Welcome to Sackville School
Year 7 Maths Workshop

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Maths is used every day

- A recipe is for 4 so what quantities do I need for 10?
- How much will this shirt cost with 15% off?
- How much paint do I need to decorate my bedroom?
- How much will it cost to fill my car with petrol?
- How many euros will I get for £100?
- How long will it take me to drive to my friends?
- If I put £100 in my savings account at 2.7% interest, how much will I have after 3 years?
- How can I share 2 pizzas equally between 5 people?

Maths At Sackville

- 3 lessons a week
- Students are set according to ability
- Differentiated Scheme of Work used by all teachers
- Calculators not used in Year 7 – focus is on numeracy and algebra
- 5 milestone tests during a year and an end of year exam
- Problem solving skills encouraged in lesson structure

Maths sets at Sackville

- Two parallel bands – J and K

- Each band has one top set and two sets of two classes of mixed ability; set 2 and set 3

7J1	7K1
7J2a 7J2b	7K2a 7K2b
7J3a 7J3b	7K3a 7K3b

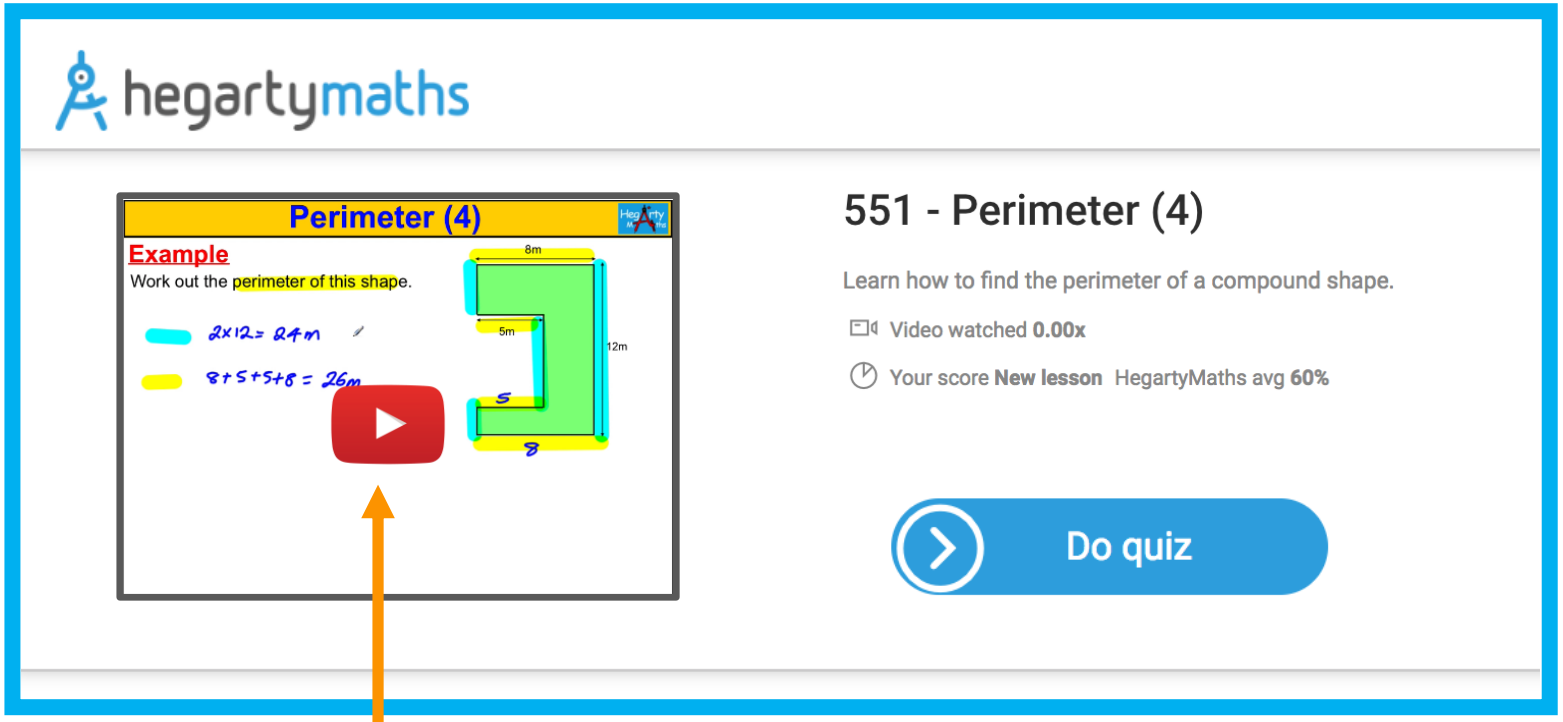
- Class groupings are regularly reviewed

- Students will be given a MEG level (**M**inimum **E**xpected **G**rade)

Homework

- Homework is set once a week on the Hegarty Maths website
- Homework details on Show My Homework
- Students can set alerts on Show My Homework

What does a homework on HegartyMaths look like?

