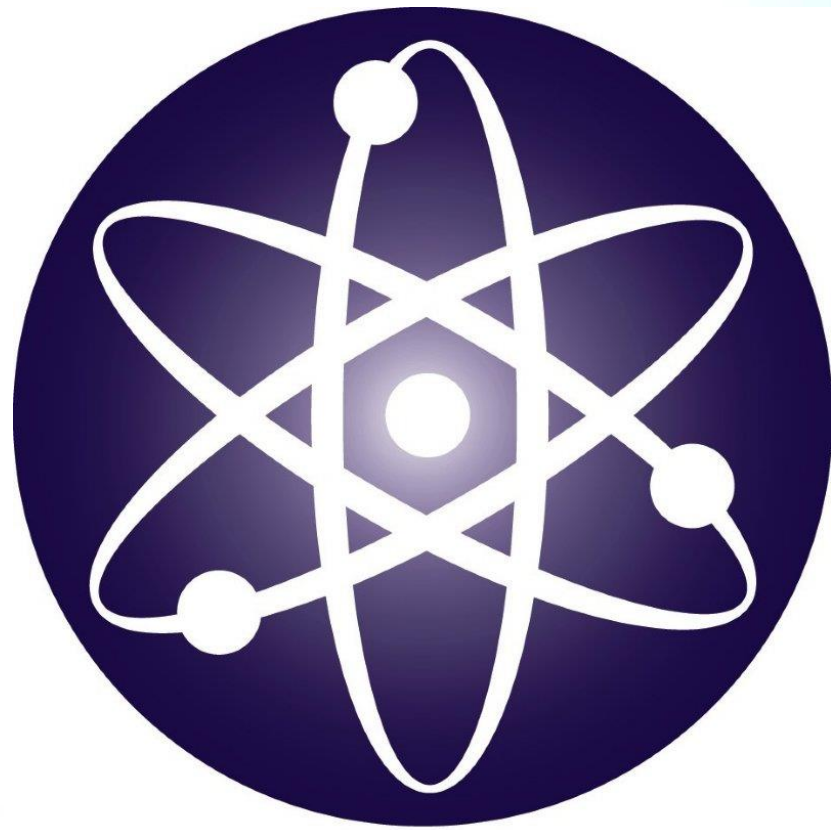
A close-up, slightly blurred photograph of a hand holding a glass of orange juice. A slice of lemon is perched on the rim of the glass. The background is a soft, out-of-focus mix of light blue and white.

**‘embracing
failure’**

Supporting Year 7 students
in...



Mathematics

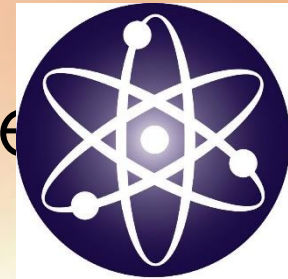


Science

Miss Hart

Questions I hope to answer...

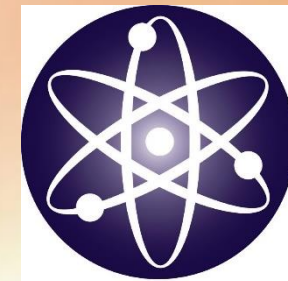
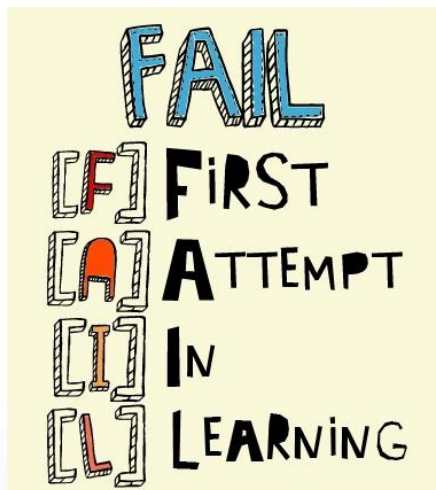
1. What will your child be studying in science this year?
2. How does their study of science change throughout the school?
3. How will they be assessed this year?
4. What extracurricular activities can they do?
5. What can you do to support the



Year 7

Key aims...

