

Caroline Chisholm School



Ambition Confidence Success
Everyone Every Lesson Every Opportunity








High Performance Learning
End of Year newsletter




What is High Performance Learning?

The High Performance Learning (HPL) philosophy sees all students as potential high performers who are not limited by ability. The Advanced Cognitive Performance Characteristics (ACPs – how our students learn) and the Values, Attitudes and Attributes (VAAs - how our students behave) drive Teaching and Learning across both Primary and Secondary phases in all subjects. This philosophy ensures are students are advanced performers, enterprising learners, intellectually and socially confident with a global outlook and a concern for others. The wonderful examples below showcase our HPL vision in action.

ACPs:

ANALYSING	
	Critical or logical thinking
	Precision
	Complex and multi-step problem solving
CREATING	
	Intellectual playfulness
	Flexible Thinking
	Fluent thinking
	Originality
	Evolutionary and revolutionary thinking
META-THINKING	
	Meta-cognition
	Self-regulation
	Strategy-planning
	Intellectual confidence
LINKING	
	Generalisation
	Connection finding
	Big picture thinking
	Abstraction
	Imagination
	Seeing alternative perspectives
REALISING	
	Automaticity
	Speed and accuracy

VAAs:

AGILE	
	Enquiring
	Creative and enterprising
	Open-minded
	Risk-taking
EMPATHETIC	
	Collaborative
	Concerned for society
	Confident
HARD WORKING	
	Practice
	Perseverance
	Resilience

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HPL World Class School Accreditation



World Class School 2021

Following two years of engagement in the HPL Award Scheme, Caroline Chisholm School has been successful in accreditation and is now awarded the status of HPL World Class School!

'This is in recognition of your having met the exacting HPL Award Standards and demonstrated a world class quality of education throughout the school. Your Peer Assessor was particularly impressed with the whole school strategy, how the students are modelling HPL in, and out, of the classroom and the whole school commitment to the HPL philosophy.' -- Simon O'Grady – Chief Executive Officer, High Performance Learning.

To be accredited, the school had to provide evidence that it was performing highly over a range of criteria and submitted a substantial portfolio of evidence that was assessed at an accreditation inspection on 11 November 2021.

Our accreditor said of his visit to the school, *'The HPL journey at Caroline Chisholm School has been well considered, well planned, and expertly delivered. The outstanding evidence from the portfolio, and the accreditation day, show a school that is world class. However, it was the students that made this such a remarkable and joyous visit. They are exceptional, and are wonderful, honest, and reflective ambassadors for their school, and the impact HPL has had on their learning and outlook. This is a "World Class" school that is keen to progress further. In fact, I think it is a 'wow' school that could be a real beacon for how HPL can impact on learning in an Academy.'* Russel Ellicott – HPL accreditor / Headteacher Pate's Grammar School.

Caroline Chisholm School will continue to proceed on its ambitious path of improvement and use HPL to secure unparalleled learning outcomes for students. As an accredited HPL school, Caroline Chisholm School is now focused on systematising and optimising HPL throughout the school to gain deeper impact and to come closer to the goal of every single student being a high performer.



Year group spotlight - Reception

Skills spotlight: Agile, Linking and Meta Thinking

Reception have been busy using lots of the HPL ACPs and VAAs throughout their learning! The children in Foundation Stage have shown amazing perseverance and creativity in performing their Nativity to tell the Christmas story 'A Miracle in Town'. They have been keen to ask questions to learn more about the story as well as having the confidence to perform to several audiences on stage. Through lots of practice, the children learned 8 songs as well as their lines. We are so proud of them all!





Year group spotlight - Year 1

Skill spotlight: Meta-thinking, Empathetic and Linking

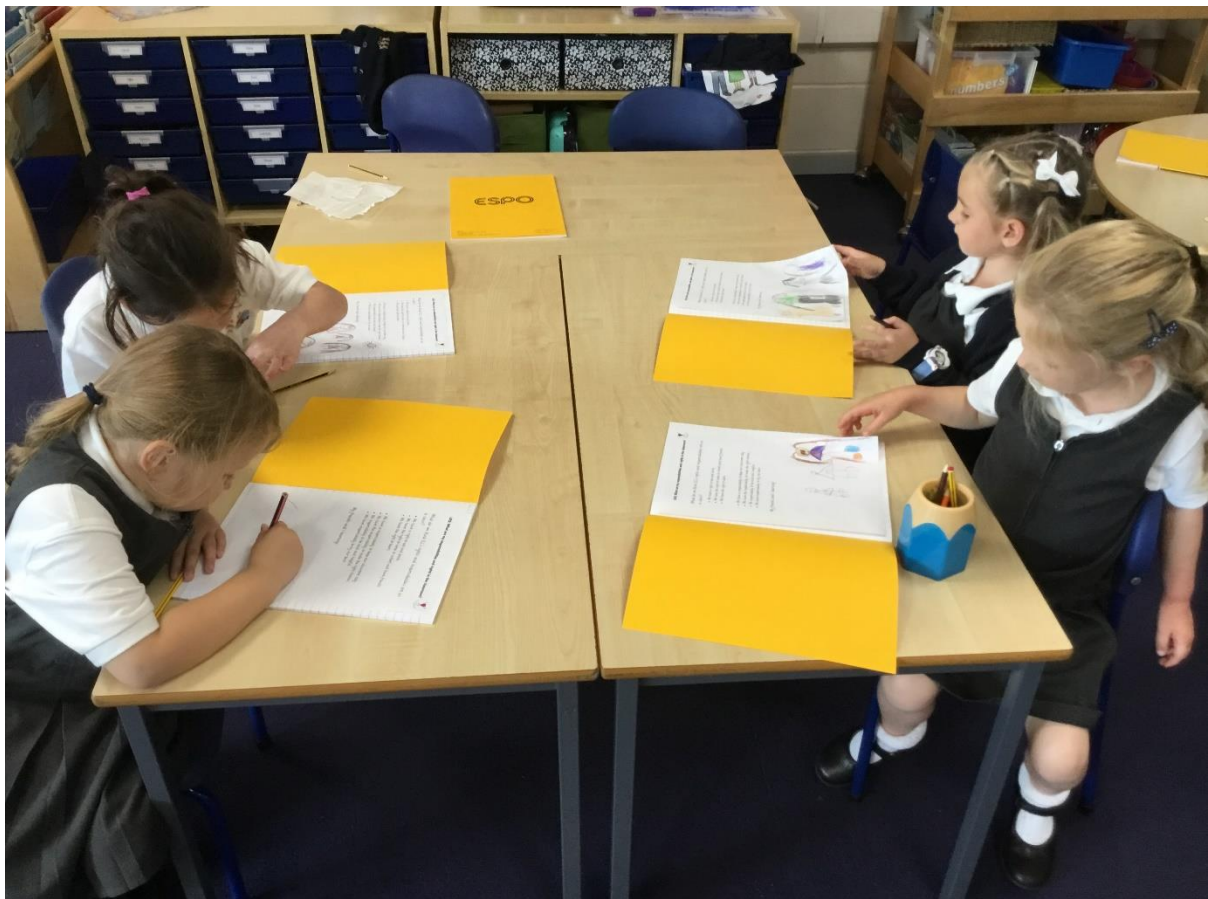


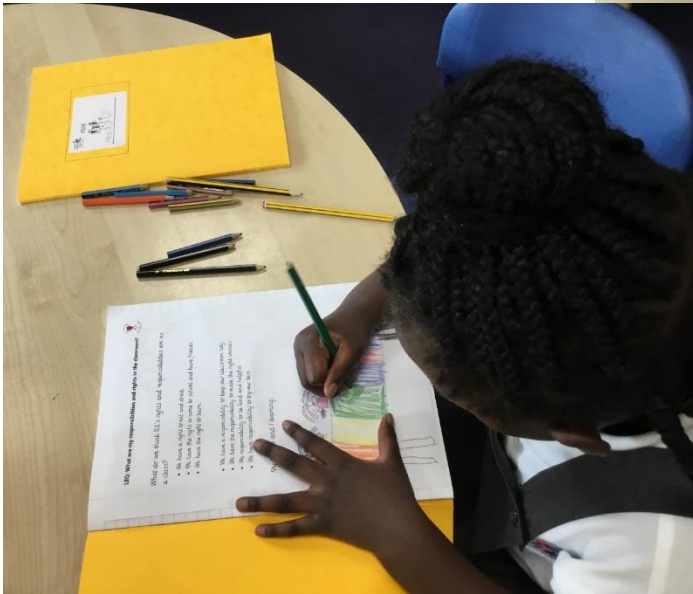
1KO:

