Key Stage 3
Curriculum Information Evening

Please make sure you have picked up an information pack from the back of the hall.

Introductions

- Mrs Frankish (Deputy Headteacher)
- Mr Watters (Assistant Headteacher)
- Mrs Roff (Associate Assistant Headteacher)
- Mr Barry (Pastoral Leader: Key Stage 3)

Aims of the evening

To update you on:

- the curriculum content
- teaching and learning in Years 7 and 8
- curriculum terminology and teaching methods used
- our expectations of homework
- use of home-school planners
- weekly expectations.

The KS3 Curriculum

- At Key Stage 3 we continue to build upon the firm foundations provided by our excellent Year 5 and Year 6 team.

- The Key Stage 3 curriculum provides a broad and balanced blend of academic, creative, active and technological subjects that bring out the best in each individual. At the same time, we continue to ensure that every pupil continues to make outstanding progress in reading, writing, speaking and listening, and numeracy by emphasising these skills across the curriculum. Pupils who display talents in these areas are also given the opportunity to compete against young people from other schools by taking part in competitions such as the UK Mathematics Challenge and the regional Literacy Quiz.

- Throughout Key Stages 2 and 3, the knowledge and skills developed in the classroom are further enhanced by a wide range of educational visits to theatres, historic monuments and other sites of educational interest and value.

- We encourage our pupils to have a broader understanding of society, religious diversity and healthy lifestyles through a comprehensive PSHE programme that is undertaken by all year groups on a weekly basis.

Timetable

The Key Stage 2 Week at HMS

- 4 hours of English incl. a library visit
- 2 hours of History and 2 hours of geography
- 2 hours of PE
- 4 hours of Maths
- Half a year DT; Half a year FT
- 2 hours of French
- 3 hours of science
- A weekly hour of: Art and Music
- 1 hour of PSHE and 1 hour of RE
- 1 hour of computing

Our curriculum is broad and balanced and we maintain this as much as possible throughout the whole school year.

English

Literacy across the curriculum

Language and literacy

Teachers should develop pupils' spoken language, reading, writing and vocabulary as integral aspects of the teaching of every subject. English is both a subject in its own right and the medium for teaching; for pupils, understanding the language provides access to the whole curriculum. Fluency in the English language is an essential foundation for success in all subjects.

Secondary National Curriculum p.10

Every teacher is a teacher of literacy

Reading

- Free choice reading material for all
- Library access once per week
- Novel based teaching linked to other curriculum areas where possible
- Focusing on:
  - reading widely (fiction and non-fiction) for pleasure, including prose, poetry, pre-1914 literature, re-reading.
  - reading for understanding, vocabulary development, comprehension, making inferences, finding evidence.
  - reading critically to understand conventions, make comparisons and analyse language choice, text structure and organisation.

Reading

- Read the first extract from Sherlock Holmes: the adventure of the Speckled Band

- Have a go at highlighting details about the woman who has come to visit Sherlock Holmes.
  - How can you tell this text is set during the Victorian times?
  - Why does Sherlock feel obliged to offer her a coffee?
  - What is unusual about her appearance?

How to support at home:

- Talk about reading! What is your child currently reading? What's the name of the main character? When was the last time your child read a newspaper or a non-fiction book?
- Encourage your child to relate to the characters. E.g. How do you think the character is feeling at this point? Why might they be feeling this way? How would you feel if you were in their situation?
- Reading Record on page 118 onwards in planner.

Grammar and vocabulary at KS3

- Consolidate and build upon knowledge of KS2 grammar and vocabulary
- Study more challenging texts
- Examine effectiveness of grammar and vocabulary
- Use grammatical constructions from their reading in writing and speech
- Understand differences between spoken and written English
- Use Standard English in writing and speech where appropriate.

