

# **Knowledge Organiser**





# Year 6

# Number & Place Value

Every digit has a value, no matter how many digits that number is made up of. Place value will help our understanding of multiplication and division, especially when it comes to multiplying and dividing decimal numbers by 10, 100 and 1000.

### Builds from Year 5:

Read, write, order and compare numbers to at least 1,000,000.

Count in steps of powers of 10.

hundred

millions

Round numbers to the nearest 10 000, 100 000 Interpret negative numbers in context.

Recognise years written in Roman numerals.

### This year:

tens

Read, write, order and compare numbers to 10,000,000.

Round any whole number.

Use negative numbers in context.

ones

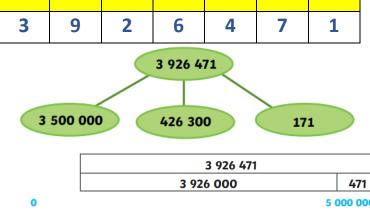
### Leads to Key Stage 3:

Extend understanding of the number system and place value to include powers and roots.

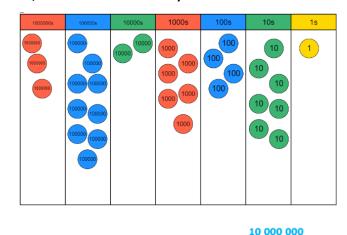
# Numbers to 10,000,000

# 3,926,471

three million, nine hundred and twenty-six thousand, four hundred and seventy-one



hundreds



**Rounding Numbers** 

5 000 000 1 000 000 2 000 000 3 000 000 4 000 000

6 000 000 7 000 000 8 000 000 9 000 000

# **Compare and Order Numbers**

#### $36 + 48 = 12 \times 7$ 375,631 > 98 527 851, 026 < 1,851,206 less than equals greater than

81 782

smallest

127 352

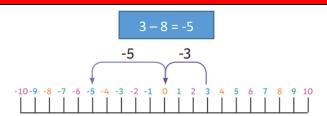
127 835

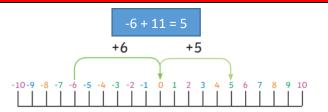
137 019 200 002

largest

#### Rounding to the nearest 1000 round down round up Rounding to the nearest 10 000 20 000 < - 24 999 25 000 -**→** 30 000 round down Rounding to the nearest 100 000 200 000 🔫 - 249 999 250 000 — → 300 000 round down round up Rounding to the nearest 1 000 000 2 000 000 - 2 499 999 2 500 000 round down round up

## **Negative Numbers**





# **Key Vocabulary**

ten million millions thousands hundreds tens ones zero place value greater than less than order round rounded negative number partition interval sequence linear sequence