The children played a tactical maths game where they had to play against a partner and the first person to 10 dots wins. This is supporting them with their number-bonds to 10. They were using great meta-thinking skills and were asked questions such as "What would Mark the Meta-thinking monkey do?" The children were also channelling their inner 'Neetah the realising cheetah' by recognising which numbers combine to make 10. The children were also being 'Zulu and Zua' the linking giraffes by remembering some of their number-bonds!

1LL:

In PSHE, the Year 1 children welcomed Jigsaw Jack into our class. They were asked to behave like 'Emily the Empathetic Superhero'. The children spoke in calm, reassuring voices to Jigsaw Jack and were able to identify that they were being kind and gentle, like Emily. The children made links with when they feel safe, what helps them to feel safe and the importance of being empathetic towards one another. The children then discussed what they thought their responsibilities and rights were in the classroom and together made a list to go in their books. The children then illustrated their rights and responsibilities in their books.

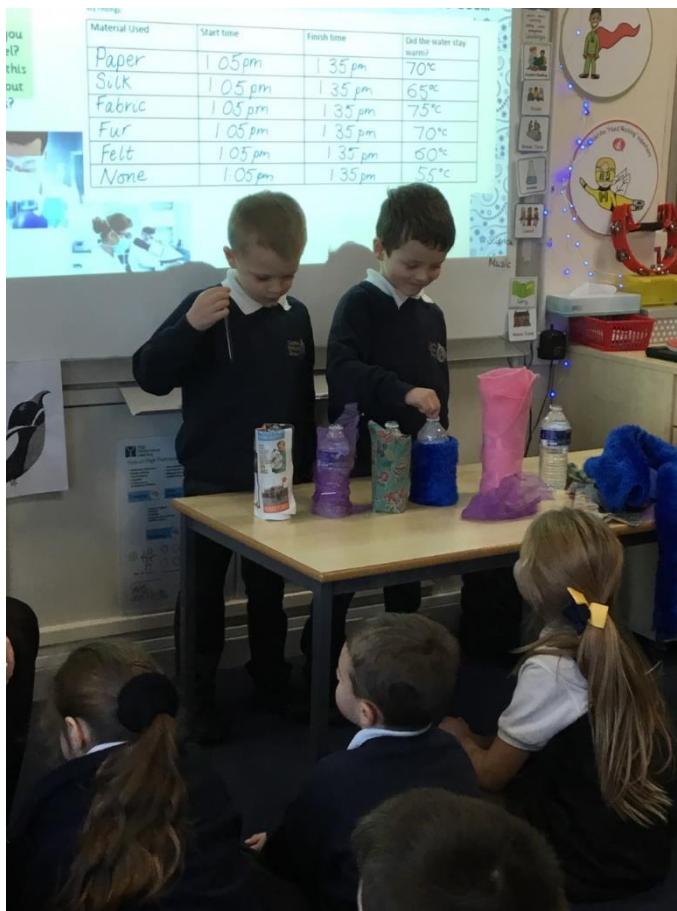




Year group spotlight - Year 2

Skills spotlight: Analysing and Linking

In Year 2, the children have been working like Zulu and Zua the Linking Giraffes. The children have been working like scientists and making generalisations. They made connections between the ways they keep themselves warm to help them to make predictions about which materials would act as the best insulators to keep an Antarctic explorer warm on an expedition. The children then conducted a fair test to see if their predictions and generalisations were correct, looking carefully and recording their results like scientists. The children were then able to draw conclusions and make generalisations about the most and least effective insulators.

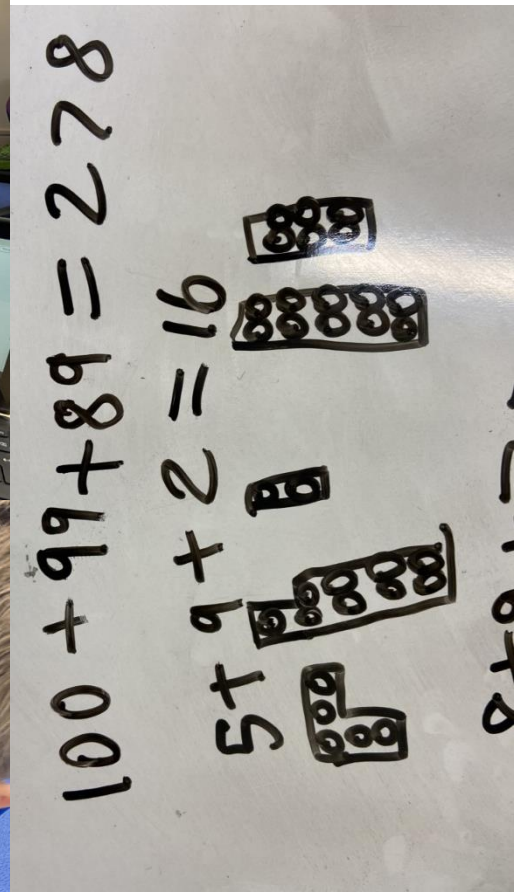
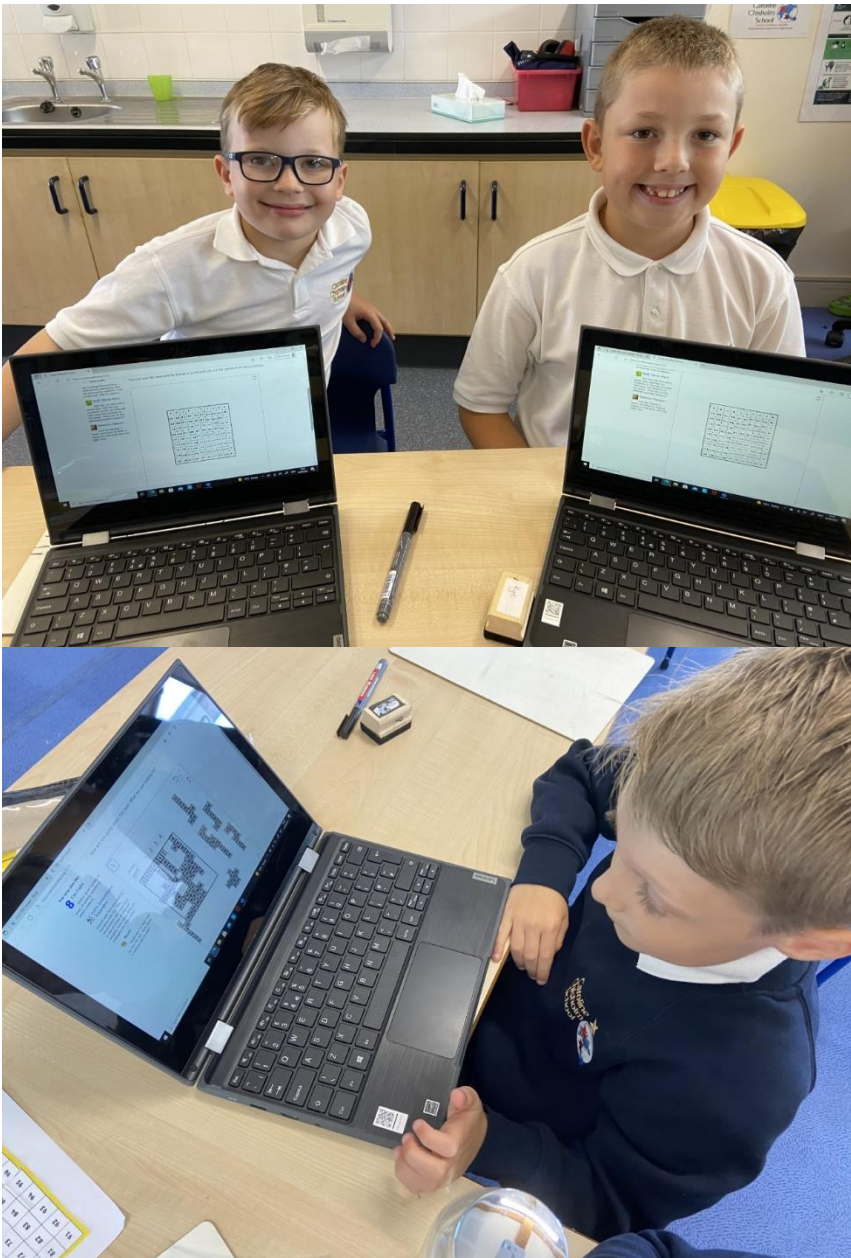