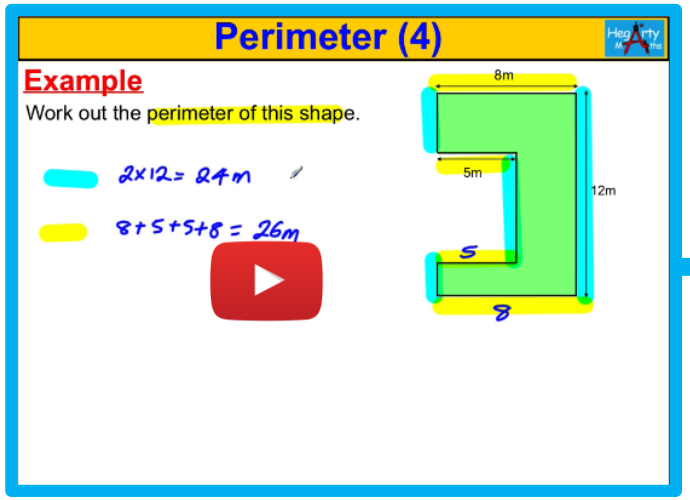


Step 1:

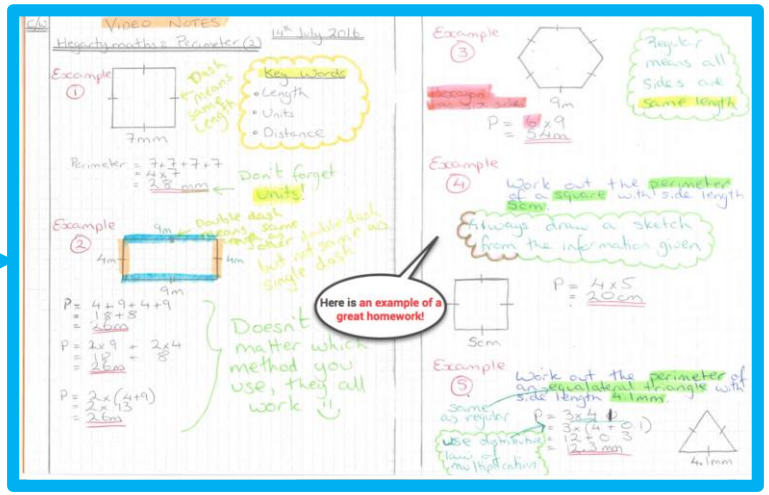
Video where Mr. Hegarty teaches you everything you need to know about that topic & goes through all the examples that will be in the quiz.

Step 1:

Watch the video, take notes of all modelled examples.