1. Instil a love of science
2. Develop Growth Mindset attitude
3. Ensure a secure foundation of key scientific ideas



Year 7

Key Scientific ideas:

Cells

Particles

Forces

Energy

Space

Ecology

Electricity

Key Scientific skills:

Making predictions

Understanding variables

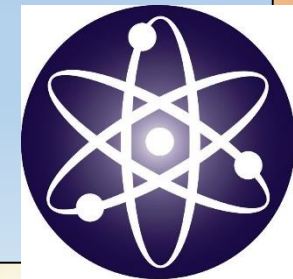
Conducting safe experiments

Using and criticizing evidence

Conclusions

Using models

Ethics in science



Year 7

HESTON COMMUNITY SCHOOL: YEAR 7 Winter Term

	Cells, tissues and organs	
1	I can identify animal and plant cells I can describe functions of major organs	
2	I can label the parts of animal and plant cells I can define a tissue and give examples I can define diffusion and give examples I can describe how to make a slide and use a light microscope I can explain what different parts of a cell do	
3	I can explain what different tissues do I can explain the function of some organs and organ systems I can draw conclusions about a cells function from its adaptations	
4	I can analyse how a range of factors that affect the rate of diffusion	

	Reproduction	
1	I can label the reproductive organs in humans I can identify some ways maternal lifestyle effects a foetus	
2	I can describe how reproductive cells are adapted to their function I can explain the function of the reproductive organs	
3	I can link the menstrual cycle and fertilisation with infertility I can explain and compare though investigation some seed dispersal methods	
4	I can evaluate the use of IVF	

	Particles and mixtures	
1	I can draw particle diagrams of each state I can identify some ways to separate mixtures I can describe the difference between a mixture and a pure substance	
2	I can describe the properties of the 3 states I can state the names of the changes of state I can describe dissolving using terms such as soluble, solute, solvent and solution I can explain how changes of state occur in terms of particle energy	
3	I can describe how gas pressure occurs I can select appropriate separation methods and justify my reasons I can explain how impurity can affect melting and boiling points I can explain separation techniques with detailed reference to the particle model	
4	I can explain the differences between simple and fractional distillation	
5	I can explain how the products of fractional distillation are linked to boiling points	

	Forces	
1	I can identify some forces and classify as contact or non-contact I can describe the effect of friction I can describe how force affects spring extension I can explain the effect of balanced and unbalanced forces	
2	I can calculate a resultant force I can explain ways to increase and reduce friction I can recall and calculate a force using Hooke's Law	
3	I can explain why vehicles have a top speed I can apply Hooke's Law to calculate extension and spring constant	
4	I can explain the meaning of "equilibrium situation" and "Newton's third law"	

	Working Scientifically	
1	I can follow instructions to conduct safe scientific investigations I can make simple hypotheses and predictions I can identify variables I can correctly use some SI units I can record results in tables I can use simple equations to carry out calculations I can identify simple patterns in tables and graphs I can draw conclusions from data	
2	I can explain independent, dependent and control variables I can explain hazards and risks in an experiment I can record results in tables using the correct number of d.p. I can do data analysis to calculate mean I can evaluate repeatability I can draw line and bar graphs I can identify anomalous results and explain how to handle them I can recall required formula	
3	I can write detailed conclusion with reference to data and hypotheses I can suggest improvements to methods I can suggest a wide range of precautions to ensure a practical is conducted safely I can suggest further questions that arise from investigations I can evaluate the use of scientific models I can explain ethical, personal, social, economic and environmental issues in science	
4	I can manipulate formula to change the subject of the calculation I can write a detailed risk assessment using CLEAPSS I can explain the meaning of "directly proportional" I can calculate the gradient of a line graph	

Years 8 - 13

Year 8 (Graded 1-9)

