

**KPI: Number and place value – Counts in multiples of 6,7,9,25 and 1000.**

challenge

a)  $24 \div 6 = 4$  ✓  
 $24 \div 4 = 6$  ✓  
 $6 \times 4 = 24$  ✓  
 $4 \times 6 = 24$  ✓

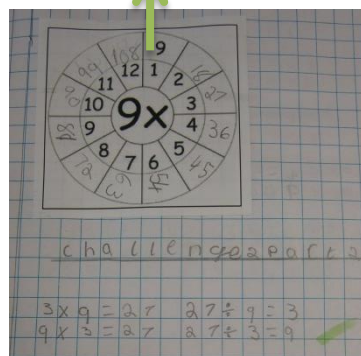
b)  $36 \div 6 = 6$  ✓  
 $12 \div 6 = 2$  ✓  
 $12 \div 2 = 6$  ✓  
 $6 \times 2 = 12$  ✓  
 $2 \times 6 = 12$  ✓

c)  $56 \div 7 = 8$  ✓  
 $56 \div 8 = 7$  ✓  
 $7 \times 8 = 56$  ✓  
 $8 \times 7 = 56$  ✓

challenge

a) multiple of 7 that comes before 65 is 63 ✓  
 $63 \div 7 = 9$  ✓  
multiple of 7 that comes before 15 is 14 ✓  
 $14 \div 7 = 2$  ✓  
multiple of 7 that comes before 80 is 77 ✓  
 $77 \div 7 = 11$  ✓  
multiple of 7 that comes before 23 is 21 ✓  
 $21 \div 7 = 3$  ✓  
multiple of 7 that comes before 98 is 91 ✓  
 $91 \div 7 = 13$  ✓  
multiple of 7 that comes before 231 is 224 ✓  
 $224 \div 7 = 32$  ✓

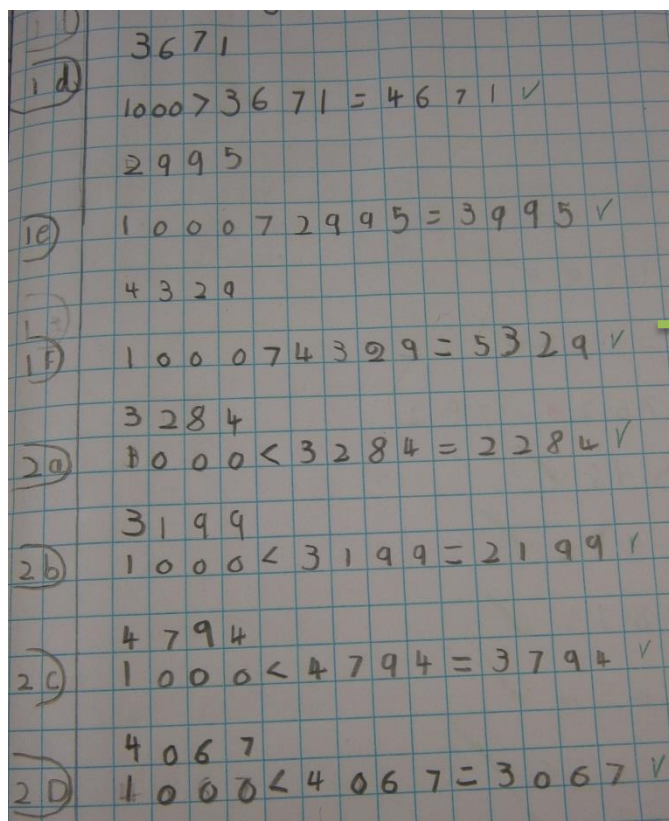
Children independently can count in multiples of 6,7 and 9.



a) Multiples of 1000: 8000, 3000, 7000, 6000 ✓  
b) Multiples of 100: 4300, 5500, 2100, 6000, 7500 ✓  
c) Multiples of 25: 500, 2500, 3750, 6250, 6750 ✓

Children can independently count in multiples of 25,100 and 1000.