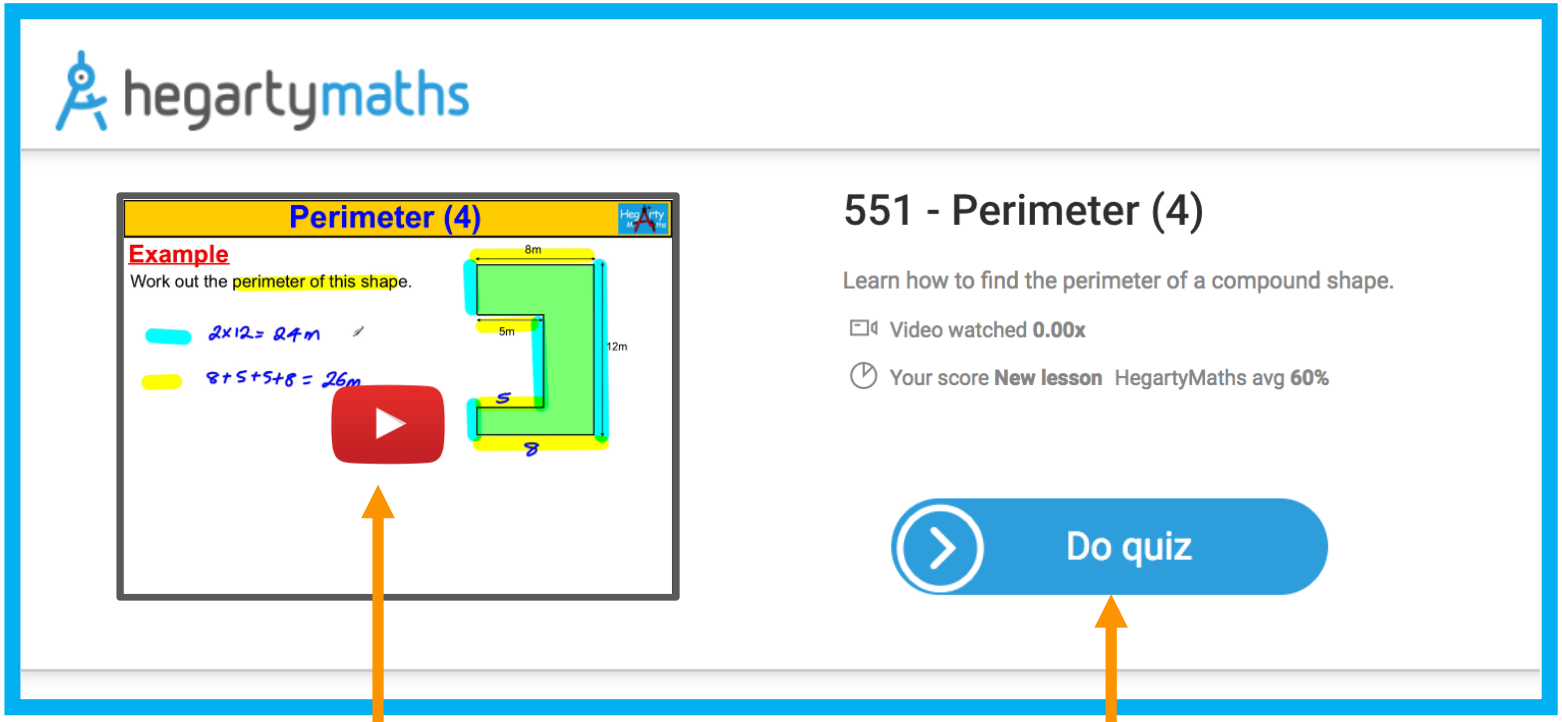


You will turn each video into fantastic notes in your HegartyMaths homework books.



Producing a set of well-written notes of all the modelled examples in the video encourages students to be an expert note-taker and to revise before they try the quiz.

HegartyMaths

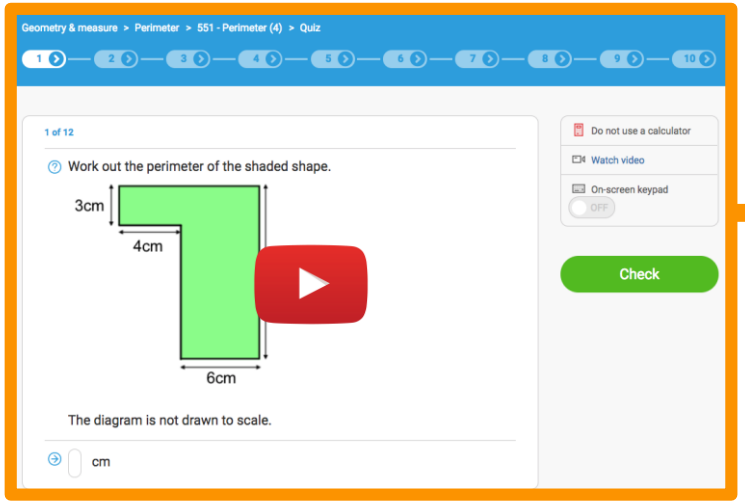


Step 1:
Video where Mr. Hegarty teaches you everything you need to know about that topic & goes through all the examples that will be in the quiz.

Step 2:
Quiz that will allow you to practise all the examples in the video for yourself and know whether you understood what was in the video.

Step 2:

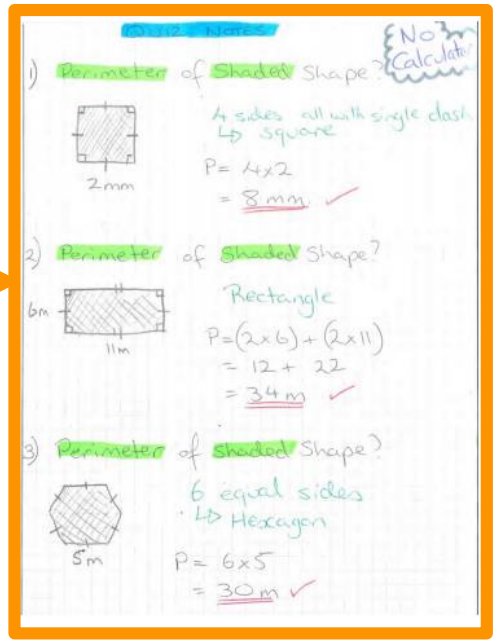
Assess your learning from the video in a quiz.