Year group spotlight - Year 3

Skills spotlight: Analysing, Linking and Creating

Year 3 students were using their analysing skills to solve the problem of a coded 100 square. Linking and finding connections with their knowledge of a 100 square from Year 2 and their place value knowledge, could they work out where jigsaw pieces went to create a coded 100 square? I had some great verbal reasoning.

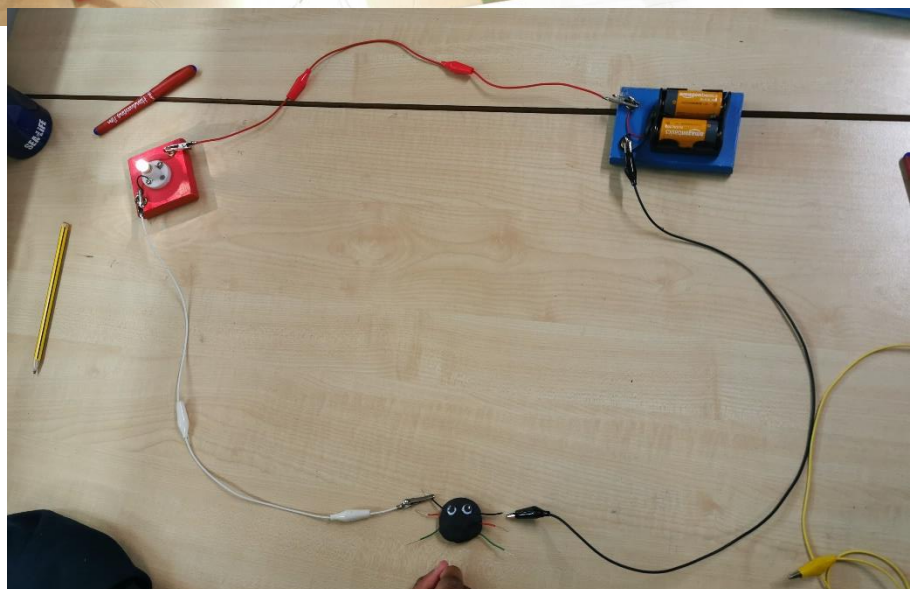
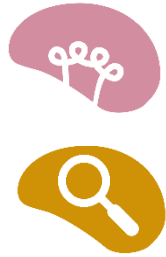
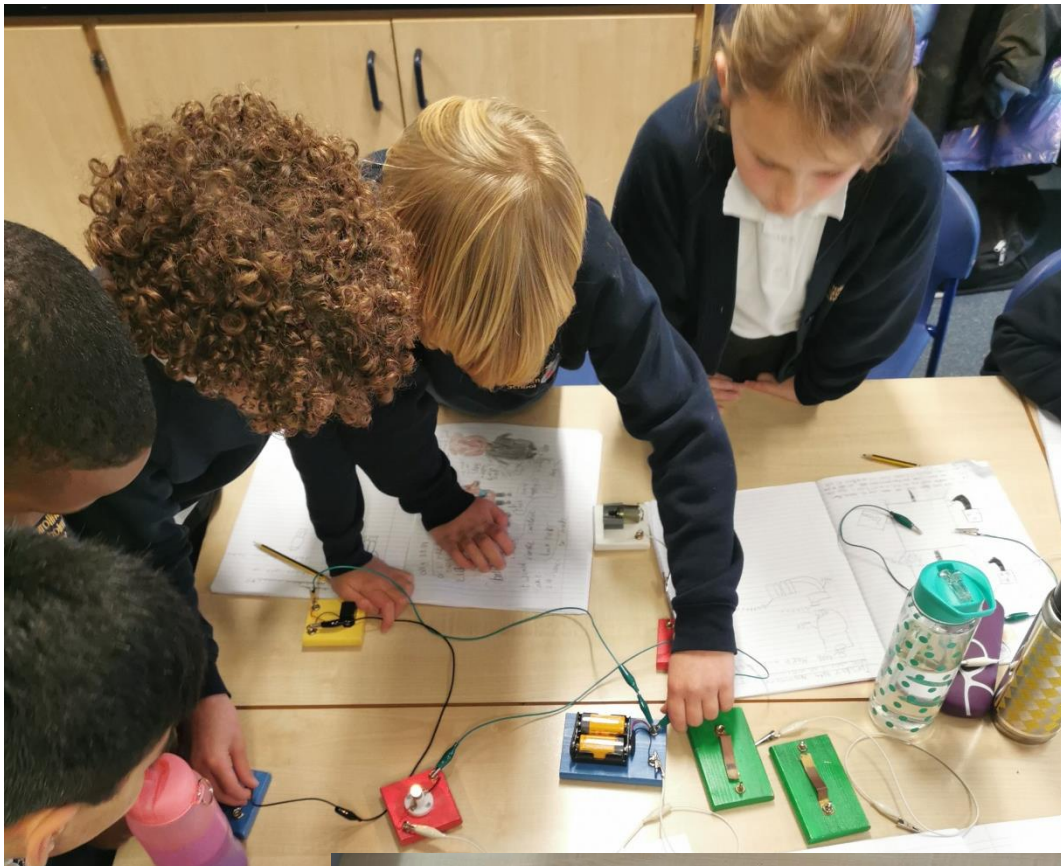
We also used our analysing skills when adding 3 numbers, 2 odd and 1 even. Some were creative in making/drawing the numbers to help them solve the problem and spot patterns. They all worked hard to solve the problems.



