

Year 8

Planner 2
2025/2026

Independent
Study

Name & LF:

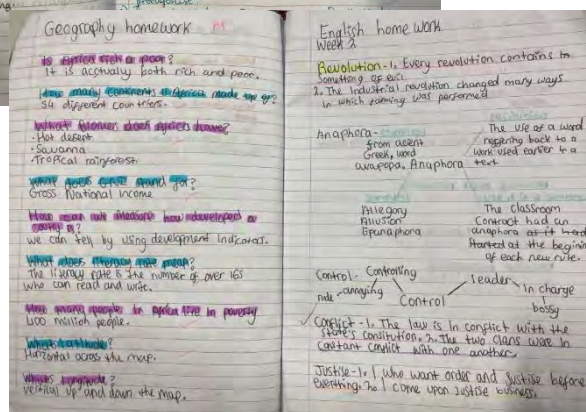
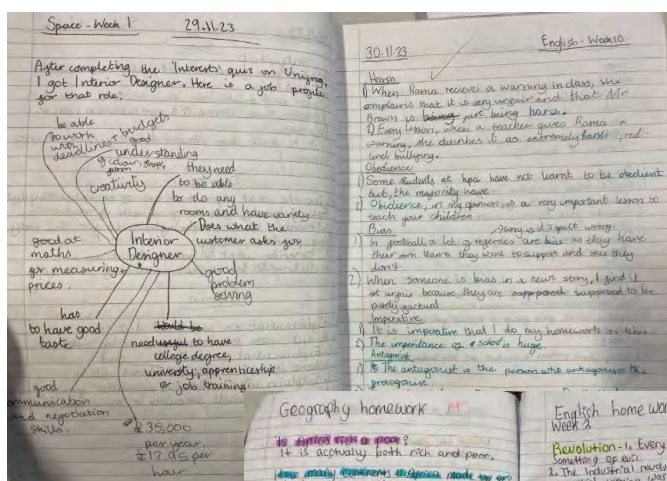


Cabot
Learning
Federation

How to Complete Independent Study

Completed IS is valued by teachers as it extends and supports the learning in lessons as well as embedding independent learning habits. It is rewarded with achievement points.

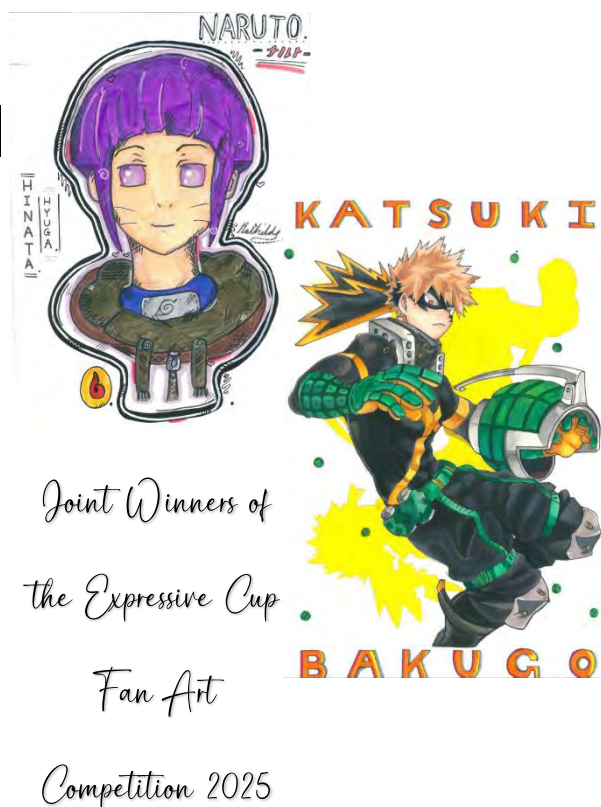
- Three pieces of compulsory IS are due each week for the core subjects: English, Maths and Science. The schedule is included in this booklet for clarity.
- Additional IS projects are introduced throughout the year for other subjects. These allow more creativity and challenge. They are rewarded and celebrated within each department.
- Independent study is introduced, supported and recorded by subject teachers. Further information is posted in Bromcom.
- To complete your independent study, you will need this knowledge organiser and your grey, IS exercise book. Most IS is set using this booklet. Maths will be set online in SPARX.
- IS resources can be collected from the library. Electronic copies of the booklets are available online, on the HPA website, alongside a video explaining IS.
- Compulsory IS Workshops on Tuesdays at 3pm for students who are not completing the core IS independently.