Grammar and vocabulary task

- Read extract 2 from Sherlock Holmes: the adventure of the Speckled Band

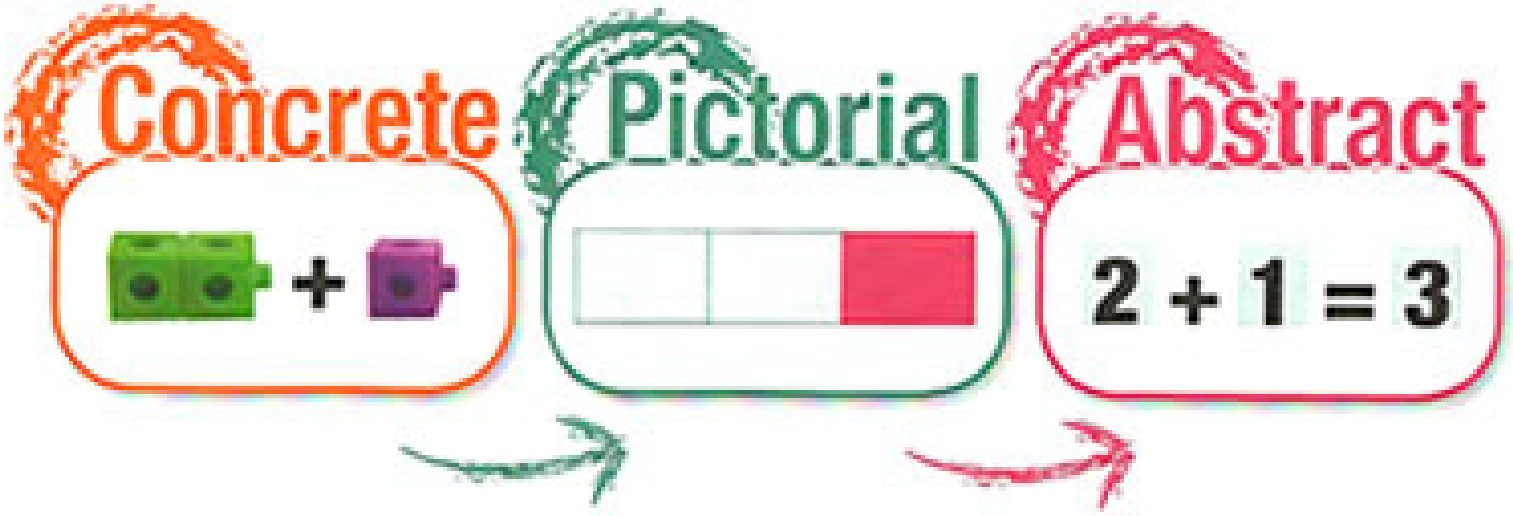
- This time, look at how the extract has been written to build tension
  - Can you find and highlight any examples of vocabulary which build tension?
  - How does the dialogue (speech) help to build tension?
  - Are there any sentences which are particularly tense? Why?

Handwriting

All children should be able to maintain legible joined handwriting when writing at speed.

Maths

Make maths visual and real



Maths HUBS
Great North

National Centre
for Excellence in the
Teaching of Mathematics

	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	**Algebraic Thinking**						**Place Value and Proportion**					
	Sequences		Understand and use algebraic notation		Equality and equivalence		Place value and ordering integers and decimals			Fraction, decimal and percentage equivalence		
Spring	**Applications of Number**						**Directed Number**			**Fractional Thinking**		
	Solving problems with addition & subtraction		Solving problems with multiplication and division			Fractions & percentages of amounts	Operations and equations with directed number			Addition and subtraction of fractions		
Summer	**Lines and Angles**						**Reasoning with Number**					
	Constructing, measuring and using geometric notation			Developing geometric reasoning			Developing number sense		Sets and probability		Prime numbers and proof	

	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	**Proportional Reasoning**						**Representations**					
	Ratio and scale		Multiplicative change		Multiplying and dividing fractions		Working in the Cartesian plane			Representing data		Tables & Probability
Spring	**Algebraic techniques**						**Developing Number**					
	Brackets, equations and inequalities				Sequences	Indices	Fractions and percentages			Standard index form		Number sense
Summer	**Developing Geometry**						**Reasoning with Data**					
	Angles in parallel lines and polygons		Area of trapezia and circles		Line symmetry and reflection		The data handling cycle				Measures of location	