Year group spotlight - Year 4

Skills spotlight: Creating and Analysing

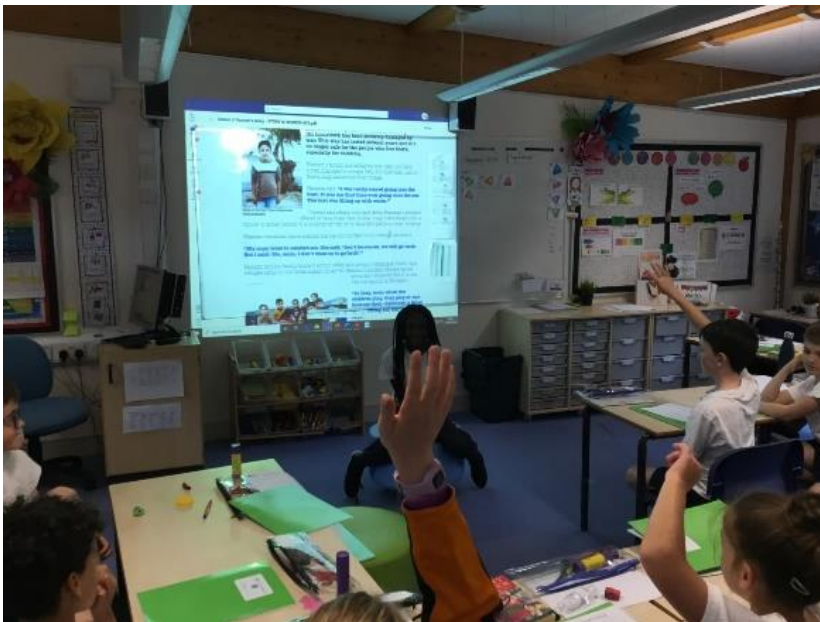
In science this term, Year 4 have been using their creative skills to understand how simple circuits work. We have used our intellectual playfulness to ask questions such as 'what if I connect this wire to this component?' and to find imaginative ways to create specific circuits. When learning about breaks in a circuit and working out which wires on our Electric Bugaloos worked or didn't work, we used our flexible thinking to adapt the method, based on information we had been given or had learned in previous lessons.



Year group spotlight - Year 5

Skills spotlight: Empathetic and Linking

Year 5 children have been studying a story about a child refugee, who fled Iraq with his family. As a class, we used the hot seating technique to help the children understand and empathise with the characters from the story. By varying the roles of the characters and using their questioning skills, children were able to relate to the journey the family made from one country to another. Furthermore, children made a link between the feelings of the refugee and the experiences of a child in our English work, who is also on a journey from one place to another.



Skill spotlight: Linking - connection finding

For our theme of Journeys, we have looked at reasons for migration, particularly to Australia as we have a school link to the country as well as it being a good case study for this subject. We also focus on South Africa, our Writing test being set in the Apartheid period in Johannesburg.

To start each focus, we used the flags of those countries as stimulus discussion. We linked the Australian flag back to British Colonialism and explored its other representations, then together discussed the purpose/origins of the Aboriginal flag. Who did it represent? Why would they prefer to use this flag?

For South Africa, we again used the idea of the Union Jack forming part of another country's flag. Why? We again linked back to our prior knowledge and were then able to link the flags of both countries together, where the new or alternate flags are used to be either more representative or representative of a certain identity.

Linking back to our writing focus also helped contextualise the setting for the book and the pupils have largely better understood what life was like for both real people and the fictional characters that we are studying.

The image displays a collection of flags and a student worksheet. The flags shown are the Union Jack, the Australian flag, the South African flag, and the Aboriginal flag. Blue link icons connect the Union Jack to the Australian flag, and the Union Jack to the South African flag. A student worksheet titled 'What was Apartheid?' and 'Who fought against Apartheid?' is shown, featuring a 'BUS STOP FOR NON WHITES' sign, a photo of Nelson Mandela, and the South African flag.

What was Apartheid?
Apartheid is a very unfair policy when the blacks were separated from the whites because some whites came over and thought that they were superior/they were meant that they had certain places like town and schools they could have more better places than the blacks because they were better.

Who fought against Apartheid? What did they do?
The school African-English and Nelson Mandela. They both made protest like properly burning Apartheid was bad to start for life!

How did Apartheid come to an end?
When there was a new prime minister of South Africa and he thoughtfully did not believe in Apartheid. His name is F.W. De Klerk. He freed Nelson Mandela from jail and let the N.A.C. vote in the government.

What happened in South Africa after the end of Apartheid?
It was much more peaceful and the South African got a new flag. Even better Nelson Mandela was actually the prime minister for 62% of the votes for the N.A.C.

Skills spotlight: Linking and Analysing



In Year 5 Science, students were looking at the characteristics of materials. They began by Linking to knowledge they had previously learnt in Year 4, then by asking their partner questions using their analysing skills, they were able to deepen their learning and find out about how materials were made. The class discussion moved towards protecting the planet and collectively how we could make changes to the design of objects and the types of materials which are used to support the world. Children recognised that by being HPL learners they are gaining skills for their future and that they will be part of the bigger picture in the future.

04.11.2021
LEQ: How can I recognise different types of materials.

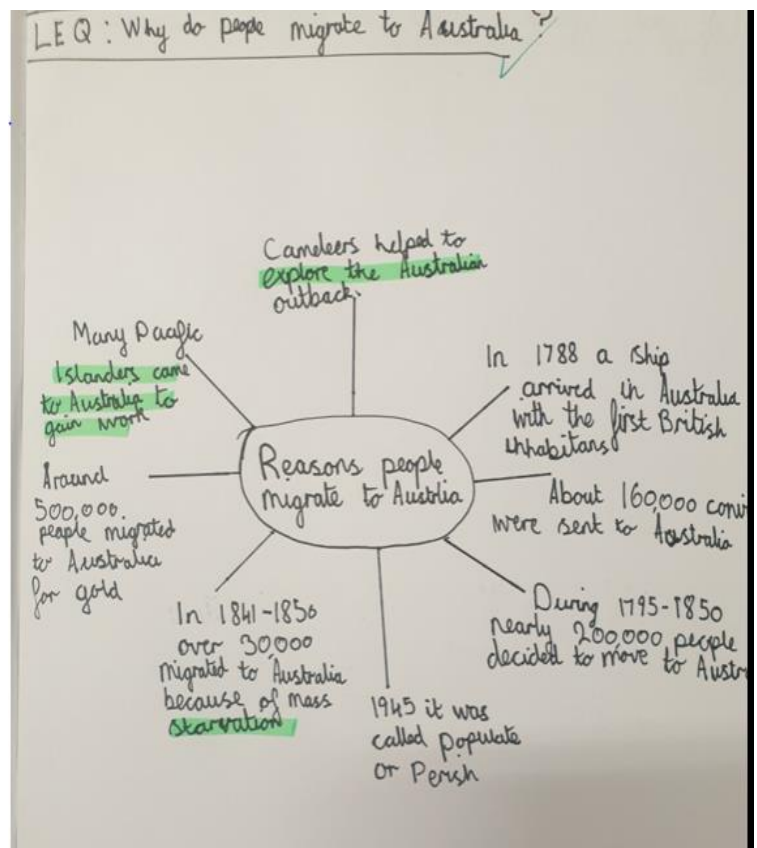
Characteristics of Materials

Look at objects around your school or home that you can write in the table below.

Object	What it is used for	Material it is made from	Why the material is a good choice
Plastic frame	Holding pictures	Plastic	Because if it was glass it could easily break.
School T-shirt	for clothing	Cloth	Because it is comfortable.
Statue Dragon	Modeling	Sand	Because it is really nice for a museum.
Benches	Sitting	Wood	Because we can sit on it.
Brick in wall	for holding soil with plants	Sand	Because then the plants can't be damaged.
Glasses	for people who can't see	glass	Because then we wouldn't be blind.

Skill Spotlight: Realising, Linking and Hard working

Our focus in theme, was to independently research the reasons why people migrated to Australia. This lesson linked to the push and pull factors which we covered the following week. Children used their linking skills – Asking, “What if?” They made connections from one idea to another, which helped them understand the reasons why people migrate. Students also used their analysing skills by asking the correct questions to gain understanding.