If students are struggling to complete the compulsory, core IS they will be expected to attend the workshop session after school the following week to address any barriers they are facing and ensure the work is completed successfully. This session sets them up for the coming week, rather than focusing on work that has been missed.

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Challenge Task Schedule

The challenge tasks will be introduced by teachers in the term they are set. They are not compulsory but incredibly valuable to stretch and challenge learning. They will be recognised and rewarded within departments and allow students to be creative and tackle different projects.

| Term | Subject | Task |
|--------|------------------|--|
| Term 4 | French & Spanish | Welcome to Weston project |
| Term 4 | History | Create a presentation, poster or essay which explores the following question: How far did one individual change the course of British history? |
| Term 5 | Computing | Scratch Game Challenge |
| Term 5 | Geography | Create a presentation, poster or essay which explores the following question: How can we make our local area more sustainable? |
| Term 5 | Art | Draw/paint/collage (your choice) an A5 portrait of a famous person you admire. Your Art teacher will discuss ideas and hand in dates with you. |
| Term 6 | DT | The Design Process: From Concept to Creation |
| Term 6 | RS | Create a presentation, poster or essay which explores the following question: What does it mean to live a good life? |

Independent Study Hand-In Schedule

The schedule below shows which pieces of independent study will be due each week. They will be checked by the teacher of the subject due in the lesson that week.

| Date | Schedule | |
|---------------------------|----------|--|
| Term 4 | | |
| 23 rd February | English | |
| | Maths | |
| | Science | |
| 2 nd March | English | |
| | Maths | |
| | Science | |
| 9 th March | English | |
| | Maths | |
| | Science | |
| 16 th March | English | |
| | Maths | |
| | Science | |
| 23 rd March | English | |
| | Maths | |
| | Science | |
| 30 th March | English | |
| | Maths | |
| | Science | |
| Term 5 | | |
| 20 th April | English | |
| | Maths | |
| | Science | |
| 27 th April | English | |
| | Maths | |
| | Science | |
| 4 th May | English | |
| | Maths | |
| | Science | |
| 11 th May | English | |
| | Maths | |
| | Science | |
| 18 th May | English | |
| | Maths | |
| | Science | |

| Date | Schedule | |
|-----------------------|----------|--|
| Term 6 | | |
| 1 st June | English | |
| | Maths | |
| | Science | |
| 8 th June | English | |
| | Maths | |
| | Science | |
| 15 th June | English | |
| | Maths | |
| | Science | |
| 22 nd June | English | |
| | Maths | |
| | Science | |
| 29 th June | English | |
| | Maths | |
| | Science | |
| 6 th July | English | |
| | Maths | |
| | Science | |
| 13 th July | English | |
| | Maths | |
| | Science | |
| 20 th July | No IS | |
| | No IS | |
| | No IS | |