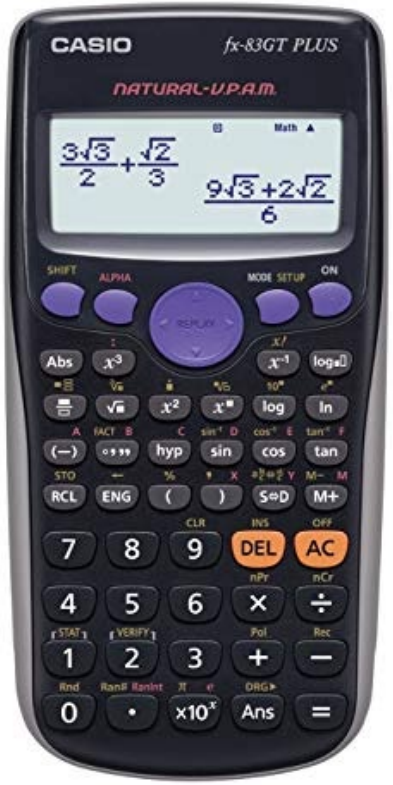
Our approach

- Maths is taught in a well-planned sequence of ‘blocks’.
- Each block of learning is built up in ‘small steps’.
- Each small step has links to other areas of the maths curriculum so that memory and retention of key concepts is enhanced.
- The curriculum content and concepts interleave one another.

Assessment

- Each block is assessed.
- Pupils will receive TLF feedback from their teacher and complete a yellow assessment overview in their books.
- Each term, pupils will complete a standardised summative assessment based on the content covered to date.
- Each lesson, formative assessment in the classroom informs next steps for planning.

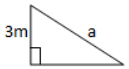
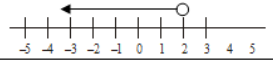
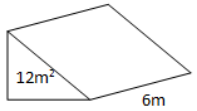
Scientific Calculators



Homework

HEXHAM MIDDLE SCHOOL **Maths Basic Skills** Level 7 Test 1

Name _____ **Date**_____ **Class**_____

Section A:Numbers & calculating		Section B: Algebra		Section C: Using and applying	
7.1 1. To increase an amount by 7%, what single multiplier would you use?		*7.6* 11. Expand & simplify: $(x + 2)(x + 3)$		21.  To find 'a' choose one calculation: $\sqrt{4^2 + 3^2}$ OR $\sqrt{4^2 - 3^2}$	
7.1 2. To decrease an amount by 7%, what single multiplier would you use?		*7.6* 12. Expand & simplify: $(x + 2)(x - 3)$			
7.2 3. Increase £28 by 7%		*7.8* 14. Solve: $x + 1 < 5$		22. 123 grams is rounded to nearest whole. Write down the maximum possible mass it could have been	
7.2 4. Decrease £28 by 7%		*7.8* 14. Give the inequality  			
7.3 5. Without a calculator work out: 0.2 x 0.3		*7.9* 15. Make n the subject of the formula: M=3n		23. A plane flies 1440miles at a speed of 240mph. How long does it take?	
7.3 6. Without a calculator work out: 5 ÷ 0.1		*7.9* 16. Work out the value of: 3x + 2y When x = 5 and y = -4			
7.4 7. Round off 17.2 to one significant figure		*7.10* 17. Write down the next term in this sequence: 1 4 9 16 25		24. If the relative frequency of getting a 'six' on a dice is 0.2, how many sixes would you expect to get in 200 throws of the dice?	
7.4 8. Estimate the answer to: 17 x 193		*7.10* 18. Write down the 1st term in the sequence given by: $T(n) = n^2 + 3$			
7.5 9. Use a calculator to work out: (1dp) $(0.3 \times 2.8)^2$		*7.11* 19. If $y = 3x^2 + 4$, find the value of y when x = 2		25. Work out the volume of this prism?  	
7.5 10. Use a calculator to work out: (1dp) $\frac{6.38 + 4.52}{4.71 + 9.53}$		*7.11* 20. If $y = x^3 + 3$, find the value of y when x = 2			
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

MyMaths

Arithmetic

- Pupils must be fluent in their use of all four operations with large and decimal numbers.
- It is hugely important that pupils work with pace **and** accuracy and develop their mental skills to answer initial questions quickly.
- Confidence in these written methods will assist pupils in their problem solving.
- This focus cannot end in KS2! All of the hard work and progress must be maintained.