Year group spotlight – Year 6

Skills spotlight: Linking, Analysing, Creating, Agile and Resilience

Within their English lessons, Year 6 are studying the novel 'Goodnight Mister Tom'. In Chapter 6 they were introduced to a new character – Zach. Pupils were asked to think critically and consider why the author had introduced this character and how he will influence the rest of the story. This was focusing on intellectual playfulness by asking 'what if?' and evolutionary thinking by thinking up new ideas by building on existing ideas. Pupils also had to analyse quotes from the text to explain what they tell the reader about the character of Zach. This was building on the meta-reading skill of inference.

Thursday 7th October



LEQ: How can I develop my understanding of a character?

Look at the quotes in the table below taken from Chapter 5 of Goodnight Mister Tom. Think carefully about what the quote tells us about the character of Zach. Write your answers in the table.

CHALLENGE: Identify your own quotes from the book to help describe the character of Zach and add these to the empty boxes at the end of the table.

QUOTE	WHAT THIS TELLS THE READER ABOUT ZACH
"Hello!", he said brightly, grasping Willie's hand'	He is excited to meet Willie and make new friends.
'But before Willie could reply the boy was already chattering on'	He is chatty/talkative.
'The strange boy's eyes seemed to penetrate so deeply into Willie's that he felt sure he could read his thoughts'	He wants to get to know Willie.
'He couldn't understand this exuberant friendliness in a boy he'd only had a glimpse of twice'	Friendly, Considerate
'As soon as I see someone I like, I talk to them''	Social, to the point, outgoing
'... said a cultured voice....'	Civilised, glib
'"Wizard! Calloo! Callay!"'	Funny, lively
'He tugged and pulled at it until it eventually moved over his nose and ears, causing his hair to spring up in all directions.'	His jumper is tight



Critical Thinking



How is the character of Zach portrayed in Chapter 6 of Goodnight Mister Tom?

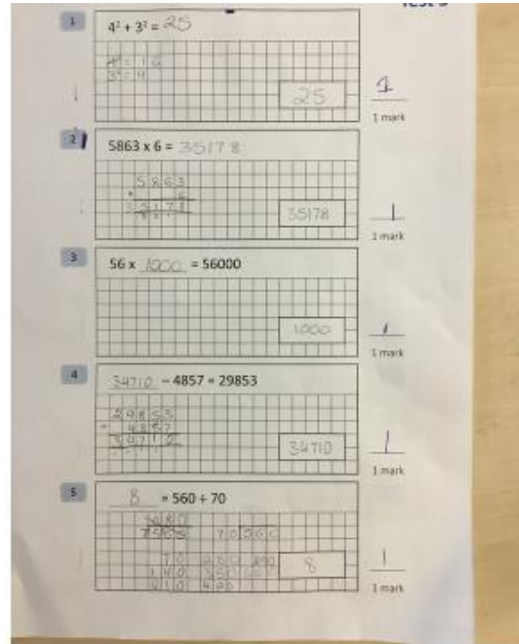
Why has the author introduced this character to the story?

How do you think Zach will influence events and characters in the remainder of the story?



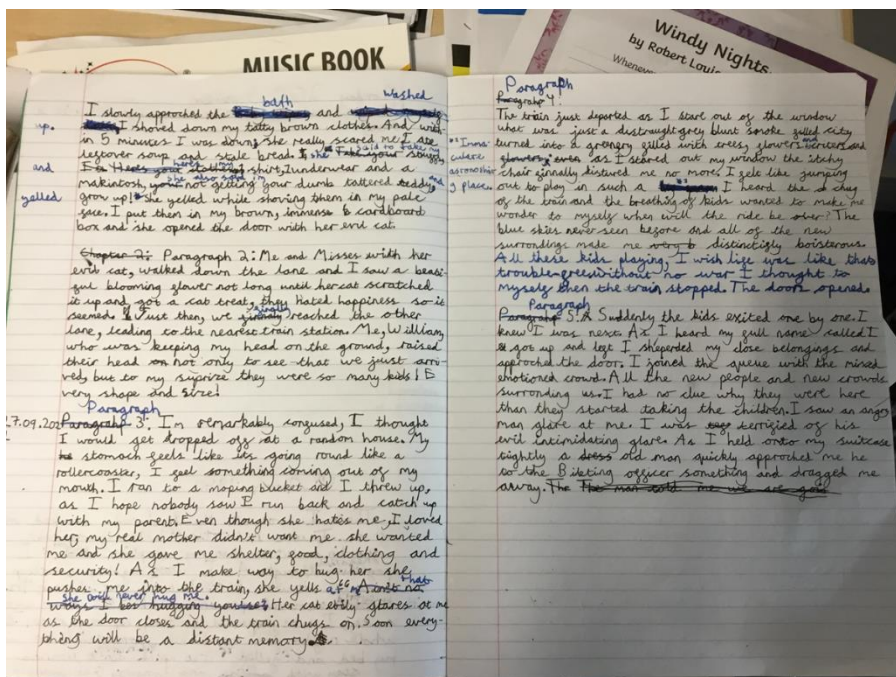
Skills spotlight: Analysing, Linking, Realising and Meta-Thinking

Students in year 6 completed their weekly Arithmetic practice. There are lots of HPL ACP's covered in this activity from precision, connection finding, speed and accuracy. As well as automaticity with recalling facts and self-regulation, knowing that making mistakes is a part of learning.



Skill Spotlight: Meta-Thinking

Year 6 have been self-regulating by looking for errors in their writing. They are learning how to independently edit their writing to look for spelling, punctuation, vocabulary and grammatical errors. They used their blue pen to make any amendments and worked with talk partners to strategy plan and talk about the ways to make improvements.



Skill Spotlight: Creating and Meta-Thinking



Year 6 have been focusing on meta-cognition during their spelling lessons using an approach called 'cued' spelling. Pupils need to develop a new way to help remember tricky and challenging spellings.

For example, by inventing a mnemonic – Big Elephants Can Always Understand Small Elephants (because). Or a saying – remembering the first 'r' in library is tricky so we will say this to help us remember: 'we always Read in the library'.

This is also showing creativity as they are developing intellectual playfulness with words by thinking of imaginative ways to recall spellings. It is also showing fluent thinking as they are thinking up different solutions and ideas when faced with the problem of learning tricky spellings.

Year 6 Cued Spelling

Spelling Words	Chosen Spelling Cue	Say the spelling cue & write the word - 1	Say the spelling cue & write the word - 2	Say the spelling cue & write the word - 3	Rainbow write the spelling
according	Two collars ending long.	according	according	according	according
awkward	Sortward on the awk	awkward	awkward	awkward	awkward
conscious	concrete seats	conscious	conscious	conscious	conscious
Dictionary	adict stationery	Dictionary	dictionary	dictionary	dictionary
Familiar	family liar	familiar	familiar	familiar	familiar
individual	Under is in a dual	individual	individual	individual	individual
neighbour	night boat rower	neighbour	neighbour	neighbour	neighbour
possession	one san two steps	possession	possession	possession	possession
sacrifice	sacrifice	sacrifice	sacrifice	sacrifice	sacrifice
System	A stem spells sign with a y	System	System	System	System

Year 6 Cued Spelling

Spelling Words	Chosen Spelling Cue	Say the spelling cue & write the word - 1	Say the spelling cue & write the word - 2	Say the spelling cue & write the word - 3	Rainbow write the spelling
Gym	google gummy munch	Gym	Gym	Gym	Gym
myth	myth gummy number hide	myth	myth	myth	myth
Egypt	egg gum pot top	Egypt	Egypt	Egypt	Egypt
Pyramid	people gummy rice and mid	Pyramid	Pyramid	Pyramid	Pyramid
Mystery	meo gummy song to egg riding you	Mystery	Mystery	Mystery	Mystery
Symbol	Small gummy munch buns old lady	Symbol	Symbol	Symbol	Symbol
Lyrics	Love your rice I cook those	Lyrics	Lyrics	Lyrics	Lyrics
Synonym	Small gum not your map	Synonym	Synonym	Synonym	Synonym
System	Small gummy stake eat me	System	System	System	System
Gymnastics	gym mat no and sticked roll gym clothes	Gymnastic	Gymnastic	Gymnastic	Gymnastic

Secondary Phase Achievement Points

Following the HPL framework, we use the Values, Attitudes and Attributes (VAAs) to reward our Secondary Phase students with Achievement points. VAAs help to promote and draw out empathetic, hard-working and agile characteristics in all our students.

