## Number and Place Value: Numbers to 1000000

## By the end of this unit, children will be able to:

- read and represent numbers to 100000
- read and represent numbers to 1000000
- read and represent numbers to 1000000 using number discs
- compare numbers to 1000000 using place value
- compare numbers to 1000000 using pictorial representations and proportionality
- compare numbers to 1000000 from pictorial representations, using lists and number lines
- make and identify patterns in numbers using knowledge of place value
- make number patterns that decrease in multiples of 10000 or 100000
- round numbers to the nearest $10000,100,000$ using number lines and bar graphs
- round numbers to the nearest $100,1000,10000$ and 100000 using number lines.


## Calculations: Addition and Subtraction <br> By the end of this unit, children will be able to:

- add using the 'counting on' strategy with concrete materials and number lines
- subtract using the 'counting backwards' strategy with concrete materials
- add numbers within 1000000 using rounding and concrete materials
- use addition and subtraction to solve comparison problems with numbers to 1000000
- add numbers within 1000000 using the column method of addition
- subtract using the column method, number bonds and number discs using numbers to 1000000
- add and subtract using number bonds as a key strategy using numbers within 1000000
- consolidate and refine addition skills and place-value knowledge to solve addition problems
- subtract numbers to 1000000 using concrete materials, the column method and number bonds
- consolidate and refine subtraction skills and place-value knowledge to solve subtraction problems.


## Calculations: Multiplication and Division

## By the end of this unit, children will be able to:

- consolidate and review multiplication; to find the result of multiplying by a number
- consolidate and review multiplication; to find the numbers we can multiply by to get a number
- define and find common factors of numbers to 100
- identify and name the prime numbers; to recognise prime numbers as numbers that only have 2 factors
- define and determine prime numbers to 100
- create and determine square and cubed numbers
- multiply 1 - and 2-digit numbers by 10,100 and 1000
- multiply 2 - and 3 -digit numbers by a 1 -digit number using multiple strategies
- multiply 4 -digit numbers by 1 -digit numbers with regrouping, using a variety of strategies
- multiply a 4 -digit number by a 1 -digit number, with regrouping from the ones, tens and hundreds, using multiple methods
- multiply 2-digit numbers by 2 -digit numbers using multiple methods
- multiply a 2 -digit number by a 2-digit number using multiple methods, including the grid method, number bonds and column method, with regrouping
- multiply a 3-digit number by a 2-digit number, with the grid method and column method as key strategies
- multiply a 3 -digit number by a 2 -digit number with regrouping, using the column method as the key strategy
- find thousands, hundreds and tens in a 4-digit number using concrete materials
- divide 3 - and 4 -digit numbers by 1 -digit numbers, using number bonds and long division as the key methods
- divide 4 -digit numbers by 1 -digit numbers, using number bonds and long division as the key methods.


## Statistics: Graphs

## By the end of this unit, children will be able to:

- read the information presented in a table and interpret its meaning
- read and respond to information presented in a table
- read and respond to tables that have a variety of data sets
- read and interpret information provided in a line graph where a single line represents the data and where the data is represented by more than one line
- read and interpret information presented in a table and turn it into a line graph; to determine relationships between data sets.