**KPI: Number and place value – Finds 1000 more or less.**

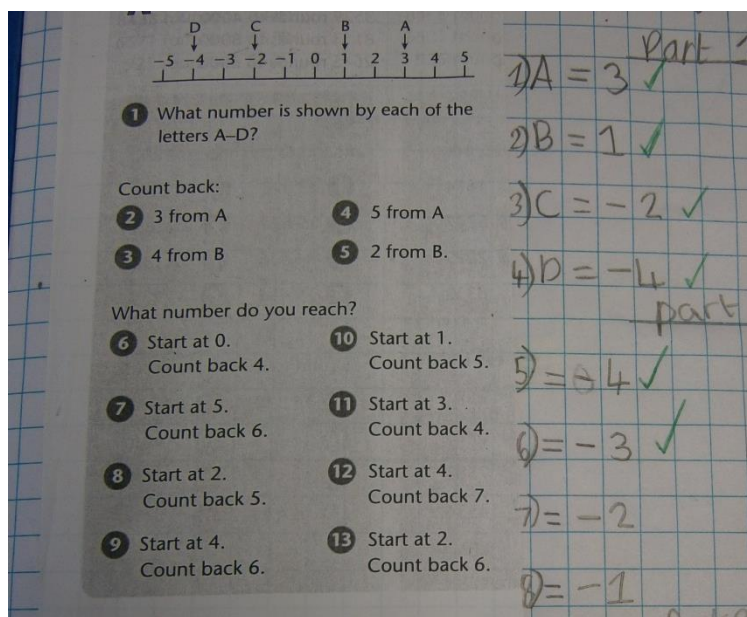


Handwritten student work on grid paper showing calculations for finding 1000 more or less:

- 3671
- 1d)  $1000 > 3671 = 4671 \checkmark$
- 2995
- 1e)  $1000 > 2995 = 3995 \checkmark$
- 4329
- 1f)  $1000 > 4329 = 5329 \checkmark$
- 3284
- 2a)  $1000 < 3284 = 2284 \checkmark$
- 3199
- 2b)  $1000 < 3199 = 2199 \checkmark$
- 4794
- 2c)  $1000 < 4794 = 3794 \checkmark$
- 4067
- 2d)  $1000 < 4067 = 3067 \checkmark$

Children independently can calculate 1000 more or less using a method they know progressing into a mental method.

**KPI: Number and place value** – Counts backwards through zero to include negative numbers.



Number line: -5 -4 -3 -2 -1 0 1 2 3 4 5

Points marked: D at -4, C at -2, B at 1, A at 3

1 What number is shown by each of the letters A-D?

Count back:

2 3 from A

3 4 from B

4 5 from A

5 2 from B.

What number do you reach?

6 Start at 0. Count back 4.

7 Start at 5. Count back 6.

8 Start at 2. Count back 5.

9 Start at 4. Count back 6.

10 Start at 1. Count back 5.

11 Start at 3. Count back 4.

12 Start at 4. Count back 7.

13 Start at 2. Count back 6.

Handwritten answers:

1) A = 3 ✓

2) B = 1 ✓

3) C = -2 ✓

4) D = -4 ✓

10) = -4 ✓

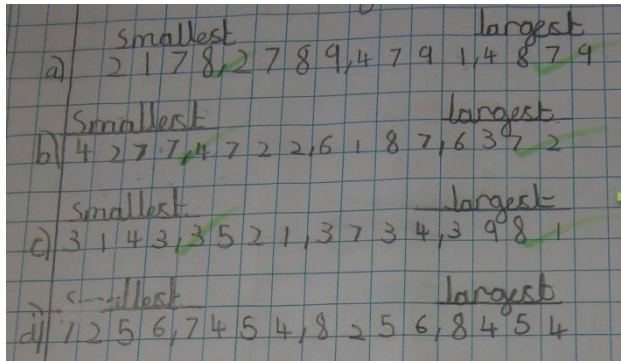
11) = -3 ✓

12) = -2

13) = -1

Children independently can count backwards through 0 and into negative numbers. Children may use a number line to support this.