Detailed below are the achievement point totals for each house.



2,931



10,080



4,862

The winners!!! 🍌🍌🏆



3,188



10,429



4,791



3,044



10,437



4,639



3,000



10,331



4,635

2021 HPL Certificate Awards Term 2



For collaboration, perseverance & resilience when practising and performing in the Nativity show. Well done for being confident and focused!



For working collaboratively to improve a piece of writing.

Also, for working with precision and striving for accuracy.



For super meta-cognition within maths!
Well done for using your strategy planning to know the steps that you need to take to succeed in your learning!



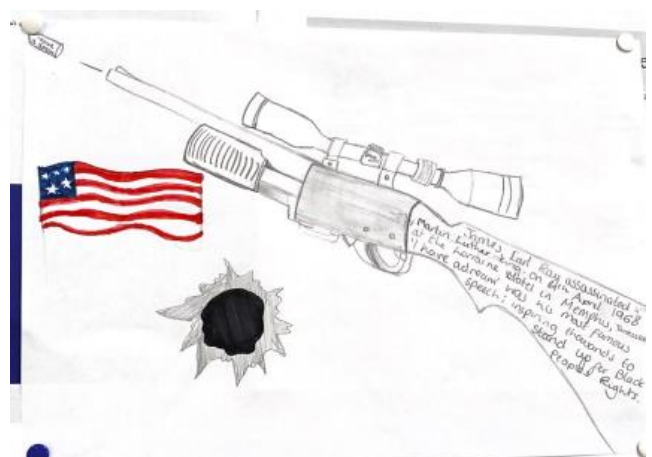
Department spotlight - English

Skill spotlight: Linking - Connection Finding and Creating - Originality

Year 9 are currently studying a Justice unit and reading a novel called Ghost Boys – a story about a young, black, American boy called Jerome who is shot by a white police officer. It is story about injustice, prejudice and grief that reflects real issues in our society today.

Whilst considering the story of Ghost Boys, Year 9 had to research the impacts of the Civil Rights Movement and consider how certain ethnic groups were mistreated by others in society.

The images below show some students' work and how they each used their creativity to display their findings.



Skill spotlight: Linking - Connection finding



Year 11 have been studying Shakespeare's *Romeo and Juliet* for their GCSE English Literature. Alongside reading the play, we have been looking at academic reading from The British Library to ensure they are persevering with ambitious content. The questions below explore the idea of Juliet as a defiant daughter who fails to follow her duty as an Elizabethan female.

ANALYTICAL THINKING: RESPONDING TO ACADEMIC READING

Juliet... falls in love with Romeo (the son of her father's enemy) and marries him in secret **Inevitably** then, she must disobey her father later in the play by refusing to marry Paris. Capulet is furious. Despite Juliet's attempts to remain respectful towards him, 'Good father, I **beseech** you on my knees / Hear me with patience but to speak a word' (3.5.158-59), he threatens to disown her if she doesn't **comply** with his wishes: 'And you be mine, I'll give you to my friend, / And you be not, hang, beg, starve, die in the streets' (3.5.191-92).

It's part of Juliet's tragedy that she's unable to tell her **authoritarian** father about her marriage to Romeo, even though she could express her love with an eloquence that could overcome anger and hatred. Capulet is determined to 'give' her to Paris (a father's **prerogative**, even **enshrined** in the marriage ceremony) and she feels she has little option but to agree to Friar Laurence's drastic plan to fake her own death in order to **extricate** herself from this situation - a plan that is doomed to go horribly wrong.

1. What can we learn from Capulet's reaction about the role of the father in Elizabethan society?

2. Lord Capulet is described here as 'authoritarian'. How has he changed from when we first saw him?

3. What, according to the article, is part of Juliet's tragedy? WHY is this tragic?

4. In your opinion, what event in the play, if any, has changed Capulet's mind about Juliet's marriage to Paris?

5. Juliet is thirteen years old and yet she is willing to 'extricate herself' from this situation and break away from her family. In your opinion, is she a foolish child or mature adult?

6. EXTRA CHALLENGE: What is presented as worse in the play? The death of romantic or familial love?

Skill spotlight: Empathy - Collaborating, Concerned for society and Confidence

Year 8 were tasked with using all three strands of the Empathy VAA when completing a Speaking and Listening task for their Dystopia unit. Students were given the question: 'is it ever ethically and morally just to experiment on humans and animals?' Students had to collaborate and devise an argumentative piece that they had to share with the class. Some students showcased great confidence and were able to justify their arguments with their supporting research.

TASK 3 - SPEAKING AND LISTENING NEXT LESSON



- As - you are going to argue that it is never ethically and morally just to experiment on humans and animals.
- Bs - you are going to argue that it can be moral and ethical.
- Each group of four now needs to choose a spokesperson who will take it in turns to make the group's argument, followed by an opposition argument.
- You can disagree with each other, as long as you have allowed each person to finish their argument - use your prompt cards to help you debate.
- Audience: you will need to listen carefully as you will need to have your own opinion by the end of the debate.

CONCERN FOR SOCIETY:

Is it ever ethically and morally just to experiment on humans and animals?

- Now that you have heard all of the arguments, place your post-it notes on the continuum to show where you stand, justifying your stance with at least three reasons.

Strongly agree

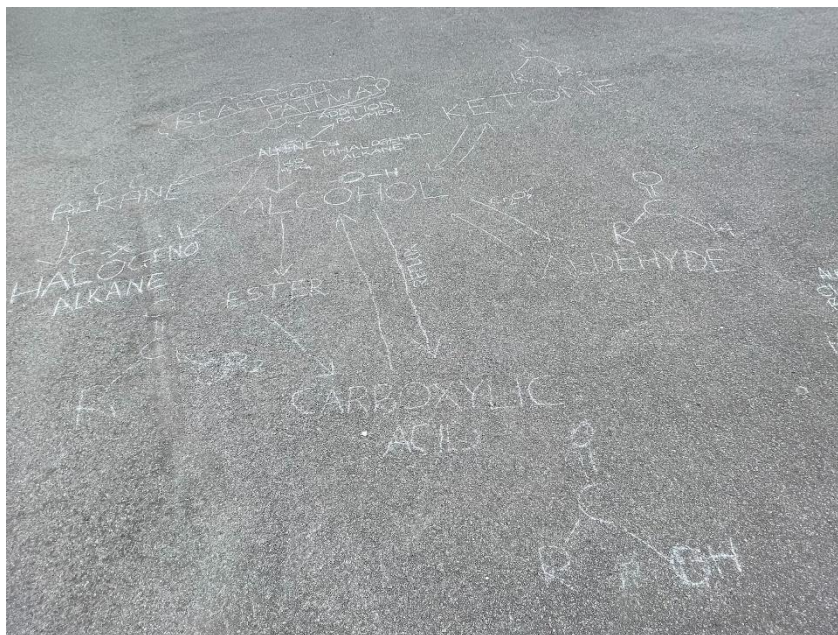
Strongly disagree



Department spotlight - Science

Skill spotlight: Linking - Connection finding

Ms Poole's Year 13 group were learning about the reactions that organic compounds have, particularly focusing on how the reactions all link together. This has meant the class have been able to make useful and complicated compounds.



