

**Year 7  
information evening.**

**Mathematics.**

# AIMS

- We aim to develop our students' confidence and competence in using Mathematical skills and techniques.
- We also seek to develop students' logical thinking as they apply mathematical facts and communicate their reasoning.
- We want students to recognise the importance of mathematics in their own lives and in society.
- Students are encouraged to apply their mathematical skills to a variety of problems with increasing complexity, illustrating resilience and perseverance.

# Year 7

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	<p>Algebraic thinking</p> <p><b>Sequences</b> FREE TRIAL</p> <p><a href="#">VIEW</a></p>	<p>Algebraic thinking</p> <p><b>Understand &amp; use algebraic notation</b></p> <p><a href="#">VIEW</a></p>	<p>Algebraic thinking</p> <p><b>Equality &amp; equivalence</b></p> <p><a href="#">VIEW</a></p>	<p>Place value &amp; proportion</p> <p><b>Place value &amp; ordering integers &amp; decimals</b></p> <p><a href="#">VIEW</a></p>	<p>Place value &amp; proportion</p> <p><b>Fraction, decimal &amp; percentage equivalence</b></p> <p><a href="#">VIEW</a></p>							
Spring term	<p>Applications of number</p> <p><b>Solving problems with addition &amp; subtraction</b></p> <p><a href="#">VIEW</a></p>	<p>Applications of number</p> <p><b>Solving problems with multiplication &amp; division</b></p> <p><a href="#">VIEW</a></p>	<p>Fractions &amp; percentages of amounts</p> <p><a href="#">VIEW</a></p>	<p>Directed number</p> <p><b>Operations &amp; equations with directed number</b></p> <p><a href="#">VIEW</a></p>	<p>Fractional thinking</p> <p><b>Addition &amp; subtraction of fractions</b></p> <p><a href="#">VIEW</a></p>							
Summer term	<p>Lines &amp; angles</p> <p><b>Constructing, measuring &amp; using geometric notation</b></p> <p><a href="#">VIEW</a></p>	<p>Lines &amp; angles</p> <p><b>Developing geometric reasoning</b></p> <p><a href="#">VIEW</a></p>	<p>Reasoning with number</p> <p><b>Developing number sense</b></p> <p><a href="#">VIEW</a></p>	<p>Reasoning with number</p> <p><b>Sets &amp; probability</b></p> <p><a href="#">VIEW</a></p>	<p>Reasoning with number</p> <p><b>Prime numbers &amp; proof</b></p> <p><a href="#">VIEW</a></p>							

# Year 8

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	Proportional reasoning <b>Ratio &amp; scale</b> FREE TRIAL  VIEW		Proportional reasoning <b>Multiplicative change</b>  VIEW		Proportional reasoning <b>Multiplying and dividing fractions</b>  VIEW		Representations <b>Working in the Cartesian plane</b>  VIEW		Representations <b>Representing data</b>  VIEW		Representations <b>Tables &amp; Probability</b>  VIEW	
Spring term	Algebraic techniques <b>Brackets, equations &amp; inequalities</b>  VIEW				Algebraic techniques <b>Sequences</b>  VIEW	Algebraic techniques <b>Indices</b>  VIEW	Developing Number <b>Fractions &amp; percentages</b>  VIEW		Developing Number <b>Standard index form</b>  VIEW		Developing Number <b>Number sense</b>  VIEW	
Summer term	Developing geometry <b>Angles in parallel lines &amp; polygons</b>  VIEW			Developing geometry <b>Area of trapezia &amp; circles</b>  VIEW		Developing geometry <b>Line symmetry &amp; reflection</b>  VIEW	Reasoning with data <b>The data handling cycle</b>  VIEW			Reasoning with data <b>Measures of location</b>  VIEW		

# Year 7 Unit tracker

Name:

Class:



## Year 7 – Mathematics – unit 5

**Big Question** – Can I convert fluently between fractions, decimals and percentages?



Knowledge / Skills	Opportunity for assessment & feedback (RAG)	Gaps
Convert fractions & decimals (tenths & hundredths)	Key question Classwork Diagnostic questioning Summative assess.	
Convert fractions & decimals (fifths & quarters)	Key question Classwork Diagnostic questioning Summative assess.	
Convert fractions & decimals (eighths & thousandths)	Key question Classwork Diagnostic questioning Summative assess.	
Identify equivalent fractions	Key question Classwork Diagnostic questioning Summative assess.	
Convert fluently between FDP	Key question Classwork Diagnostic questioning Summative assess.	
<b>Big Question Task</b>	<b>E S W</b>	

Summarise your next steps to improve or build on the knowledge gained in this unit:

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# Year 7 unit test

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Year 7 – Mathematics – Unit 8

### Big Question – Can I find fractions and percentages of an amount?

1. Work out the calculations. You may use the bar models to help you.

(a)  $\frac{1}{2}$  of 80



\_\_\_\_\_

(1 mark)

(b)  $\frac{2}{5}$  of 45



\_\_\_\_\_

(2 marks)

(c)  $\frac{5}{6}$  of 42



\_\_\_\_\_

(2 marks)

2. (a) Dexter is thinking of a number.