**KPI: Number and place value – Orders and compares numbers beyond 1000.**



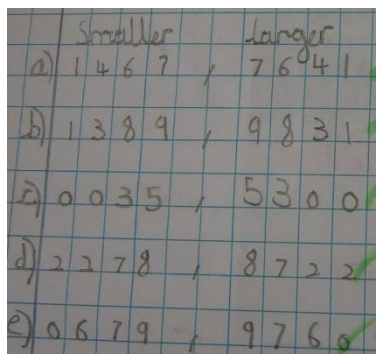
a) smallest 2178, largest 2789, 479, 1, 4879 ✓

b) smallest 4277, 4722, 6187, largest 7, 6322 ✓

c) smallest 3143, 3521, 3734, largest 3981 ✓

d) smallest 7256, 7454, 8256, largest 8454 ✓

Children independently can order numbers which are greater than 1000.



a) smaller 1467, larger 7641 ✓

b) 1389, 9831 ✓

c) 0035, 5300 ✓

d) 2278, 8722 ✓

e) 0679, 9760 ✓

Children can independently compare numbers to say which is smaller or larger.

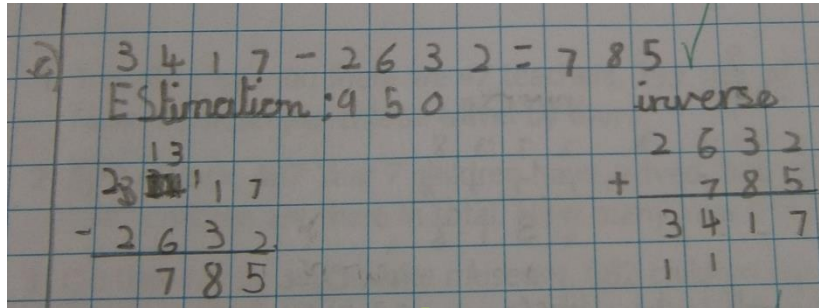
**KPI: Number and place value** – Rounds any number to the nearest 10,100 or 1000.

5929	=	6000	Round nearest 1000
8754	=	8750	Round nearest 10
8754	=	8800	Round nearest 100

Children independently can round to the nearest 10,100 and 1000.

Capacity in ml	Rounded to nearest 10ml	Rounded to nearest 100ml
1612ml	1610	1600
1775ml	1780	1800
1990ml	1990	2000
2235ml	2240	2200

**KPI: Addition and subtraction** - Add and subtract numbers up to 4 digits using the formal written method.



Handwritten student work on grid paper:

2)  $3417 - 2632 = 785$  ✓

Estimation: 450

13

$3417$

$- 2632$

$785$

inverse

$2632$

$+ 785$

$3417$

11



Children can independently add and subtract numbers with up to 4 digits using the formal written method. Crossing the tens boundary where necessary.



**KPI: Addition and subtraction** – Solves addition and subtraction two-step problems in context, deciding which operations and methods to use and why.

121 children are late

$$\begin{array}{r} 367 \\ + 258 \\ \hline 625 \\ 11 \end{array}$$

1017 brought drinks

$$\begin{array}{r} 364 \\ + 275 \\ \hline 639 \end{array}$$

$$\begin{array}{r} 639 \\ + 378 \\ \hline 1017 \end{array}$$

Children can independently solve two-step problems involving addition and subtraction. Using a method they know.

Children may be read the question but should be able to understand what they have to do.

