' column on the place value chart, and its meaning as ten groups of ten. The concept of place value is developed in Lesson 4, where pupils partition numbers into number bonds.

- ? What vocabulary will support pupils in making connections between representations?

## Finding one/ten more and fewer

L5 Recognise one more and one fewer and ten more and ten fewer

Pupils identify one more and one fewer than a given number in various representations. Develop Mathematical Thinking by giving pupils opportunities to notice patterns in what changes when one or ten is added or subtracted.

- ? What questions might you use to prompt pupils to spot patterns?
- ? What thinking will you model aloud?

Lesson 10 is suggested as a consolidation lesson. However, you may want to use this earlier in the unit to allow time to secure pupils understanding of place value.

30, 25, 20, 15, ■

## Applying understanding of comparison of numbers within 100

L8 Order numbers within 100  
L9 Identify the pattern in a sequence of numbers

Pupils apply their understanding from earlier in the unit to order numbers within 100. A 'play your cards right' game is suggested, but emphasis should be placed on pupils explaining their choices referring back to the number of tens and ones. In the final lesson, pupils explore number sequences and are encouraged to represent each sequence with manipulatives and describe the patterns they notice.

- ? What might pupils find challenging and what would support them in finding 'a way in' to the problem?

## Comparing numbers within 100

L6 Compare numbers within 100 on a number line  
L7 Compare numbers within 100 on a place value chart

Pupils compare numbers on a number line, learning that the further a number is from zero, the greater its value, and then on a place value chart, learning the strategy of comparing the tens first because they have a greater value than the ones.

- ? What connections will pupils make between models?
- ? What's the same and what's different about the models?