| Extra-Curricular | |
|------------------|--|
| | |
| | |
| | |
| | |



Independent Study Challenge Tasks

| | | |
|-----------------|--|--------------------|
| Subject | | <u>Task</u> |
| Date Set | | |
| Date Due | | |
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| Subject | | <u>Task</u> |
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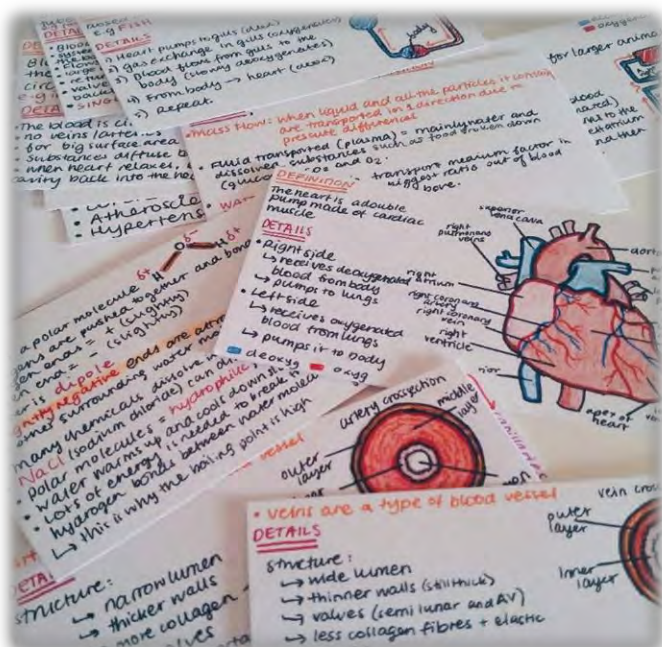
Revision Techniques

Flash Cards

Great for revising key terms and remembering definitions, dates, facts etc.

Split the page of your I.S textbook into four using a ruler or use flash cards which you can collect from the LRC and keep in your I.S folder.

Make brief notes on the information in the knowledge organiser, use colour coding and diagrams where you can to highlight key information.



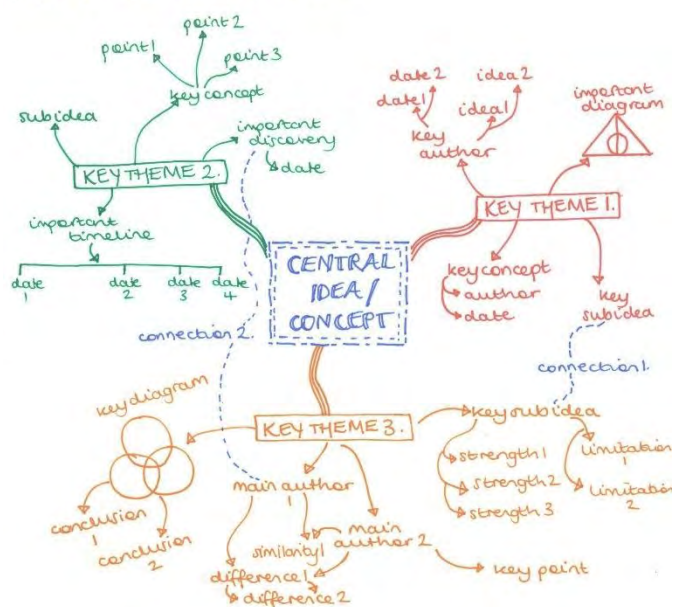
Mind Maps

Great for revising if you are a visual learner, allowing you to select and link key information.

Use a full page to add as much detail as you can to your mind map, starting with a key concept or topic at the centre. Use the knowledge organisers and your own ideas.

You can use colour coding, diagrams and connections to support your learning.

MINDMAPPING GUIDE



Self-Quizzing Questions

Here is a section of a Science Knowledge Organiser. You could test your grasp of this knowledge by asking yourself,

“What ions are found in acids? Acids contain hydrogen ions.”

“What does corrosive mean? A corrosive acid can destroy skin cells and cause burns.”

These are examples of self-quizzing questions. Write 10-20 self-quizzing questions and answers based on the subject knowledge organiser and focusing on the areas where you need to strengthen your knowledge.

2. Acids (pH 1-6)



- Acids are a family of chemicals, examples are lemon juice, vinegar and Coca Cola. There is also acid in our stomach.
- Acids contain Hydrogen (H⁺) ions.
- Strong acids like hydrochloric acid are very corrosive this means they destroy skin cells and cause burns.
- Weak acids like vinegar are safe to eat but are still irritant to sensitive parts of the body.