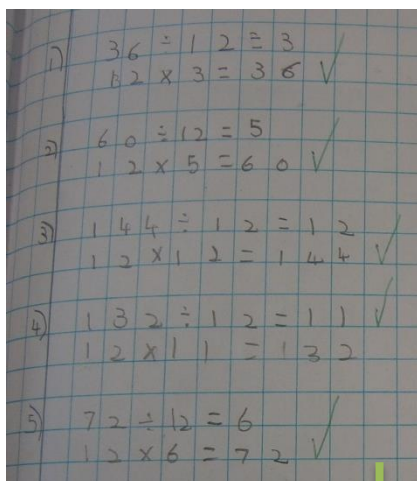
b) 325 children arrived in year 9

$$\begin{array}{r} 487 \\ + 535 \\ \hline 1022 \\ 111 \end{array}$$

$$\begin{array}{r} 1347 \\ - 1022 \\ \hline 325 \end{array}$$

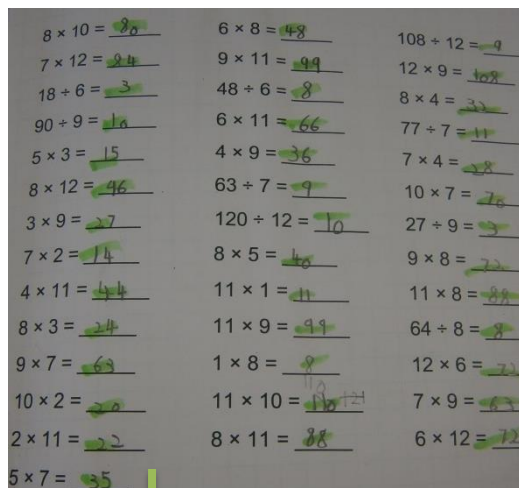
Including problems where the two steps may use different operations.

**KPI: Multiplication and division:** -Recalls multiplication and division facts for multiplication tables up to 12X12.



Handwritten multiplication and division facts on grid paper:

- 1)  $36 \div 12 = 3$   
 $12 \times 3 = 36$  ✓
- 2)  $60 \div 12 = 5$   
 $12 \times 5 = 60$  ✓
- 3)  $144 \div 12 = 12$   
 $12 \times 12 = 144$  ✓
- 4)  $132 \div 12 = 11$   
 $12 \times 11 = 132$  ✓
- 5)  $72 \div 12 = 6$   
 $12 \times 6 = 72$  ✓



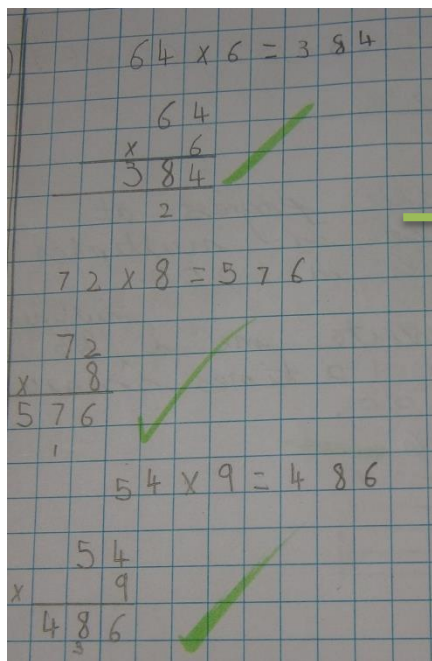
Handwritten multiplication and division facts on a grey background:

$8 \times 10 = 80$	$6 \times 8 = 48$	$108 \div 12 = 9$
$7 \times 12 = 84$	$9 \times 11 = 99$	$12 \times 9 = 108$
$18 \div 6 = 3$	$48 \div 6 = 8$	$8 \times 4 = 32$
$90 \div 9 = 10$	$6 \times 11 = 66$	$77 \div 7 = 11$
$5 \times 3 = 15$	$4 \times 9 = 36$	$7 \times 4 = 28$
$8 \times 12 = 96$	$63 \div 7 = 9$	$10 \times 7 = 70$
$3 \times 9 = 27$	$120 \div 12 = 10$	$27 \div 9 = 3$
$7 \times 2 = 14$	$8 \times 5 = 40$	$9 \times 8 = 72$
$4 \times 11 = 44$	$11 \times 1 = 11$	$11 \times 8 = 88$
$8 \times 3 = 24$	$11 \times 9 = 99$	$64 \div 8 = 8$
$9 \times 7 = 63$	$1 \times 8 = 8$	$12 \times 6 = 72$
$10 \times 2 = 20$	$11 \times 10 = 110$	$7 \times 9 = 63$
$2 \times 11 = 22$	$8 \times 11 = 88$	$6 \times 12 = 72$
$5 \times 7 = 35$		

Children can independently recall and use multiplication and division facts up to 12 X 12.