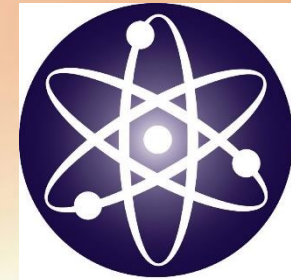
- Similar to year 7

Year 9 -11 (Graded 1-9)

- Separate Science (3 GCSEs – Biology, Chemistry, Physics)
- Combined Science (2 GCSEs)

Year 12-13 (Graded A*-E)

- Biology, Chemistry, Physics A-levels

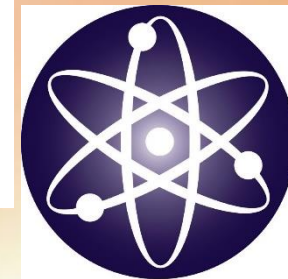


Years 7 Assessment

1. Recall and Literacy tests

Recall and Literacy Quiz: Year 7 Winter Term

1	The nucleus controls the activities of a cell.
2	The cytoplasm is the site of chemical reactions .
3	The cell membrane controls what exits and enters the cell.
4	The mitochondria is the site of respiration , to release energy.
5	The cell wall supports plant and bacteria cells.
6	The vacuole contains cell sap.
7	Chloroplasts contains chlorophyll , it is the site of photosynthesis .
8	Tissues are a group of similar cells.
9	Unicellular organisms have only one cell.
10	Substances move in and out of cells by diffusion .
11	The skeleton is for protection, support, movement and to produce blood cells.
12	Muscles work in antagonistic pairs.
13	Sperm and eggs are sex cells called gametes .
14	Testes produce sperm.
15	Ovaries produce eggs.
16	Eggs travel down the oviduct to the uterus .
17	When the egg and sperm meet this is called fertilisation .
18	The menstrual cycle takes 28 days.
19	When an egg is released this is called ovulation .
20	An embryo takes 9 months to develop.
21	Cigarettes and alcohol are harmful to the baby.
22	The three states of matter are solid , liquid and gas .
23	Particles in a solid vibrate and have strong bonds.
24	Particles in a gas move quickly and have weak bonds.
25	If a gas becomes a liquid this is called condensation .
26	If a liquid becomes a solid this is called freezing .
27	A mixture is made of a solute (solid) and a solvent (liquid).
28	If substances are insoluble they will not dissolve .
29	Chromatography is used to separate dyes.
30	Distillation separates mixed liquids.
31	Force is measured in Newtons .
32	Balanced forces produce no change in movement.
33	Unbalanced forces produce a change in speed or direction.
34	Friction stops objects sliding past each other.
35	Hooke's Law : $\text{Force} = \text{spring constant} \times \text{extension}$



Years 7 Assessment

1. Recall and Literacy tests

2. Assessed Tasks

- Marked by teachers
- Improved by students (green pen)

Year 7: Multicellular organism assessment

The heart is an organ made of many tissue types. Follow the levelled criteria to explain how these tissues work together so that the heart can function to keep us alive.



Keywords: Specialised cells, Tissues, Organs, Organ system, Multicellular organism, Epithelial, Glandular, Muscular, Oxygen, Circulatory, Coronary artery.

Level	Criteria	
3	Define the term multicellular organism	
4	Explain how multicellular organisms are organised	
	Define a tissue	
	Give examples of tissue types found in the heart	
5	Explain the function of each tissue and how this relates to the role of the heart	
	Explain how and why the structure of the stomach is different to the heart with reference to the tissues.	
6	Explain how a heart attack can occur and why this can be fatal	