You need to:

1) **Write down all your workings**

2) **Always mark + self-correct your work**



Students should write their workings in their homework book and mark all questions as they go along.

Lesson Structure: Diagnosis, Therapy, Testing.

Diagnosis: Students are presented with three differentiated questions to attempt. The aim is to encourage students to give questions a go so they can assess their own prior knowledge and to build mathematical resilience and problem-solving skills. These questions are demonstrated by the teacher explaining in detail each step required to complete/solve each question.

Therapy: Students are given differentiated practice questions. Depending on their level of understanding and individual ability, the students themselves decide which questions of the Therapy section to complete. This part of the lesson is where students are expected to work independently, to master their skills and to embed their understanding. These questions are then explained and marked.

Testing: The Testing part consists of three differentiated questions. Students choose which question they want to complete to demonstrate their new skills and assess their progress from the beginning of the lesson.

Topics covered in Year 7 Maths

Schemes of Work are available on the VLE (Virtual Learning Environment)

https://sites.google.com/a/mysackville.co.uk/sackville-school-vle/home

Year 7 Scheme of Work	Hours Required
N1 – Addition and Subtraction	7
A1 – Sequences	5
Milestone Test 1	4
N2 – Multiplication and Division	7
A2 – Expressions	6
Milestone Test 2	4
N3 – Fractions, Decimals, percentages	6
A3 - Substitution	7
Milestone Test 3	4
N4 – Percentages, Ratio and Proportion	7
A4 – Equations	5
Milestone Test 4	4
N5 – Multiples, Factors and Primes	6
A5 - Inequalities	5
Milestone Test 5	4
Total	81

Year 7 Maths: Unit 1

Year 7 Scheme of Work	Hours Required
N1 – Addition and Subtraction	7
A1 – Sequences	5
Milestone Test 1	4

Solve these problems. Remember, its always a good idea to estimate your answer first.

136.04 + 102.27 → 136.04 + 102.27 = 238.31

Write in vertical column, aligning the decimal points.

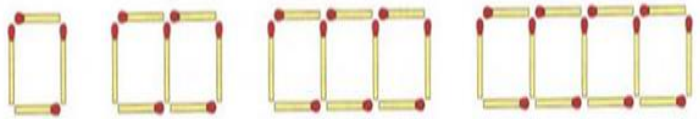
Add each column, starting on right. Carry digits when needed.

2.37 - 0.031 → 2.370 - 0.031 = 2.339

Write in vertical column, aligning the decimal points.

Subtract each column, starting on right and working left. Borrow as needed.

a Find the rule for this pattern:



b How many matchsticks will the next pattern have?

a Start with 4 and add 3 each time.

b $13 + 3 = 16$

The next pattern will have 16 matchsticks.

You can use a table to help spot the sequence:

Number of squares	1	2	3	4	5
Number of matchsticks	4	7	10	13	16

Year 7 Maths

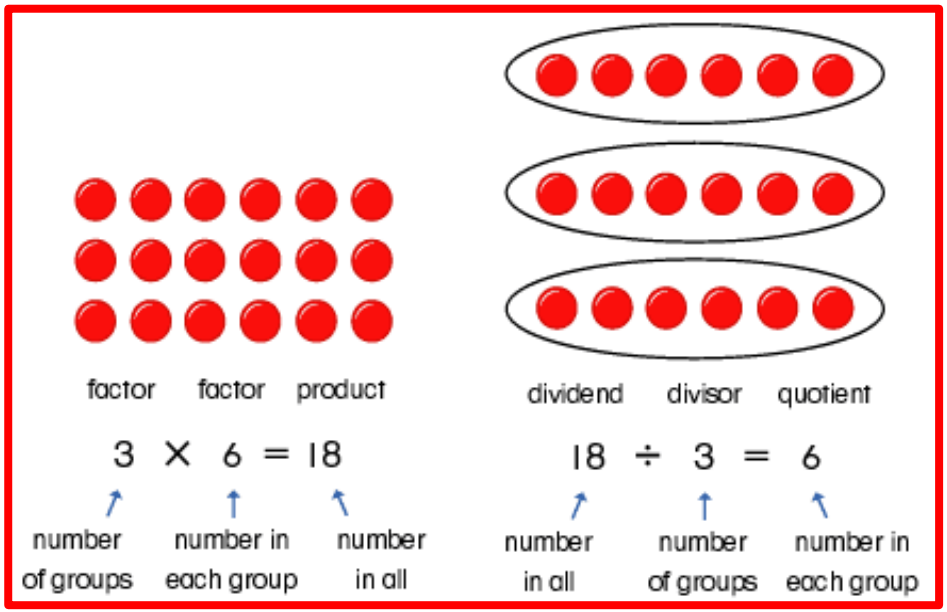
Year 7 Scheme of Work	Hours Required
N1 – Addition and Subtraction	7
A1 – Sequences	5
Milestone Test 1	4

