

Working with prime numbers

CAPS Statement

Numbers, operations and relationships

Represent prime numbers to at least 100.

Note

Remember:

Factors are the numbers you multiply to get another number.

$$2 \times 3 = 6 \quad 2 \text{ and } 3 \text{ are factors of } 6.$$

$$1 \times 6 = 6 \quad 1 \text{ and } 6 \text{ are also factors of } 6.$$

Prime numbers are the numbers that have only two factors.

$$1 \times 19 = 19 \quad 1 \text{ and } 19 \text{ are the only factors of } 19.$$

As 19 has only two factors, it is a prime number.

Composite numbers are the numbers that have more than two factors.

What are the factors of 6? 1, 2, 3, and 6.

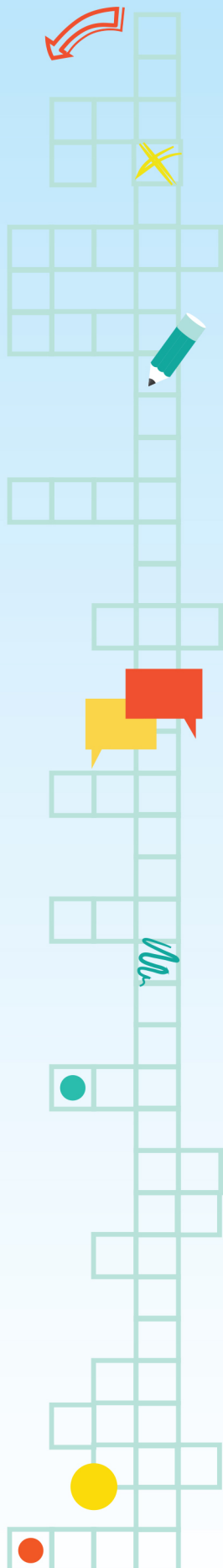
Because 6 has more than two factors, it is a composite number.

Numbers can be represented in many ways. For example, 152 can be represented using:

- A model, such as blocks:



- numerals: 152
- numerals in expanded form:
 $100 + 50 + 2$
- numerals and words:
1 hundred 5 tens 2 ones
- a number word: one hundred and fifty-two
- Roman numerals



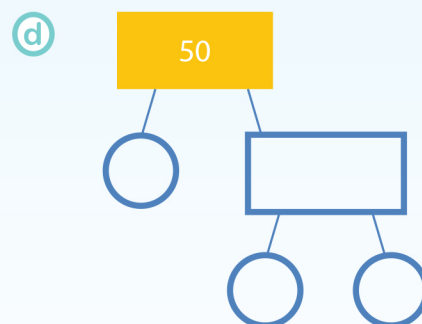
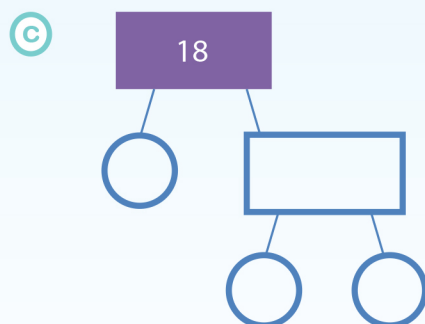
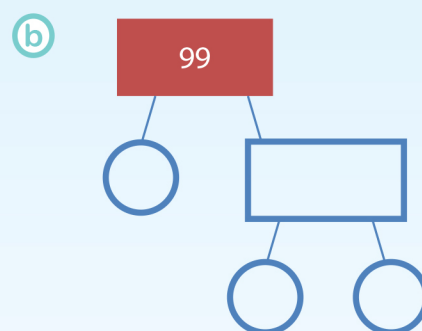
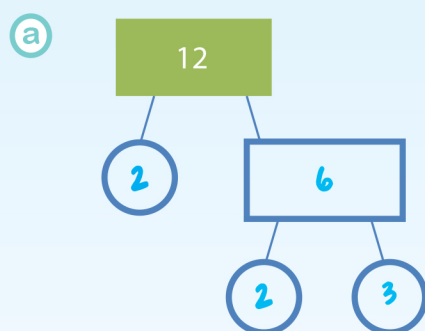
Activity 1

Complete the table.

Number	List of factors (represent as blocks)	Prime or composite number
10		
5		
12		
18		
41		
15		
2		

Activity 2

Find the prime factors of the numbers.



Teacher Tip

Provide learners with number charts so they can circle all the prime numbers.