One fifth of Dexter's number is 12. What number is Dexter thinking of?

(1 mark)

(b) Alex is also thinking of a number.

Three quarters of Alex's number is 6. What number is Alex thinking of?

(2 mark)



4. Calculate 7% of 340

(2 mark)

5. (a) Work out

150% of 70

(1 mark)

(b) Work out

$\frac{17}{5}$  of 30

(1 mark)

	A	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM
4	Forename	ESW	find a fraction of an	Use a given fraction	Find a percentage of	Find a percentage of	Solve problems with	ESW	add and subtract dir	Multiply directed nu	Evaluate algebraic e	Use order of operati	Roots of positive nu	ESW	convert between mi	add and subtract fra	Add and subtract fra	add and subtract imt	Use fractions in alge	ESW
99	Keeley		G	G	A	A	R	S	G	A	A	G	A	S	G	G	A	A	R	S
100	Eleanor		G	G	R	G	A	S	R	G	G	R	R	S	G	A	R	R	R	W
101	Daniela		G	G	G	G	G	E	G	G	G	G	R	S	G	G	G	A	G	S
102	Ava		G	A	R	A	A	W	G	G	A	A	R	S	G	G	G	G	G	S
103	Allyssa-Rose		G	A	A	G	G	W	G	G	A	A	G	W	G	G	G	A	A	S
104	Finley								R	G	A	A	R	S	A	G	G	G	G	S
105	Ethan		G	G	G	R	G	S	A	G	R	G	A	S	G	G	G	G	A	S
106	Jesse		G	R	G	G	G	S	A	G	A	A	R	W	R	G	R	R	G	W
107	Connie		G	G	G	G	G	S	A	G	G	A	A	W	G	G	A	A	R	W
108	Neve		G	G	G	A	G	S	G	A	G	A	A	S	G	G	G	G	A	S
109	Jake		G	G	R	G	G	S	G	G	A	A	A	S	G	G	G	G	G	S
110	Lillian		G	A	A	A	G	S	G	G	G	A	A	S	G	G	G	A	R	S
111	Charlie		G	G	G	G	G	E	A	G	A	A	A	S	G	G	G	G	G	S
112	Erin		G	G	A	R	A	S	R	G	G	A	R	S	G	G	G	A	R	S
113	Fabricjo		A	A	A	G	G	S	A	G	G	A	R	S	G	G	G	A	R	S
114	Isabelle		G	G	G	G	G	E	A	G	G	A	A	S	G	G	G	G	R	S
115	Kathleen		A	A	R	R	A	W	G	G	G	A	A	S	G	G	G	A	R	S
116	Zakhir		G	R	G	G	G	S	G	A	G	G	R	S	G	G	G	A	G	S
117	Noah		G	G	A	A	R	S	G	G	G	G	A	S	Abs	Abs	Abs	Abs	Abs	
118	Joseph		G	A	A	G	G	S	G	G	A	G	A	S	Abs	Abs	Abs	Abs	Abs	
119	Lucas		G	G	G	G	G	E	G	G	A	A	R	S	G	G	G	A	G	S

