

Prime Factorisation

Name:

Date:

INQUIRY

Every number has a unique 'DNA' — its prime factorisation. Can you crack the code?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Prime factor	A factor that is also a prime number.
Factor tree	Diagram breaking a number into prime factors.
Product of primes	e.g. $60 = 2^2 \times 3 \times 5$.

Part A — Factor Trees

1. Write as products of primes: (a) 36 (b) 72 (c) 180 (d) 360. [4 marks]

Part B — Using Prime Factors

2. Using prime factorisation, find HCF of 48 and 60. [3 marks]

Show your working:

3. Using prime factorisation, find LCM of 12 and 18. [3 marks]

Show your working: