

# Master The Place Value of 2-Digit Numbers

## Rationale

In this step, pupils will recognise the place value of each digit in 2-digit numbers. They will be introduced to the place value chart with Dienes to look at given numbers as a whole and explain the place value of the digits in the tens and ones columns. They will recognise zero as a place holder, understanding columns with the digit '0' do not need to be described. Pupils will continue to use the same representation to look at the individual digits of given numbers and explain the value of a single digit in its place.

Pupils' learning will be developed by replacing the Dienes in the place value charts with digits, applying their knowledge to recognise the value of specific digits abstractly.



## Key Stem Sentences

- \_\_\_ has \_\_\_ tens and \_\_\_ ones.
- \_\_\_ has \_\_\_ tens / ones. The value of the digit \_\_\_ is \_\_\_
- In \_\_\_, the value of the digit \_\_\_ is \_\_\_



## Key Vocabulary

- ones / tens
- digit
- place value
- place holder



## Common Errors or Misconceptions

- Pupils may misinterpret the value of the digit in its place. For example, in 93, the value of the digit 9 is 9
- Pupils may not recognise zero as a place holder.



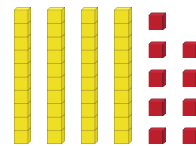
## Key Representations

### Place Value Chart with Dienes

10s	1s

36 has 3 tens and 6 ones.

### Dienes



49 has 4 tens. The value of the digit 4 is 40

### Place Value Chart with Digits

10s	1s
1	7

In 17, the value of the digit 7 is 7

10s	1s
8	0

In 80, the value of the digit 8 is 80



## Pupils will FLOURISH if they can...

- describe the place value of each digit in a 2-digit number.
- recognise zero as a place holder and nine as the largest digit that can be placed in any column.
- identify the value of a single digit in its place.
- explain their understanding using written sentences, concrete apparatus and given representations.