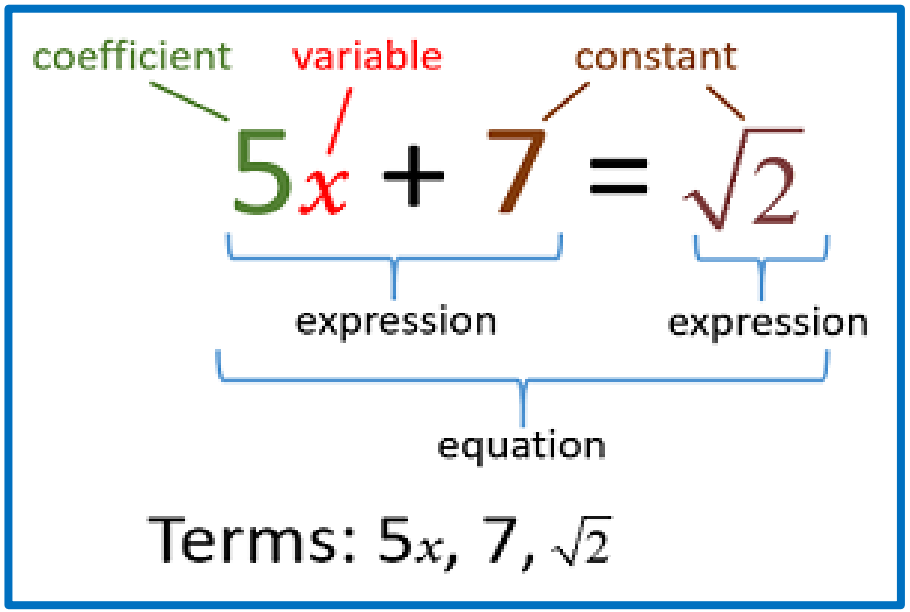
Year 7 Core Milestone test 1 PLC

Topic	Red	Amber	Green	Hegarty	%
Use formal written methods for addition and subtraction of integers and decimals				18 - 20, 41, 47	
Solve problems involving calculations with decimals				47 -50	
Add and subtract negative numbers				39 - 40	
Multiply and divide negative numbers				42 - 43	
Round decimals to a given number of decimal places				56	
Use approximation through rounding to estimate answers				130	
Calculate and solve problems involving perimeter				548 - 551	
Generate sequences using a simple term to term rule				197	
Generate sequences using nth term				198	
Find the nth term of a linear sequence				198	
Solve problems with sequences				196	
Plot graphs of simple linear functions				206	
Recognise straight-line graphs parallel to the x-axis or y-axis				205	