Years 7 Assessment

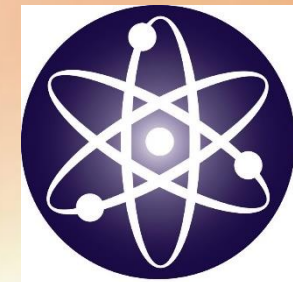
1. Recall and Literacy tests

2. Assessed Tasks

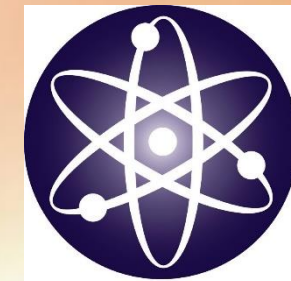
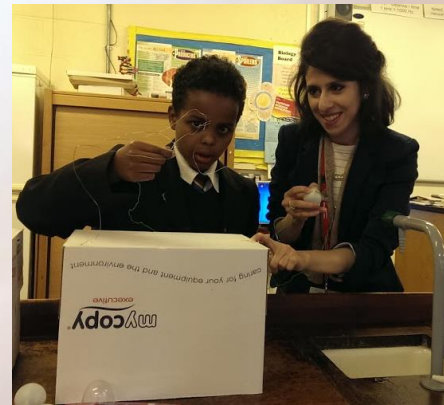
- Marked by teachers
- Improved by students (green pen)

3. Exams

- End of term – winter and spring
- End of year



Science Club

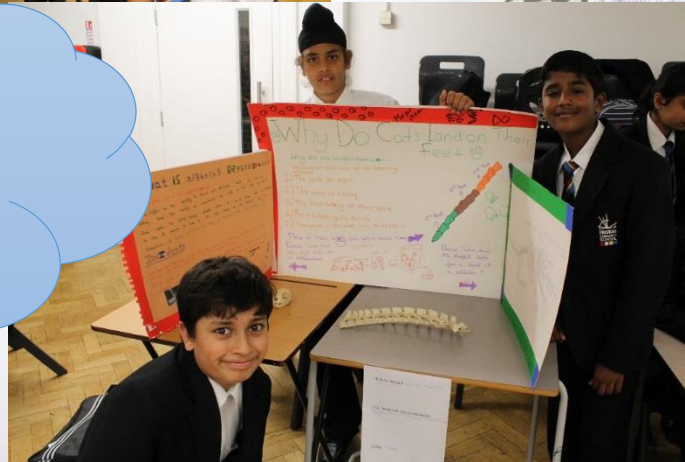


Every
Wednesday
3.15-4.15pm

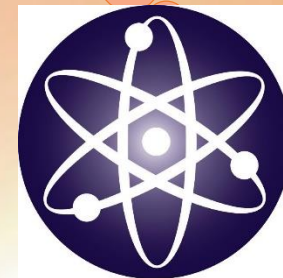
Science Fair



Can we
predict
Earthquakes?



Are all snow
flakes
unique?