**KPI: Multiplication and division:** - Multiplies 2 or 3 digit numbers by a one-digit number using the formal method.



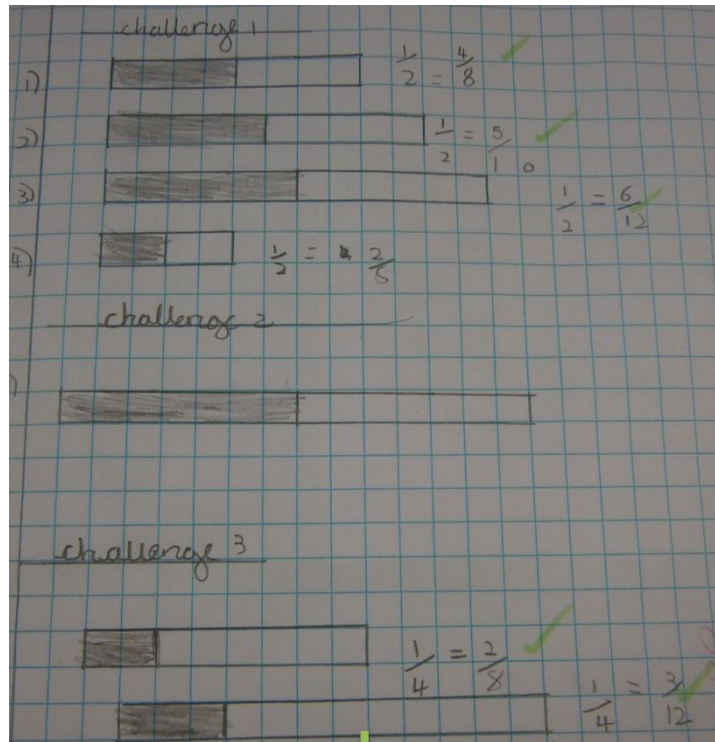
Handwritten multiplication problems on grid paper:

- $64 \times 6 = 384$
- $72 \times 8 = 576$
- $54 \times 9 = 486$

Each problem is shown with the formal written method and a green checkmark indicating the result is correct.

Children can independently multiply 2 or 3 digit numbers by a single digit number using the formal written method; carrying over where necessary.

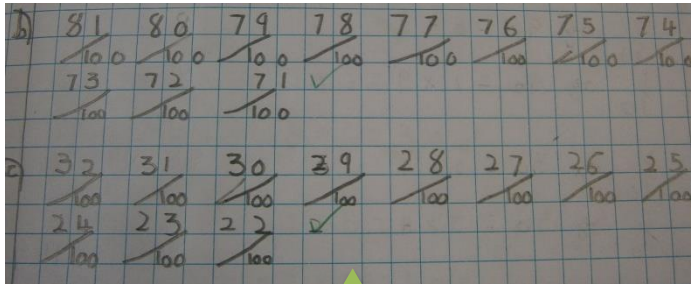
**KPI: Fractions (including decimals)** – Recognises and shows, using diagrams families of common equivalent fractions.



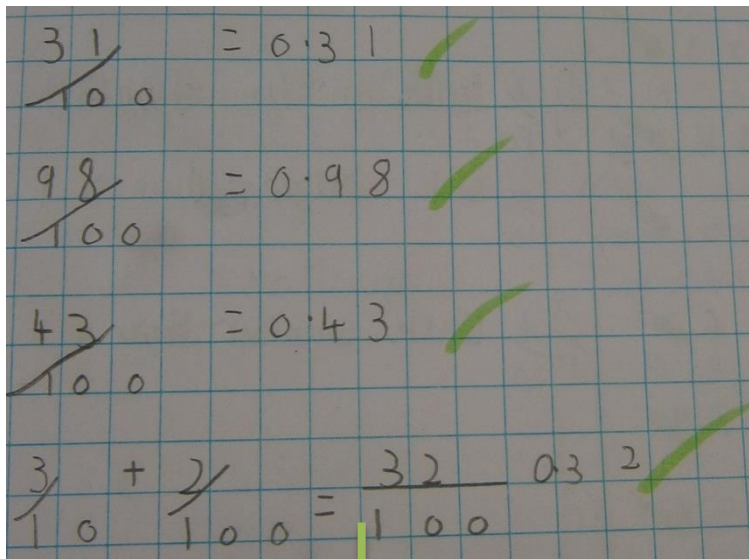
Children independently can use diagrams to recognise and show equivalent fractions.