Year 7 Maths

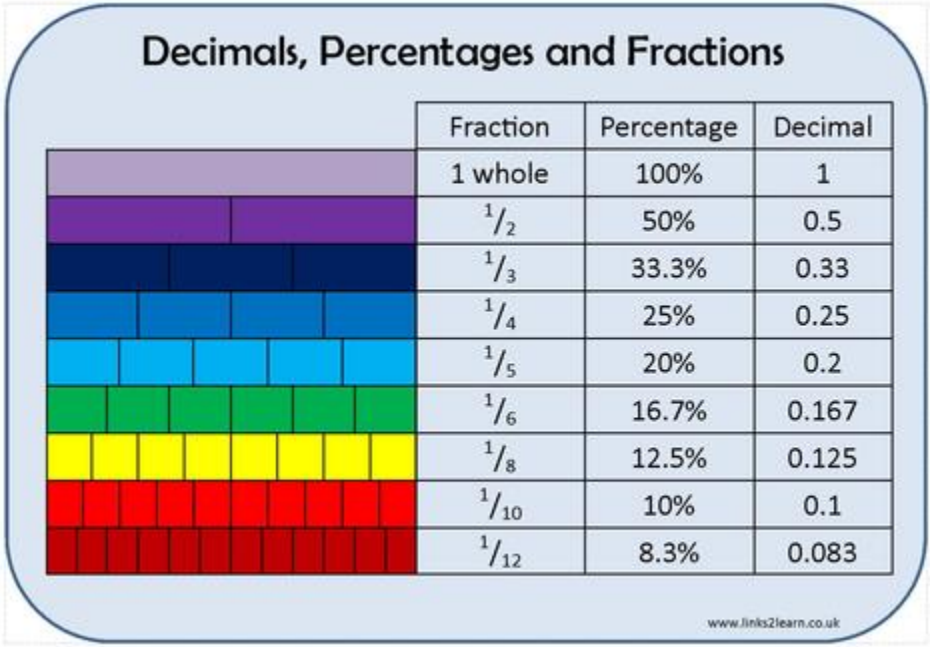
Year 7 Scheme of Work	Hours Required
N2 – Multiplication and Division	7
A2 – Expressions	6
Milestone Test 2	4

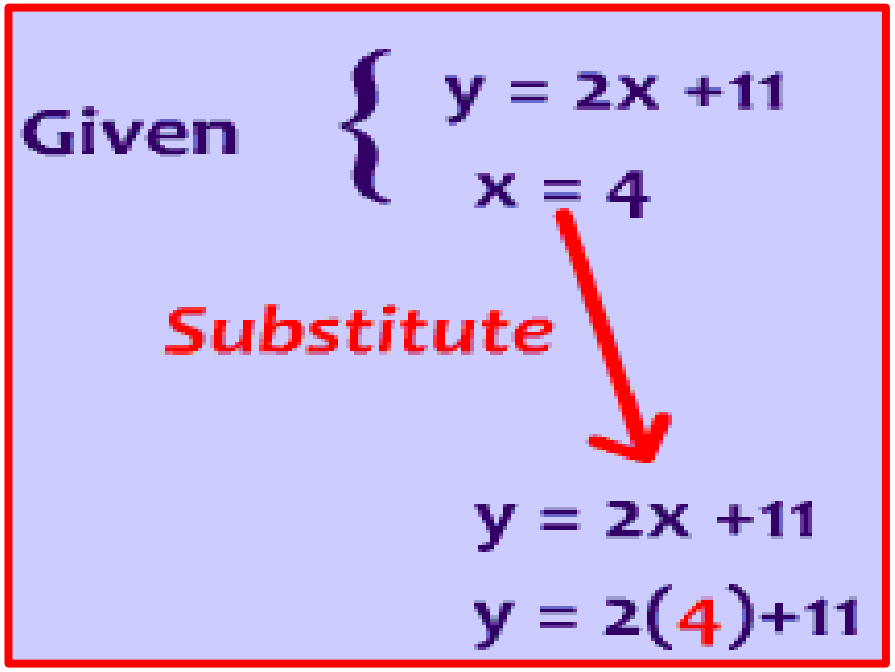




Year 7 Maths

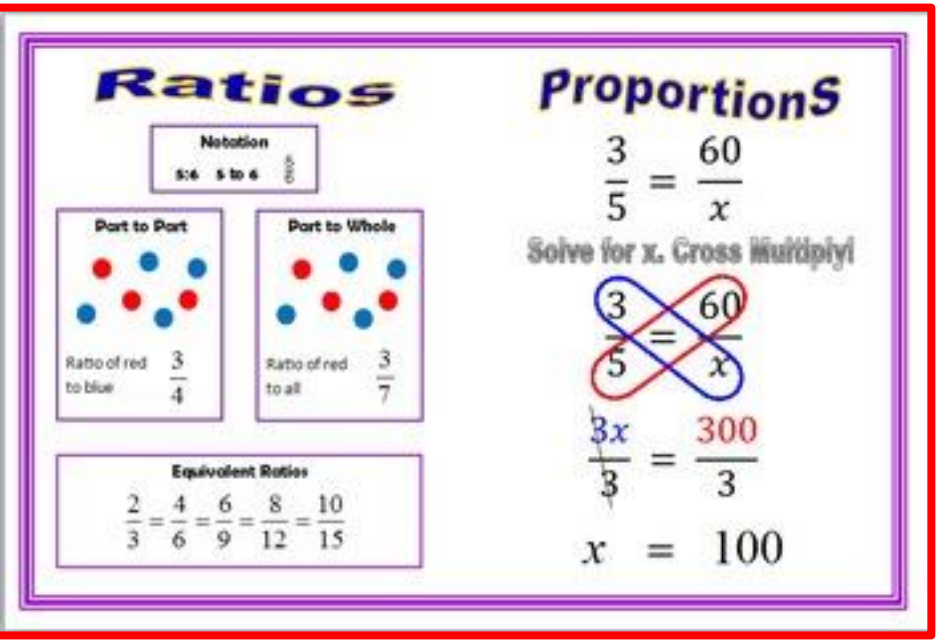
Year 7 Scheme of Work	Hours Required
N3 – Fractions, Decimals, percentages	6
A3 - Substitution	7
Milestone Test 3	4

