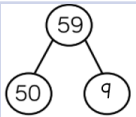


# Number and Place Value: Knowledge Organiser

## Key Vocabulary

|                  |                                                                                    |
|------------------|------------------------------------------------------------------------------------|
| tens             | A group of 10                                                                      |
| ones             | A single unit                                                                      |
| partition        | Separate a number into tens and ones                                               |
| place value      | The value of each digit                                                            |
| more than        | Compare numbers that are larger                                                    |
| greater than     | Compare numbers that are larger                                                    |
| less than        | Compare numbers that are smaller                                                   |
| equal to         | Compare numbers that are the same                                                  |
| fewer            | Less than                                                                          |
| more             | Greater than                                                                       |
| least            | smallest                                                                           |
| part-whole model |  |
| digit            | Part of a number                                                                   |
| ten frame        | Used to represent numbers up to 10                                                 |

## Key Information

- Numbers can be written as digits or words
- Objects can be grouped into Tens to count
- Numbers can be partitioned into Tens and Ones. They can also be partitioned more flexibly eg.  $35 = 20 + 15$
- Part whole models can be used to partition numbers into 2 parts and 1 whole
- Numbers can be placed on a numberline to 100 in order. Using place value knowledge, estimation of numbers can be placed correctly on blank numberlines
- Numbers can be compared using their value with symbols  $< > =$

## Prior Knowledge

- |    |                                                          |
|----|----------------------------------------------------------|
| Y1 | Read and write numbers from 1-20 in numerals and words.  |
| Y1 | Read and write numbers from 1-100 in numerals and words. |
| Y1 | Compare numbers and introduce greater than and less than |

## Worked Examples

Write number below in words and digits

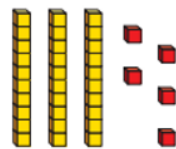
17

seventeen

38

thirty eight

Tens and ones

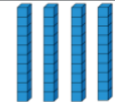


There are 3 tens and 5 ones.  
The number is 35.

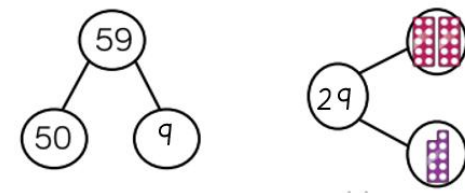
## Worked Examples



There is 1 ten and 7 ones. The number is 17.

| Tens                                                                                | Ones                                                                                |      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
|  |  | = 48 |

part whole model



compare numbers



34 is less than 38

81 is greater than  $60 + 4$

$40 + 5$  is equal to forty-five

$$80 < 60 + 34$$

$$20 + 34 = 40 + 14$$

$$30 + 12 > 32$$