**KPI: Fractions ( including decimals)** – Counts up and down in hundredths; recognises that hundredths arise when dividing and object by 100 and dividing tenths by 10.




Children independently can count up and down in hundredths.



Children recognise that hundredths are when you divide an object by 100 and tenths when you divide an object by 10.

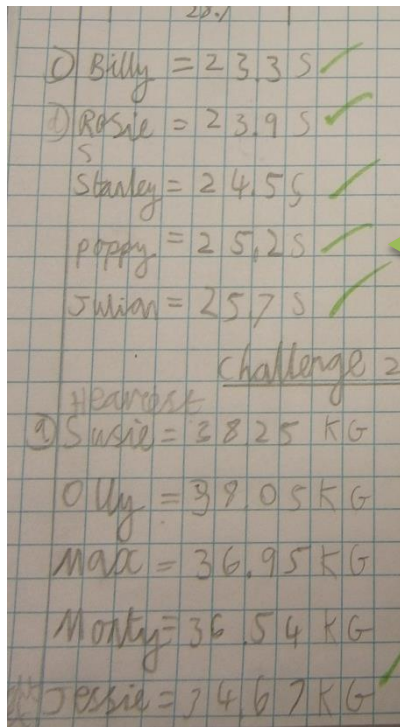
**KPI: Fractions ( including decimals) – Rounds decimals with one decimal place to the nearest whole number.**



13	13.4	14
18	18.2	19
16	16.9	17
11	11.1	12
15	15.7	16
19	19.5	20
25	25.6	26
28	28.8	29

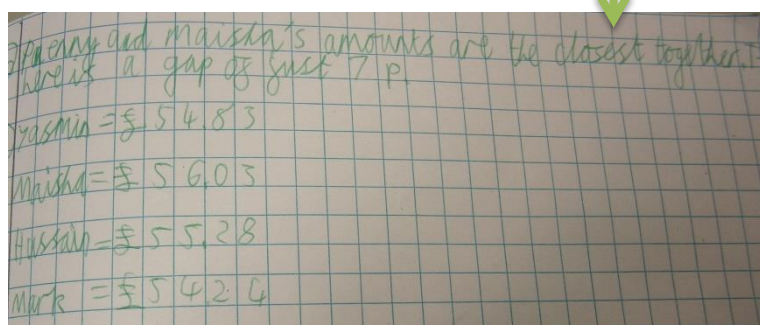
Children independently can round numbers with one decimal place to the nearest whole number.

**KPI: Fractions ( including decimals) –** Solves simple measure and money problems involving fractions and decimals to two decimal places.

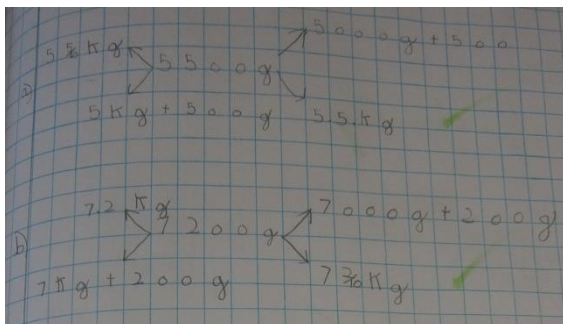


Children independently can solve simple measure problems using fractions and decimals up to two decimal places using a method they know. Children may be read the question, but should independently understand the process they need to undertake.