3478 x 54 =

22% of 640=

3248 = 56 x

4368 ÷ 56 = ☐

457,628 + ☐ = 234,821 + 672,901

4999 + 3005 =

$\frac{3}{5} \div 3 =$

REASONING CHAINS

Because I know…

7 x 8 = 56

70 x 80 =

800 x 70 =

0.8 x 0.7 =

5600 ÷ 70 =

Year 7

Which of these expressions will be equal when $x = 2$?

$2x$	$\frac{x}{2}$	$\frac{2}{x}$	$x + 2$
$2 + x$	$x - 2$	$2 - x$	x^2

Put the expressions in order from smallest to largest for different values of x
(Try $x = 1,\ x = 0.4,\ x = 100,\ x = 0 \ldots$)
Which expressions will always be equal, whatever the value of x?

Simplify these expressions so they have only one term.

$7a + 2a$	$3a + 4a + 5a$	$10b - 3b + 5b$
$6x^2 + 5x^2$	$2ab + 6ab - 3ab$	$10 + 6 - 3$

Put your answers to the following in descending order.

- $180\,000 - 42\,781$
- 360×25
- One billion divided by forty-thousand
- The sixth term of the sequence 200 , 800 , 3200 ….
- The value of x^2 when $x = 305$
- Two hundred thousand more than 610 408

Work out the value of these expressions if $a = 72, b = 0.6$ and $c = 125$
Give your answers correct to one significant figure.

- $a + b + c$
- $\frac{a}{b}$
- ab
- $\frac{b}{c}$
- c^2

Year 8

On the same axes, draw the graphs of the following equations by completing the table of values.
Discuss key features of each graph.

$y = 3x - 1$

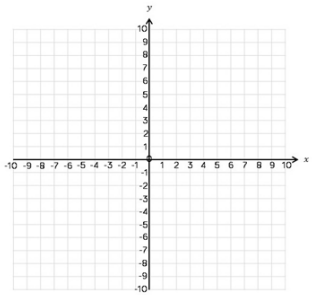
x	−3	0	3
y			

$y = \frac{1}{2}x + 3$

x	−6	0	6
y			

$y = -2x + 6$

x	−2	0	2
y			



Plotting the graphs can help identify any errors in your table.

Alex

Comment on Alex's statement. What does she mean?

There are 24 chocolates in a box. $\frac{1}{3}$ are dark chocolate and the rest are milk chocolate. Of these, some have a soft centre and the rest have a chewy centre. 5 of the milk chocolates have a chewy centre. 25% of the dark chocolates have a soft centre.

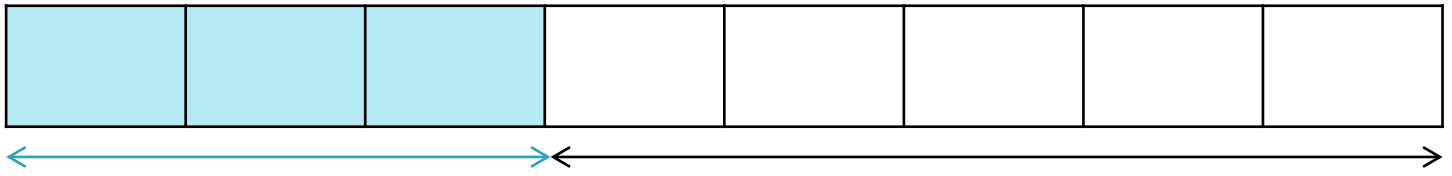
Complete the two-way table.

Write down the ratio of soft chocolates to chewy chocolates.