Science Competitions



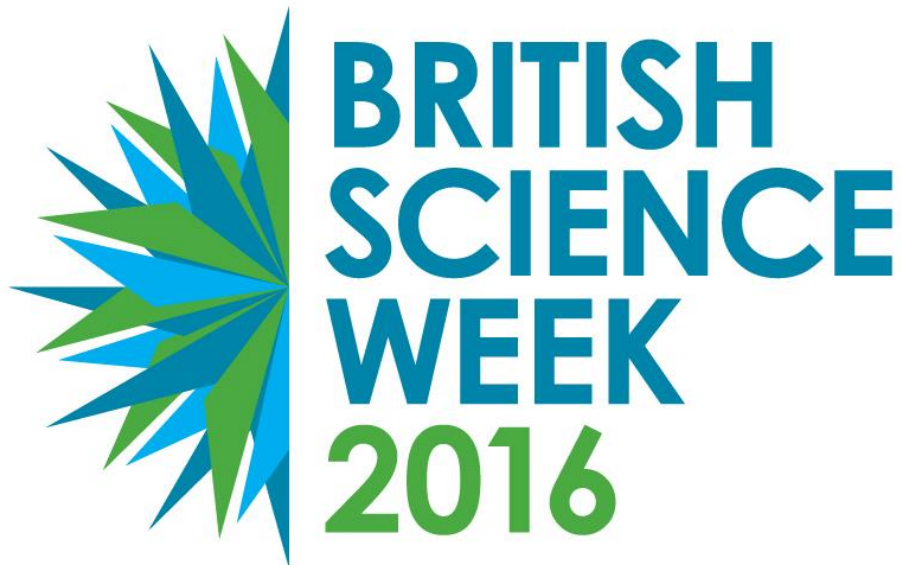
ROYAL SOCIETY
OF CHEMISTRY



NHS
Careers



MR NEWTON CONGRATULATES
THE INSTITUTE OF PHYSICS PHYSICISTS
OF THE YEAR AWARD WINNERS



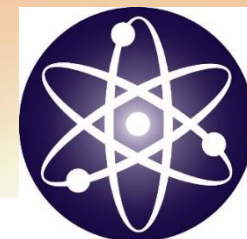
**BRITISH
SCIENCE
WEEK
2016**



World Space Week
October 4 - 10

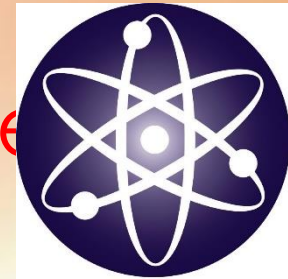
**Should developing
countries have space
programmes?**

MAX 600 WORDS
ENTER BY 16th OCTOBER
ESSAYS TO MISS HART



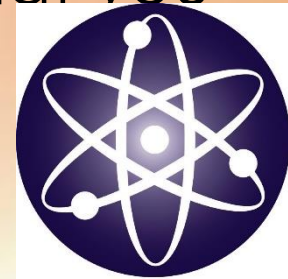
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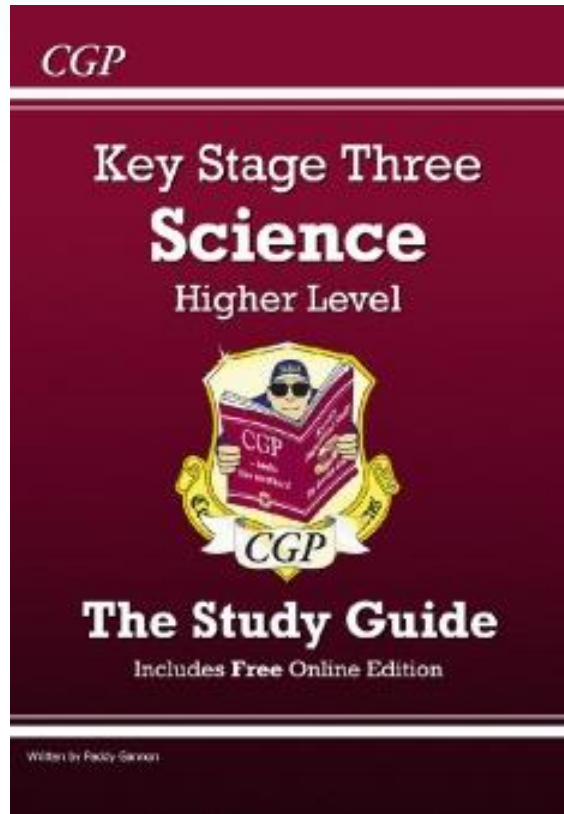



Supporting your child

1. Discuss your child's progress with them.
2. Celebrate their achievement and encourage them to push their boundaries
3. Embrace mistakes
4. Discuss topical scientific developments and controversies
5. Visit science museums
6. Set challenges to find out about topics that interest them and report back to you
7. Encourage them to make games/ quizzes that you can play together
8. Get them to research career pathways