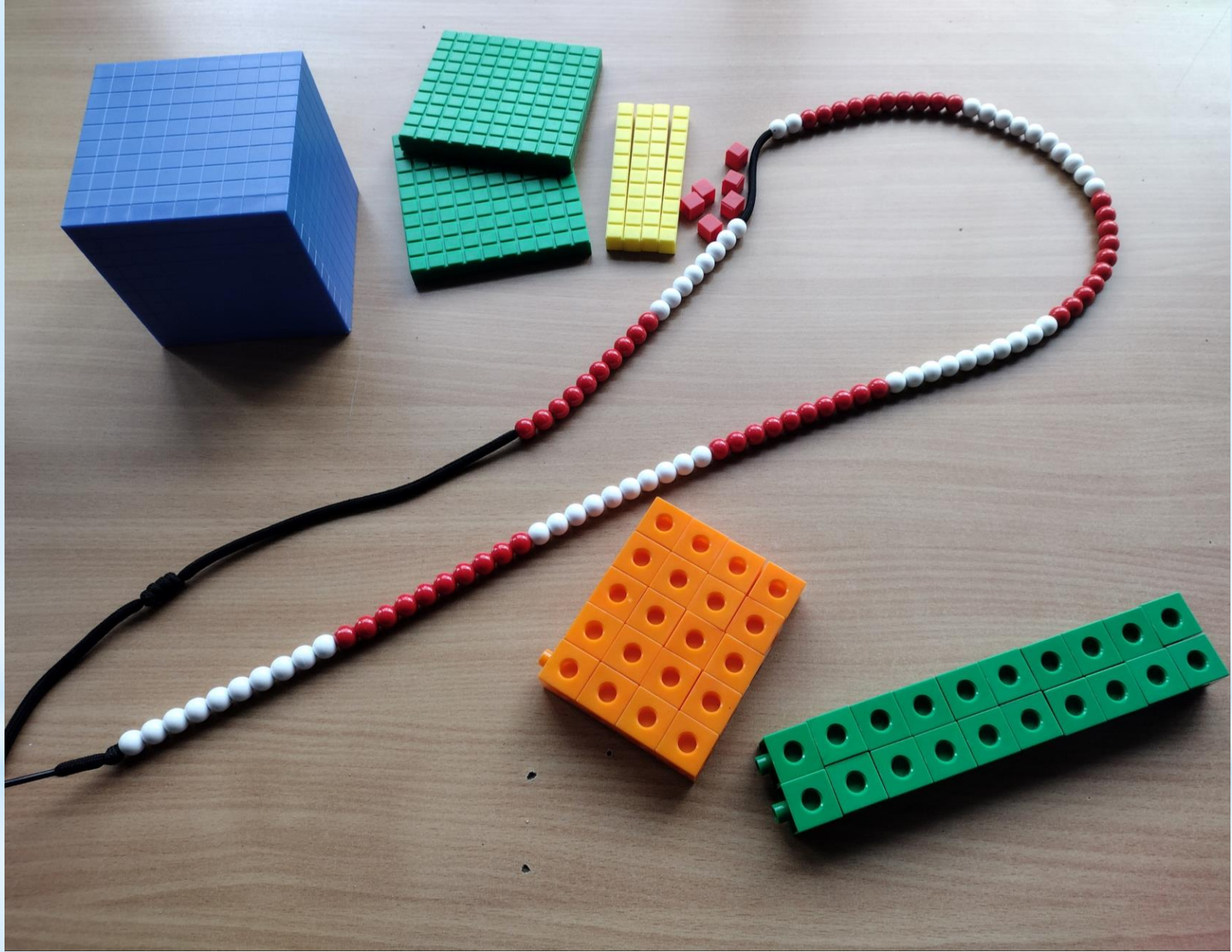
## Mathematics

We recommend Casio fx-83 GTCW.



**£9.00**



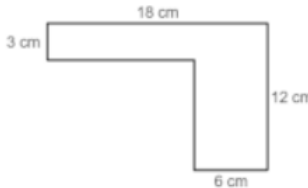


# Empowering learners and teachers in mathematics.

dfm KS3/4 → Shape, Space & Measures → Area & Perimeter  
**K116: Find the perimeter of a composite rectilinear shape.** [Watch a worked example](#)

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Exit

Find the perimeter of the shape below.



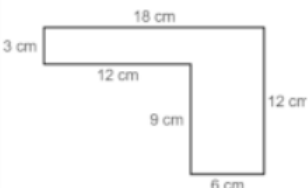
Perimeter =  cm

You can optionally leave a comment for your teacher about this question/your answer. Press Alt+Equals to insert mathematical expressions.

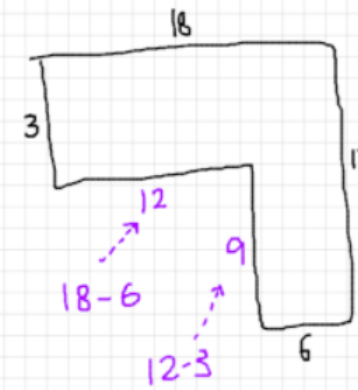
**✓ Correct**

The answer is Perimeter = 60 cm

The perimeter is the total length around the outside of the shape.



Perimeter =  $12 + 6 + 9 + 12 + 3 + 18$   
 $= 60$  cm



## Supporting learners all the way.

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## What you can do to help:

- Encourage your child to seek out their maths teacher if they are struggling with work in class.

8)  $147 \times 23$

$$\begin{array}{r}
 147 \\
 \times 23 \\
 \hline
 441 \\
 2940 \\
 \hline
 3381
 \end{array}$$

~~3381~~

$147 \times 23$

X	100	40	7	
20	2000	800	140	$\Rightarrow 2940$
3	300	120	21	$\Rightarrow 441$
				<u>3381</u>

2)  $53 \times 28 = \underline{1484}$

	5	3	X
	1	0	2
	4	2	8
1	0	4	
4	8	4	