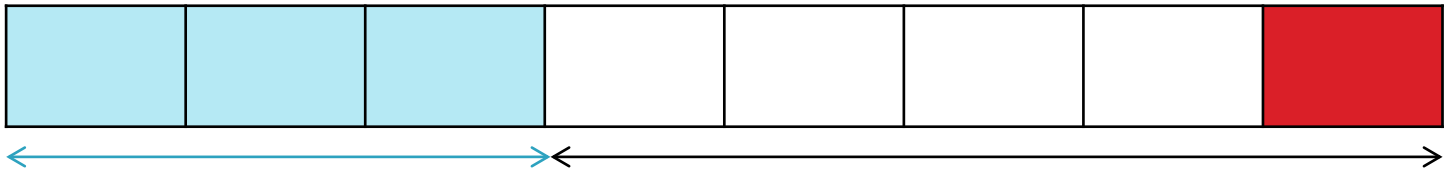
	Soft		
Milk			
Totals			

Bar model

In a class, 15 of the children are girls. $\frac{3}{8}$ of the class are boys. Altogether, how many children are in the class?



$\frac{5}{8} = 15$



$\frac{1}{8} = 3$

Multi-step problems

Six footballs cost the same as three cricket balls.

Two cricket balls cost £4.20

How much does **one** football cost?

How could I represent this problem using bar models?

Now, a challenge…

The school site covers 8000m^2. The buildings take up 3/5 of the area of the school site. Hard play areas occupy ¼ of what is left and the rest is footpaths and grass. The area of grass is seven times the area of footpaths.

How many square metres of the site is covered by grass?

Foundation GCSE

By rounding each number to the nearest 10,

estimate the answer to $\frac{61 \times 47}{102}$

You **must** show your working.

[2 marks]

9 Work out 25.68 ÷ 12

[2 marks]

15 In a school show,

girls : boys = 1 : 1

girls who sing : girls who do not sing = 1 : 2

8 girls **sing** in the show.

How many students are in the show altogether?

[3 marks]

Higher GCSE

4 $a : b = 4 : 3$

Circle the correct statement.

[1 mark]

b is $\frac{4}{7}$ of a $\quad$ b is $\frac{3}{7}$ of a $\quad$ b is $\frac{4}{3}$ of a $\quad$ b is $\frac{3}{4}$ of a

7 $\frac{3}{5}$ of a number is 162

Work out the number.

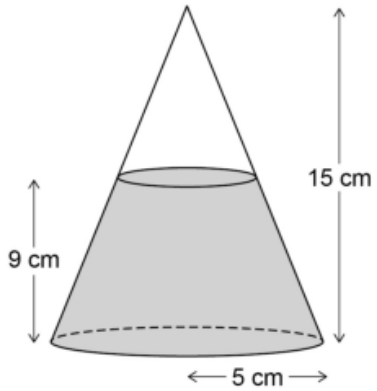
28 Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height.

A cone has a

horizontal base of radius 5 cm

height of 15 cm

The cone contains water to a depth of 9 cm



Work out the volume of the water, in cm^3

Give your answer in terms of π.

[4 marks]

Memory and Retention

- It is so important that we model to our pupils how to remember key learning.
- Regular short, informal quizzes and assessment in class help this.
- Try to build in opportunities at home for this too where possible.

- Our homework really works with this in mind!

How we teach these methods

Please refer to the ‘Methods’ sheet on your table.

Worked examples of calculations shown.

Pages 173-176 in the pupil planner are also useful!

Science

Our science syllabus is designed to create engaging lessons, promoting teaching for understanding.

A spiral curriculum, with a logical order of objectives, uses big ideas and mastery goals to equip pupils for success at GCSE.

Pupils have three science lessons per week covering Biology, Chemistry and Physics topics.

Pupils will be assessed on classwork and homework with an end of topic test.

Practical work is a vital part of our curriculum, preparing pupils for the apparatus and techniques aspect of GCSE.