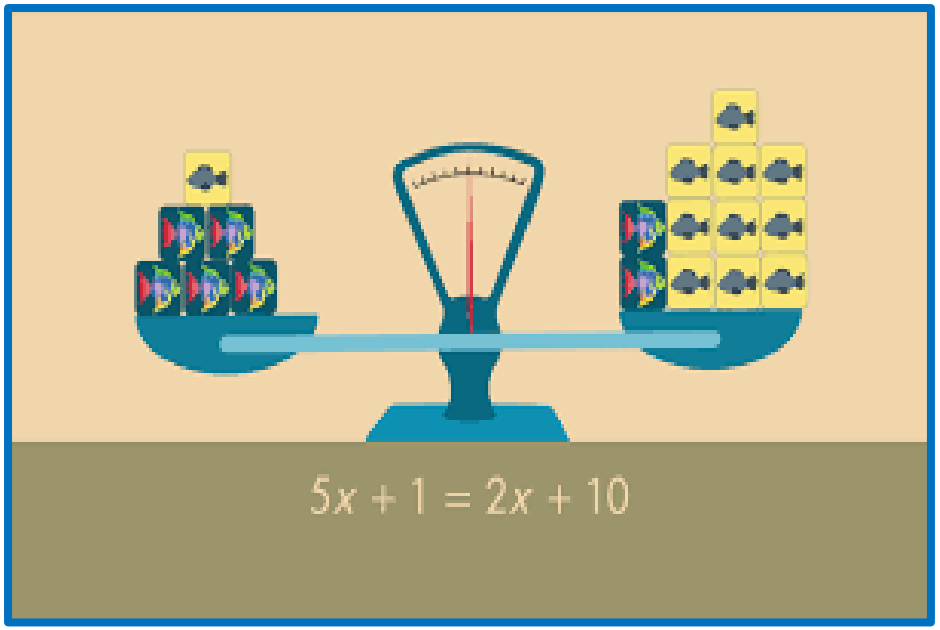




Year 7 Maths

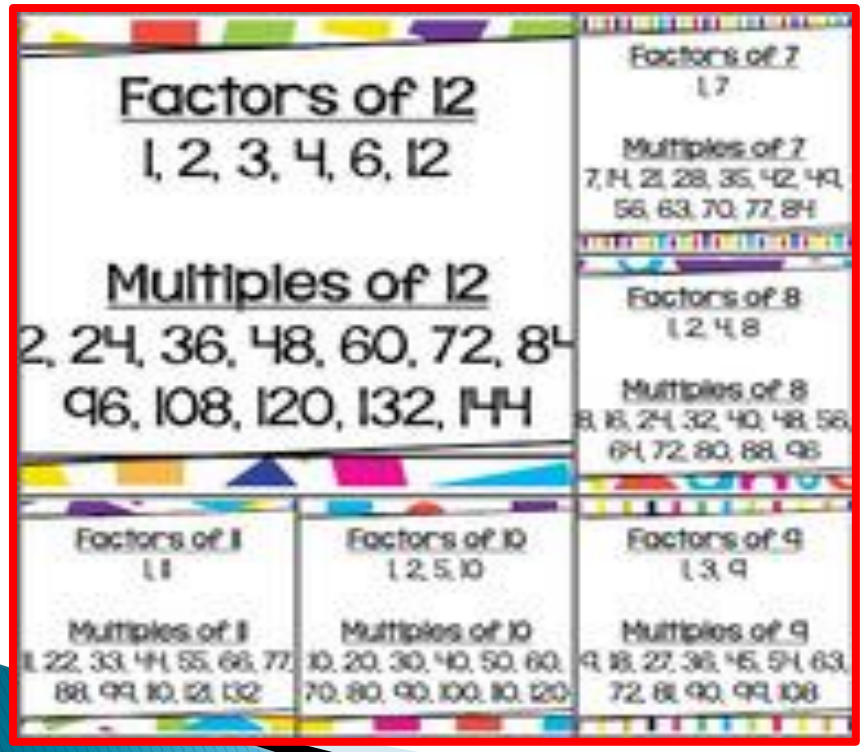
Year 7 Scheme of Work	Hours Required
N4 – Percentages, Ratio and Proportion	7
A4 – Equations	5
Milestone Test 4	4