Resources

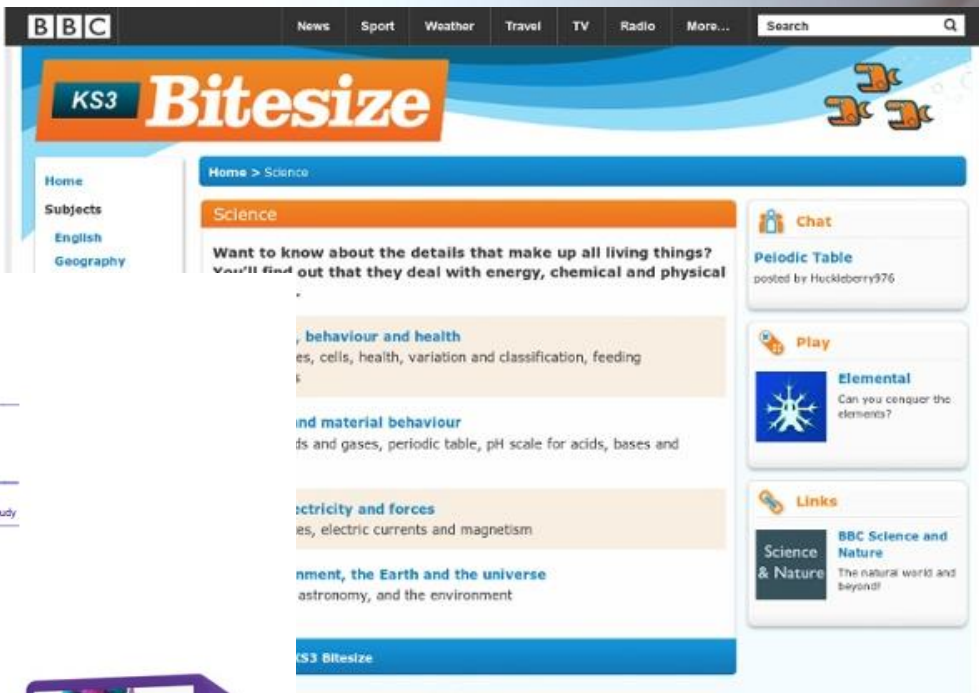





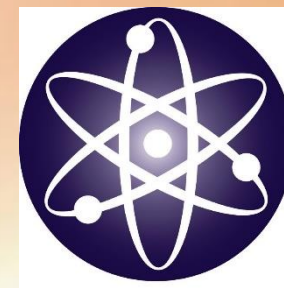
AQA
Realising potential

KEY STAGE 3 SCIENCE

Syllabus
An approach to teaching the programme of study
Version 3.2 June 2015









THE TEAM

Mr O'Keeffe

Director of English

Ms D'Lima

Assistant Curriculum Leader

Ms Chandegra

Assistant Curriculum Leader

Ms Currie

Assistant Head teacher

Ms MacDonald

Ms Birk

Ms Farmer

Ms Korzeniowska

Ms McNulty

Mr Juriansz

Mr Young

Ms Neenan





HCS @HestonCS · 27s

You could have worn a mask Mr O'Keefe! ... great work by the English Department #WorldBookDay



SPAG Learning Ladder (LangAO6+Lit AO4)

1.6

- I can spell most common words, including the correct spelling of most past and present tense words and plurals.
- I can use full stops, capital letters, question and exclamation marks accurately. I can use commas to join independent clauses and am starting to use speech marks.
- I can write some complex sentences that have main and subordinate (less important, information adding) clauses.
- I can select vocabulary (that is sometimes new) to create deliberate effects across a range of writing.

1.5

- I can spell most common words, including adverbs that end in 'ly'.
- I can use full stops, capital letters and question marks accurately. I am starting to use commas to join some parts of my sentences.
- I can write simple sentences. I try to write compound sentences, linking parts of my sentences using words such as 'and', 'so' and 'but'.
- Sometimes I can select and use particular words or phrases for effect.

1.4

- I can spell most common words, including compound words, correctly.
- I can use capital letters and full stops correctly in all of my sentences.
- I can write using simple sentences.
- I can use vocabulary that is appropriate to task and content.

SPAG Learning Ladder (LangAO6+Lit AO4)

4

- I can spell common words throughout and can spell some ambitious or uncommon words, including those with unstressed syllables or words with double vowels or consonants.
- I can use a wide range of punctuation in my writing, including brackets, hyphens and ellipsis.
- There is a variety of simple, compound and complex sentences, usually used accurately, in my writing.
- I choose simple and ambitious vocabulary to suit the needs to the task and audience.