The big ideas principle

Using the big ideas principle, the generalisations, principles and models which connect concepts are at the heart of our syllabus. We believe this is how students learn to see the world analytically, to explain phenomena and make predictions – all skills they need for their next stage of scientific learning.

Enquiry processes: working scientifically

Analyse

- Analyse patterns
- Discuss limitations
- Draw conclusions
- Present data

Communicate

- Communicate ideas
- Construct explanations
- Critique claims
- Justify opinions

Enquire

- Collect data
- Devise questions
- Plan variables
- Test hypotheses

Solve

- Estimate risks
- Examine consequences
- Review theories
- Interrogate sources

STEM

To support the work in lessons we organise a number of Science, Technology, Engineering and Mathematics activity days throughout the year.

This term we will be working with partnership schools in Tynedale and Ethiopia to highlight issues relating to sustainability and clean water.

Later in the year we will be working with Newcastle University on a STEM project.

Humanities

"Remember the past, explore the present and consider the future."

History:

There are 5 curriculum objectives which teachers use to assess learning. They include:

- Chronological awareness
- Historical knowledge and understanding
- Interpretations of history
- Historical enquiry; and
- Organisation and communication

Pupils are required to write with increasing confidence, depth and breadth as they journey through years 7 and 8, applying their subject disciplinary literacy.

History Curriculum Overview

In **year 7** pupils will learn about:

- Medieval Britain (The Norman Conquest)
- The Church, State and Society
- The English Civil War and Reformation

In **year 8** pupils will learn about:

- The Slave Trade
- The Industrial Revolution
- The French Revolution

- Geography

- There are 3 curriculum objectives which teachers use to assess learning. They include:
- - Geographical knowledge
- - Geographical understanding
- - Geographical skills and enquiry

Pupils learn about the human and physical dimensions of our world, exploring ‘location and place’ in terms of the world and its continents and consider connections between places. They will also gain more experience in the use of maps and atlases to understand our world. Fieldwork and investigation will play a key role in unlocking knowledge activating pupil participation.

Geography Curriculum Overview

In **year 7** pupils will learn about:

- Russia
- Tectonics
- Settlement
- Coasts

In **year 8** pupils will learn about:

- Earth's Resources
- Our Risky World
- Middle East
- Changing China
- International Development
- Tourism

KS3 Weekly Expectations

Hexham Middle School

EXPECTATIONS AT KEY STAGE 3

Daily:

- Read for at least 20 minutes
- Practise your spellings
- Take your planner home for an adult to see (and remember to bring it back the next day!)

Weekly:

- Change your reading book if you need to
- Complete your spelling score tracker in your planner (p. 37) and stick in your new spellings to practise
- Complete your homework
- Use Times Tables Rockstars at least 3 times per week. (Can be done in school rather than at home during lunch times.)
- Get your planner signed by an adult (preferably at the end of the week)
- Check your bag for letters that need to be given to someone at home

Occasionally:

- Complete some additional revision or practice using online or CGP resources
- Watch or read the news

Online support:

Homework

Key Stage 2	Subject	Key Stage 3
At least one piece or project every 2 weeks	**Science**	Once per week
n/a	**History/Geography**	Weeks 1, 3 and 5 half-termly
A series of pieces or one substantial project per half term.	**Explore**	n/a
At least once per half term	**French**	Weeks 2 and 6 half-termly
At least once per half term	**Religious Education**	Week 4 half-termly
At least once per half term	**Design Technology (Y5, 7 and 8)**	A series of pieces or one substantial project per half term.
At least once per half term. Cookery ingredients will be required fortnightly	**Food Technology (Y6, 7 and 8)**	A series of pieces or one substantial project per half term. Cookery ingredients will be required fortnightly
At least once per half term	**Art**	A series of pieces or one substantial project per half term.
At least once per half term	**Music**	A series of pieces or one substantial project per half term.