Mr Hanna has been working on precisely using subject terminology and scientific conventions with his Year 7 group.

It is extremely important that students are able to clearly and precisely display their findings.

Units at top once only

Food	Start temp	End temp	Difference
Wala Hoop	23°C	35°C	12°C
Cracker	21°C	35°C	14°C
Yoghurt	21°C	29°C	8°C
Britas	20°C	47°C	27°C

✓

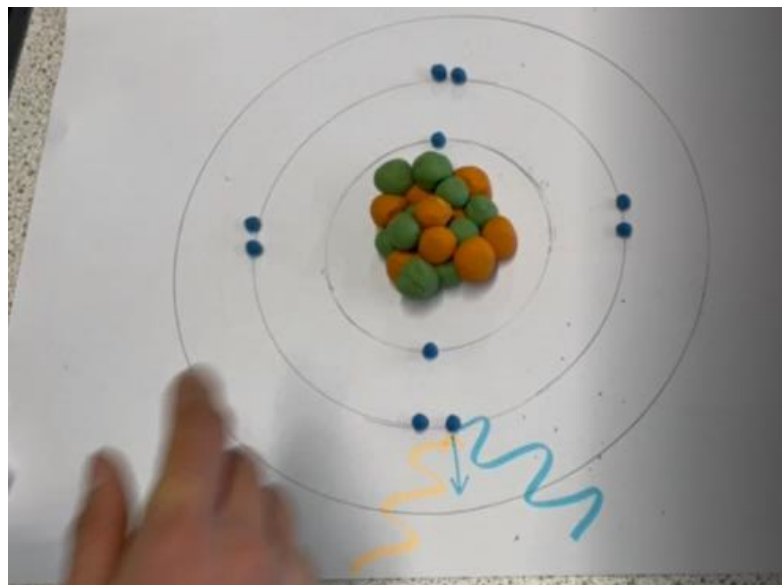
Skill Spotlight: Creating and Agile

Year 10 have been using their creativity skills to build a DNA model. They were able to develop their fluent thinking by creating compelling ideas which demonstrate originality. These DNA models show innovative and unique ideas.



Skill spotlight: Linking and Hard Working

This HPL example shows an activity where students were dealing with quite a difficult abstract concept. Mr Gardner had asked students to model the mechanism and then to explain it in a video - this focused on their speed and accuracy skills as they had to clearly explain their learning. Students had a range of materials that they could use for this including plasticine. Students showcased their linking skills by being able to move between a concrete outcome (in this case that neon gas lights up when you pass electricity through it) and the abstract (the complex modelling we use to explain this phenomenon).



Skill Spotlight: Linking and Agile

In a Year 10 lesson, Mr Robson's class were making links with their previous learning and approaching challenging ideas as they were looking at aspects of the A level curriculum.

Below shows a part of the lesson whereby the A level materials was shown. This is a great way to put learning into context and to try to encourage students to sit A level physics.

Edexcel GCSE (9-1)

Sciences

SP6c

SP6 L3 Electrons and Orbits - HPL Lesson Focus

Finding Connections – *the ability to use connections from the previous learning*

Big Picture Thinking – *the ability to work with big ideas and generalised concepts*



High Performance Learning - Focus for This Lesson

Edexcel GCSE (9-1)

Sciences

SP6c

Electrons and orbits



A Level - Classification of Stars

Types of spectra

Continuous spectra

The spectrum of light from a filament lamp is a continuous spectrum of colour from deep violet at about 350nm to deep red at about 650nm, as shown in Figure 5. The most intense part of the spectrum depends on the temperature of the light source. The hotter the light source, the shorter the wavelength of the brightest part of the spectrum. By measuring the wavelength of the brightest part of a continuous spectrum, we can therefore measure the temperature of the light source.



▲ Figure 5 A continuous spectrum

Line emission spectra

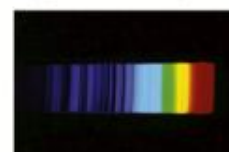
A glowing gas in a vapour lamp or a discharge tube emits light at specific wavelengths so its spectrum consists of narrow vertical lines of different colours as shown in Figure 6. The wavelengths of the lines are characteristic of the chemical element that produced the light. If a glowing gas contains more than one element, the elements in the gas can be identified by observing its line spectrum.



▲ Figure 6 A line emission spectrum

Line absorption spectra

A line absorption spectrum is a continuous spectrum with narrow dark lines at certain wavelengths. For example, if the spectrum of light from a filament lamp is observed after passing it through a glowing gas, thin dark vertical lines are observed superimposed on the continuous spectrum, as shown in Figure 7. The pattern of the dark lines is due to the elements in the glowing gas. These elements absorb light of the same wavelengths they can emit so the transmitted light is missing these wavelengths. The atoms of the glowing gas that absorb light then emit the light subsequently but not necessarily in the same direction as the transmitted light.



▲ Figure 7 A line absorption spectrum



▲ Figure 4 A spectrometer fitted with a diffraction grating

Department spotlight - Humanities

Skill spotlight: Realising - Automaticity



Miss Cambio's Year 12 class have been looking at Stuart Britain. They are currently focusing on the dynamic between King and parliament and how the decisions and relationships shape the monarchy and the successful running of the country. The below slides show a task whereby students were asked to recall previously learned content but were not allowed to use the obvious links to explain their knowledge. The class utilised their resilience skills and were able to quickly recall information but had to think outside of the box to effectively explain their answers.

Automaticity The ability to use some skills with such ease as they no longer require active thinking

Starter – what am I?



Gunpowder
Plot

Forbidden words:

- 1605
- Catholics
- Parliament
- Blow up

Automaticity The ability to use some skills with such ease as they no longer require active thinking

Starter – what am I?



Treaty of
London

Forbidden words:

- 1604
- Spain
- Peace
- War

Department spotlight - PE

Skill spotlight: Creating and Analysing

Mr O'Reilly's GCSE PE class have been looking at muscle fibres and were then tasked to use their evolutionary and revolutionary thinking skills to display their learning. The class also had to take some risks through their research and confidently find evidence to help further their understanding.



Muscle Fibre Comparison Chart:

Type	Profile	Characteristics
Type 1	Working AEROBICALLY Use OXYGEN LOW INTENSITY	High Aerobic Capacity High Fatigue Resistant Low Speed and force of contraction Low anaerobic capacity
Type 11a	Working ANAEROBICALLY LINKED to short, high-intensity activity	High speed and force Good strength and speed endurance Not as fatigue resistant as Type 1 Not as powerful as Type 11x
Type 11x	Working ANAEROBICALLY LINKED to very high-intensity activity	Very High Speed and Force Very High anaerobic Capacity Very Low Aerobic Capacity Very Low Fatigue Resistant

Muscle Fibres Mind Map:

- TYPE 1IX** (Blue colour)
 - Important points:
 - work anaerobically
 - not alot of O₂ needed
 - Very high intensity
 - Very high speed + force
 - Very high anaerobic capacity
 - Very low fatigue resistance
 - Examples: SPRINTS
- Muscle Fibres**
 - TYPE 1** (Red colour)
 - High Aerobic Capacity
 - High fatigue resistance
 - low speed force
 - low anaerobic capacity
 - Examples: Marathons
 - TYPE 11a** (Red colour)
 - High speed + force
 - Good strength + speed endurance
 - Not as fatigue resistant as Type 11x
 - Also red colour
 - Examples: SWIMMING
- Keywords + Definitions:**
 - Aerobic = Use of oxygen
 - Anaerobic = No oxygen needed
- Important points (Type 1):**
 - work AEROBICALLY
 - use Oxygen
 - LOW intensity
 - work anaerobically
 - not alot of O₂ needed
 - moderate intensity

Cartoon Illustration:

- TYPE 1IX:** Type 1IX are normally faster and more powerful than type 11A. Type 1IX are made for shorter duration that requires power and strength.
- TYPE 1:** Type 1 muscles are used as low intensity and use lots of oxygen. They have low speed and force also low anaerobic.
- TYPE 11a:** Type 11a use a combination of type 11x and Type 1. they use anaerobic and aerobic in there training, there known as fast glycolytic people.