3

- I can spell most common words, including those that are made up from other words with suffixes or prefixes.
- I can use full stops, capital letters, question and exclamation marks and speech marks accurately. I use commas to mark clauses.
- There is some variety in the length and structure of my compound and simple sentences; I have used some simple connectives such as 'although' and 'meanwhile'. I have attempted to use complex sentences.
- Across a range of writing I use a variety of simple and advanced vocabulary, choosing particular words for effect.

2

- I can spell most common words, including the correct spelling of most words with two or three sounds/syllables.
- I can use full stops, capital letters, question and exclamation marks accurately. I can use commas in lists and sometimes in sentences. I attempt to use speech marks.
- There is some variety in the length and structure of my compound and simple sentences; I have used some simple connectives such as 'if', 'when' and 'because'.
- I have used simple and some complex vocabulary in my writing; I sometimes select words to create deliberate effects.

English Language	English Literature
<p>AO1 Identify and interpret explicit and implicit information and ideas.</p> <p>Select and synthesise evidence from different texts.</p>	<p>AO1 Read, understand and respond to texts Students should be able to:</p> <ul style="list-style-type: none"> • maintain a critical style and develop an informed personal response • use textual references, including quotations, to support and illustrate interpretations
<p>AO2 Explain, comment on and analyse how writers use language and structure to achieve effects and influence readers, using relevant subject terminology to support their views.</p>	<p>AO2 Analyse the language, form and structure used by a writer to create meanings and effects, using relevant subject terminology where appropriate</p>
<p>AO3 Compare writers' ideas and perspectives, as well as how these are conveyed, across two or more texts.</p>	<p>AO3 Show understanding of the relationships between texts and the contexts in which they were written</p>
<p>AO4 Evaluate texts critically and support this with appropriate textual references.</p>	<p>AO4 Use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation</p>
<p>AO5 Communicate clearly, effectively and imaginatively, selecting and adapting tone, style and register for different forms, purposes and audiences.</p> <p>Organise information and ideas, using structural and grammatical features to support coherence and cohesion of texts.</p>	
<p>AO6 Use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation.</p>	

Year 7

Literature Extract Studies/reading skills - Gothic Theme

Assessment – Language Paper 1 – AOs 1, 2, 4 (In the style of questions 1-4 of this paper).

Descriptive/Narrative Writing 19th Century novel extracts to inform their own writing.

Assessment – Language Paper 1 – AOs, 5, 6 (In the style of Section B Question 5).



Assessment

New	Current
0.1	1
0.2	2C
0.3	2b- 2A
1.1	3C
1.2	3B
1.3	4C – 3A

New	Current
2	4B-5b F/G
3	5a – 6a E-D
4	6B – 7C D+ - C
5	7 C+ – B-
6	8 B – B+
7	A
8	A*
9	A**

Our Philosophy

In our team we recognise the profound influence assessment has on the motivation and self-esteem of students, both of which are crucial to learning. We believe that by identifying, recognising and celebrating both achievement and attainment, in conjunction with assessment, the overall development and therefore progress of each student's skills in English is secured.

Rationale

To ensure that all students have their work assessed in such a way is formative to their learning and progress in English. To ensure that assessment develops the self-esteem of all students whilst providing opportunities for self and peer-assessment in order to facilitate reflection and improvement.



Regular assessment will:

- Provide effective feedback to students and parents
- Actively involve students in their own learning
- Help evaluate teaching and inform future planning
- Motivate students by rewarding positive achievement
- Diagnose under achievement and inform future interventions at all Key Stages













Accelerated Reader – Miss D'Lima,
Assistant Curriculum Leader of English

It is vitally important that students read widely as this is beneficial across every Curriculum Area. Heston is a reading school and a member of the Accelerated Reader programme.

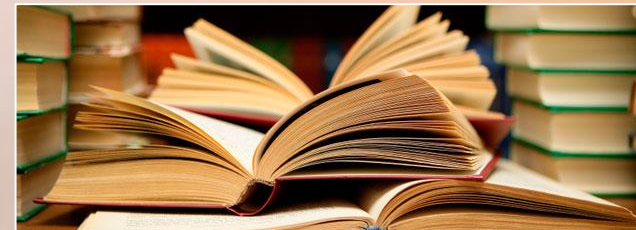
Today a
READER,
tomorrow a
LEADER.