Supporting Learning

kerboodle

readingplus

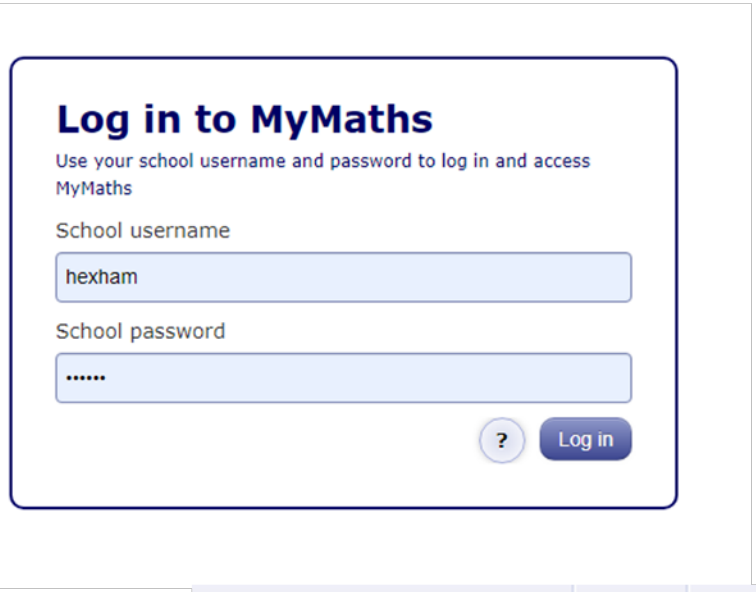
SCHOOL 360°

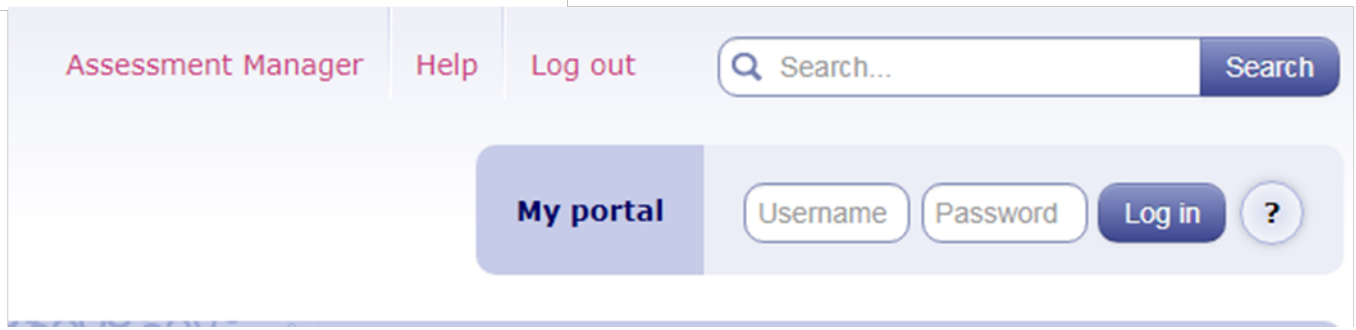
thrive

MyMaths.co.uk

Times Tables Rock Stars

My Maths – demo





Home-school planner

- Equipment list
- Steps to success at HMS
- Assessment Pages
- Spelling and arithmetic log
- Homework pages (recording)
- Guidance and support pages (blue and green)

Physical and emotional wellbeing

- Top tips on pages 184-185 in the pupil planner

CGP

As a school, we have used CGP resources for a few years now.

There are MANY other great resources out there but we find that CGP have always provided a range of support and challenge materials for our pupils.

Order forms for resources at special school prices are available.

We would encourage all pupils to place an order. If you are unsure what to order, please speak to a teacher.

Extra curricular opportunities

We place a huge emphasis on developing a love and appreciation of our subjects by planning events such as:

- STEM Days
- Author visits and workshops
- Theatre visits
- Handwriting and reading competitions
- Taking part in the Kids' Lit Quiz
- UK Maths Challenge Days
- Visits out of school to inspire writing
- Residential visits to consolidate learning
- A wide selection of clubs within the school day including access to the school's library for quiet study time.

Website tour

- Examples of resources on our school website.

Thank you for attending; we look forward to seeing you at future events in school.