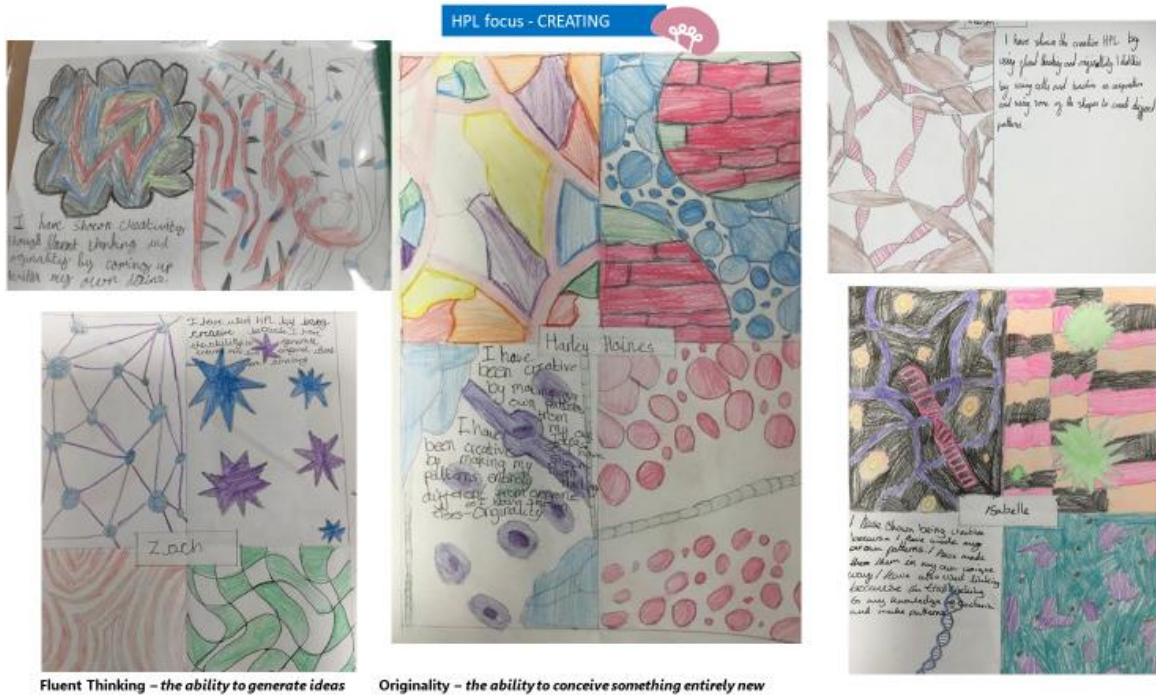
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Department spotlight - Art & Design

Skill spotlight: Creating - modeling innovating and unique ideas



Ms Akhtar's Year 7 Design and Technology Textiles class were creating patterns from cells and bacteria images. The students will then be using their creativity skills further to make these patterns into textile pieces.



Fluent Thinking – the ability to generate ideas

Originality – the ability to conceive something entirely new

Skill spotlight: Creating and Linking



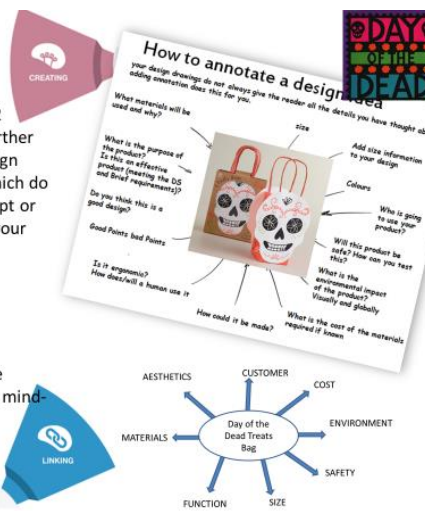
Below is an example from a Year 9 Textile lesson where students were using their creativity skills to brainstorm ideas about their Day of the Dead creations. Students also used their big picture thinking skills as they were considering who their target audience would be and how this would impact their intended product.

HPL Focus: Flexible Thinking

Once you have created your 2 design proposals annotate further using **green pen** – Which design features will you keep and which do you feel you may need to adapt or develop in order to improve your final outcome.

Linking:

Refer back to your design specification – **Highlight** any annotations that demonstrate LINKING back to our previous mind-map findings



Learning Objective:

To understand how to create an effective design proposal which is suitable for a given target audience

Lesson Task:

Today you will need to generate 2 design ideas for your Day of the Dead treats bag. The design ideas will need to be annotated thoroughly!

Gold 7-9	Students will independently create 2 effective and unique designs which reflect the needs of the target audience
Silver 4-6	Students will create 2 unique designs which reflect the needs of the target audience
Bronze 1-3	Students will create 2 designs using the blanks provided

Design Proposals

How to annotate a design idea

your design drawings do not always give the reader all the details you have thought about, adding annotation does this for you.



Department spotlight - Maths

Skill spotlight: Linking - Abstraction

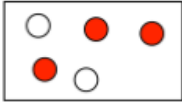


Ms Sanby's class were focusing on using their linking skills, particularly working with a range of complex ideas and problems to solve probability questions.

Question 1: Theo has 3 red sweets and 2 white sweets.
He picks a sweet at random.

(a) Write down the probability that Theo picks a red sweet. $\frac{3}{5}$

(b) Write down the probability that Theo picks a white sweet. $\frac{2}{5}$

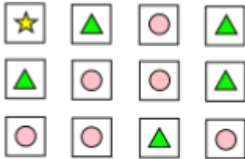


Question 2: Leah has 12 cards, each with a shape on it.
She takes a card at random.

(a) What is the probability that Leah takes a card with a star on it? $\frac{1}{12}$

(b) What is the probability that Leah takes a card with a triangle on it? $\frac{5}{12}$

(c) What is the probability that Leah takes a card with a circle on it? $\frac{6}{12}$



Question 3: Ralph has 9 cards, each with a number on it.

1 2 3 4 5 6 7 8 9

He picks a card at random.
Write down the probability that the chosen card is

(a) the number 8 $\frac{1}{9}$ (b) an even number $\frac{4}{9}$ (c) a number less than 7 $\frac{6}{9}$

(d) a multiple of 4 $\frac{2}{9}$ (e) a square number $\frac{1}{9}$ (f) a prime number $\frac{4}{9}$

Question 4: There are 12 red roses, 5 yellow roses and 3 white roses in a vase.
Felix takes a rose, at random, from the vase.

(a) Write down the probability that he takes a white rose. $\frac{3}{20}$

(b) Write down the probability that he takes a red or a white rose. $\frac{15}{20}$

(c) Write down the probability that Felix takes a rose that is **not** red. $\frac{8}{20}$


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Probability

Videos 244, 245, 250 on Corbettmaths

Question 5: Leon throws a biased coin.
The probability of getting tails is 0.4
Work out the probability of getting heads. 0.6



Question 6: Edith plants a daffodil bulb.
The probability that the bulb will grow is 0.8
What is the probability that the bulb will **not** grow? 0.2

Question 7: Wycombe Wanderers play a match of football.
The probability that they win the match is 0.28
The probability that they draw the match is 0.55
Work out the probability that they lose the match. 0.17

Question 8: Evelyn has 80 pens in a drawer.
15 pens are black and the other pens are blue.
Evelyn picks a pen at random from the drawer.