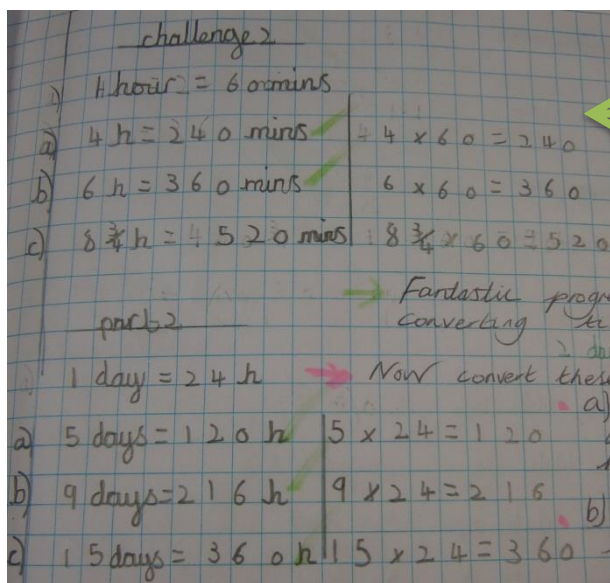
Children independently can solve simple money problems using fractions and decimals up to two decimal places using a method they know. Children may be read the question, but should independently understand the process they need to undertake.



**KPI: Measurement:** Converts between different units of measure e.g. kilometre to metre; hour to minute.



Children can independently convert between different units of measure e.g. grams and kilograms.



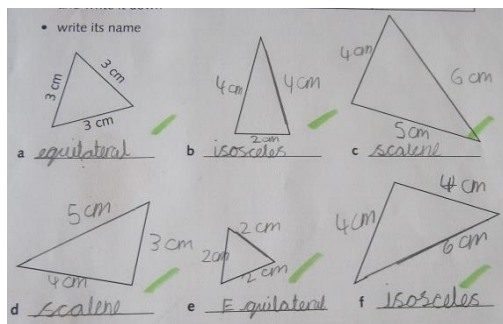
Children can convert independently between different units of time e.g. hour and minute.



**KPI: Geometry: properties of shape** - Compares and classifies geometric shapes including quadrilaterals and triangles, based on their properties and sizes.

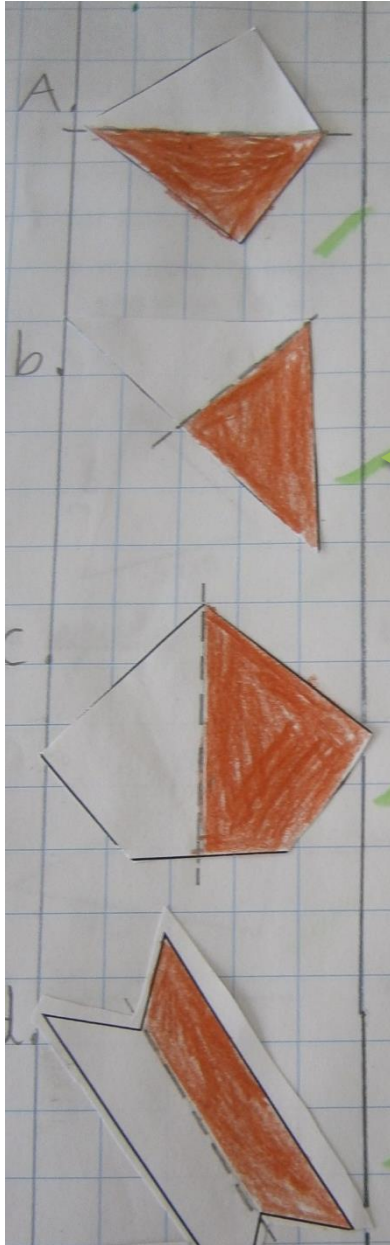
quadrilateral	opposite sides equal	opposite sides parallel	opposite angles equal	all sides equal	Four right angles
Square	✓	✓	✓	✓	✓
rectangle	✓	✓	✓	X	✓
parallelogram	✓	✓	✓	X	X
Rhombus	✓	✓	✓	✓	X

Children independently can compare and classify geometric shapes including quadrilaterals.



Children independently can compare and classify geometric shapes including triangles.