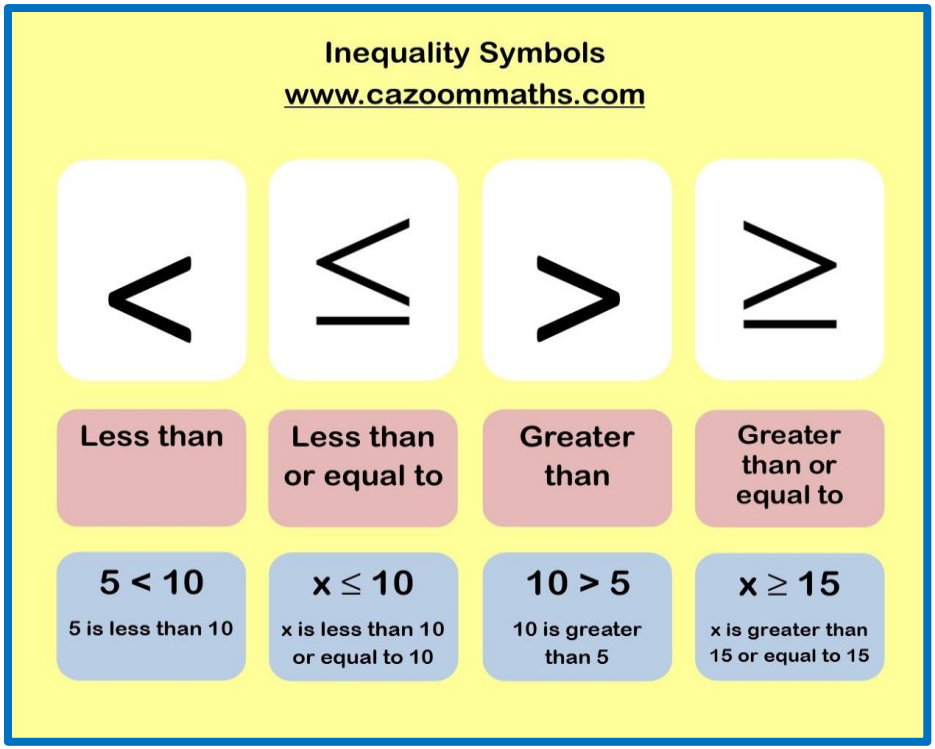




Year 7 Maths

Year 7 Scheme of Work	Hours Required
N5 – Multiples, Factors and Primes	6
A5 - Inequalities	5
Milestone Test 5	4
Total	81





Maths intervention

- Students' abilities assessed using Cognitive Ability Tests (CAT) and initial maths assessments

- Progress towards individual student MEG regular assessed

- Four additional qualified teachers run small group intervention sessions for identified students who are below target

How can you help your child succeed in maths?

- Fully equipped pencil case (calculator needed in year 8)
- Monitor Show My Homework
- Support with homework and deadlines
- Ask questions about topics
- Contact staff if there are any concerns. All staff emails are available on the website

(all emails in the same format: initialsurname@sackvilleschool.org.uk)

How can you help your child succeed in maths?

- Be positive about maths
- Involve them with maths in every day life
- Be positive about maths
- Do maths with them at home
- Be positive about maths
- Highlight when you are using maths
- Be positive about maths
- Play games with them
- **Be positive about maths!!**

Free Mathematics websites for parents and pupils

- www.hegartymaths.com

Access videos, quizzes and homework and get feedback and relevant maths practice

- www.timestables.co.uk

Learn your times tables 5 step plan with structured practice

- www.bbc.co.uk/bitesize/

Useful for maths instruction and practice

- https://www.topmarks.co.uk/maths-games/hit-the-button

Times table quick fire game

- www.mathszone.co.uk

Useful website with suggestions for interactive maths activities

- www.supermathsworld.com

Maths games

- www.coolmath.com

Maths games website

- www.crickweb.co.uk/ks2numeracy.html

Free online maths games resources

- www.educationquizzes.com/ks3

A maths games website

Any questions?