Margaret Fuller



Imagination
SQUAD

"A reader lives a thousand lives before he dies. The man who never reads lives only one." - **George R.R. Martin**



Why is it important to read widely?

- Broadens vocabulary
- Develops literacy skills (uses of tenses, sentence structure, spelling)
- Broadens general knowledge
- Leads to more highly-developed language skills and improves your ability to write well
- Reinforces student effort – and independence!
- Develops skills in note taking - preparing for exams and Higher Education
- Creates opportunities for further teacher praise and reward

1. Students have already taken a Reading Age test to work out their current reading level.

3. Students read for 30 minutes every day in school.

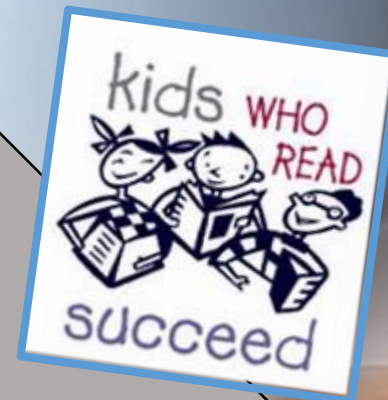
5. The quiz gives instant feedback – if a student achieves 100%, they can collect a prize instantly.

6. Rewards keep students so they continue to progress!

2. They will use this to choose books of a suitable level.

4. Students maintain a reading journal; they take an AR quiz when the book is finished.


Reading is the **KEY** to learning



Reading logs and rewards

- All students are provided with a **reading log**.
- They must have this everyday – it is part of the expected **daily equipment** which is checked by their Tutor.
- This will track students' reading but more importantly, it can be used to take consistent notes in preparation for the quizzes.
- New reading logs can be obtained via Ms Slater.

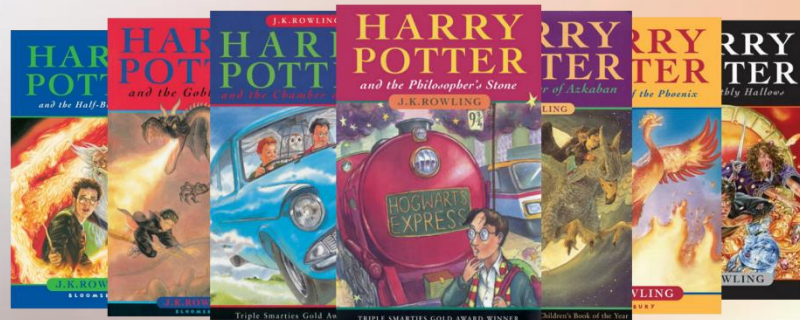
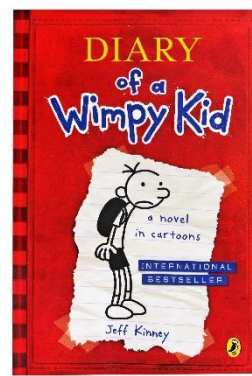
Every Term

- 100% in quiz - *lucky dip instant prizes LRC!*
 - Number of words read
 - Progress made
- 



Using the LRC

Students are able to borrow items to read from our Learning Resources Centre. Our librarians, Ms Hurley and Ms Matthews, provide support so that students choose appropriate texts.



What can you do as a parent?

- Encourage your child to read at home.
- Create a culture of reading at home - start a home library, visit your local library or bookstore. Hounslow Library Services run a number of clubs and programmes, especially over the holidays.
- Discuss the book with your child – ask about what has happened in the last chapter or what they predict will happen next.
- Read yourself.
- Read with your child – be part of their development.



What can you do as a parent?

- Encourage your child to read at home
- Create a culture of reading at home - start a home library, visit your local library or bookstore
- Discuss the book with your child
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- Read with your child – be part of their development

Make learning a family affair



Thank you for
listening.