**KPI: Geometry: properties of shape** - Identify lines of symmetry in two dimensional shapes presented in different orientations.

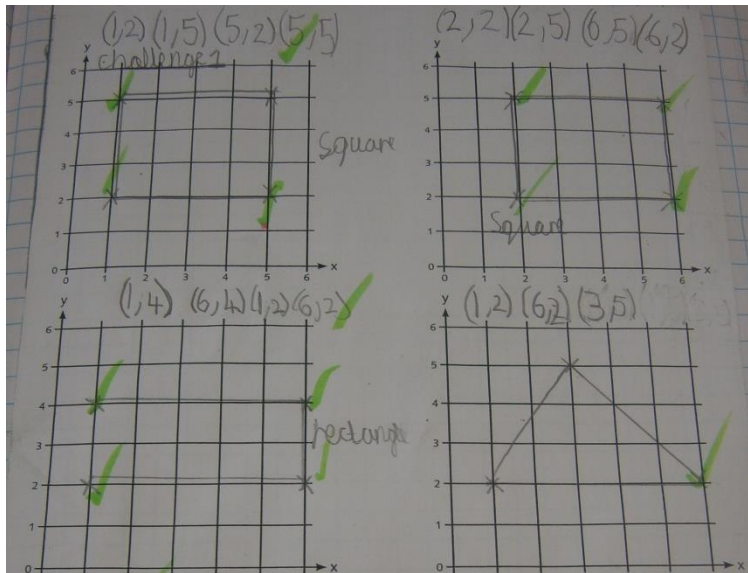


Children independently  
can identify lines of  
symmetry in a two  
dimensional shape.

Children may use a mirror  
to support this.

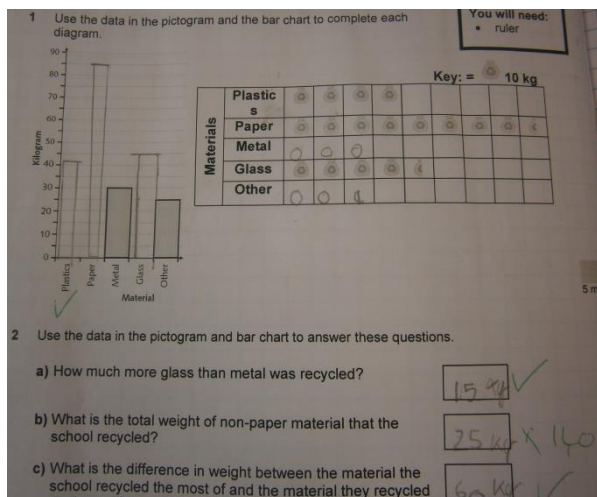
These may be presented  
in different orientations.

**KPI: Geometry: position and direction** – Plots specified points and draws sides to complete a given polygon.

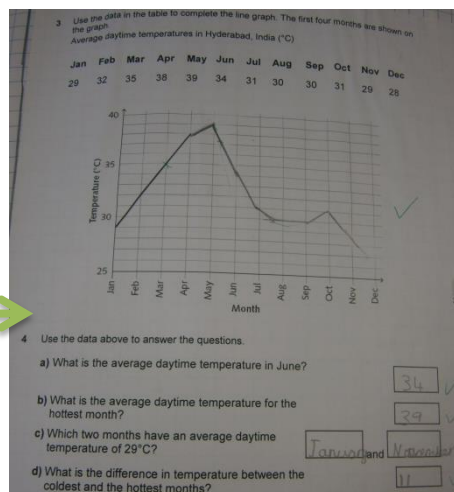


Children can independently plot points on a co-ordinates grid. They can join these co-ordinates to complete a given polygon.

**KPI: Statistics-** Solves comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.



Children can independently use bar charts, pictograms, tables and other graphs to solve comparison, sum and difference problems.



It is expected that children will have a range of evidence (ideally 2-4 pieces) to support each KPI. The evidence will show the children completing the skill exemplified as well as evidence of embedding and deepening the skill.

Children must have a secure understanding of a KPI in order to achieve it.