



# Key Learning

## Addition and Subtraction

- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

**Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate**

$$\begin{array}{r} 6029 \\ + 457 \\ \hline 6486 \end{array} \quad \begin{array}{r} \cancel{4}8\cancel{1}6\cancel{7}13 \\ - \quad 364 \\ \hline 4809 \end{array}$$

**Estimate and use inverse operations to check answers to a calculation**

What calculation might be used to estimate  $5762 + 1903$ ?

$$6000 + 2000 \text{ or } 5800 + 1900$$

Check  $4173 - 826 = 3247$

$$3247 + 826 = 4073, \text{ so incorrect}$$

## Multiplication and Division

- Replace value, known and derived facts to multiply and divide mentally, Including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Recognise and use factor pairs and commutativity in mental calculations
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence call multiplication and division facts for
- multiplication tables up to  $12 \times 12$
- Use problems such as n objects are connected to m objects.

Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

$$56 \times 1 = 56 \quad 56 \times 0 = 0$$

$$56 \div 1 = 56$$

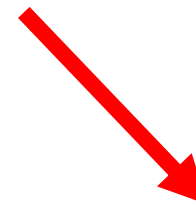
$$7 \times 3 \times 5 = 105$$

Calculate  $133 \div 7$  by counting back in 7s using a number line.



Multiply two-digit numbers by a one-digit number using formal written layout

$$\begin{array}{r} 57 \\ \times 6 \\ \hline 342 \end{array}$$



**Multiply two-digit and three-digit numbers by a one-digit number using formal written layout**

$$\begin{array}{r} 457 \\ \times 6 \\ \hline 2742 \end{array}$$