Termly Planner

| Term 4 | | | | | | |
|--|------------------|---------|-----------|----------|---------------------|---------|
| | Monday | Tuesday | Wednesday | Thursday | Friday | Weekend |
| Week 1 23rd February | INSET Day | | | | | |
| Week 2 2nd March | | | | | INSET Day | |
| Week 3 9th March | | | | | | |
| Week 4 16th March | | | | | | |
| Week 5 23rd March | | | | | | |
| Week 6 30th March | | | | | Bank Holiday | |
| Easter Holiday | | | | | | |

| Term 5 | | | | | | |
|---|---------------------|----------------|------------------|-----------------|---------------|----------------|
| | Monday | Tuesday | Wednesday | Thursday | Friday | Weekend |
| Easter Holiday | | | | | | |
| Week 1 20th April | | | | | | |
| Week 2 27th April | | | | | | |
| Week 3 4th May | Bank Holiday | | | | | |
| Week 4 11th May | | | | | | |
| Week 5 18th May | | | | | | |
| Half Term | | | | | | |

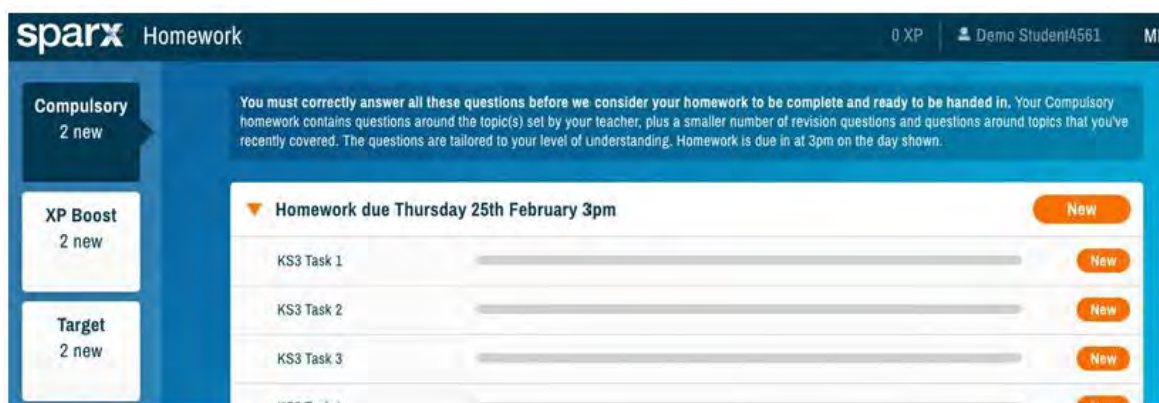
Term 6

| | Monday | Tuesday | Wednesday | Thursday | Friday | Weekend |
|---|--------|---------|----------------|----------|-----------|---------|
| Week 1 1 st June | | | | | | |
| Week 2 8 th June | | | | | | |
| Week 3 15 th June | | | | | | |
| Week 4 22 nd June | | | | | | |
| Week 5 29 th June | | | | | INSET Day | |
| Week 6 6 th July | | | | | | |
| Week 7 13 th July | | | | | | |
| Week 8 20 th July | | | Summer Holiday | | | |

All Independent Study in the Maths department is set using the online platform SparxMaths.

Students need to log into their SparxMaths accounts from the HPA navigation page. Independent study contains 3 elements: Compulsory, XP Boost and Target.

Compulsory: Sparx independent study is tailored to your child and should offer them just the right level of challenge, based on the topics that their teacher has set. All questions in the Compulsory section must be answered correctly for the independent study to be marked as complete. Students need to use pen and paper to write out the bookwork codes and workings to each of their questions as the platform will check they are recording their work. Each task bar will show as green when fully complete. For the Independent study to be classed as complete, all task bars for that independent study need to be fully green. The percentage of independent study complete will show on the menu page:



XP Boost and Target sections are additional resources that the students can complete if they wish. They will support the students to make greater progress in Maths, but do not form part of the compulsory independent study.

If a student receives too much assistance with their independent study, Sparx may think they're able to tackle more difficult questions and their work could get harder. To prevent this, always encourage them to attempt the question first and to watch the support video before getting help.

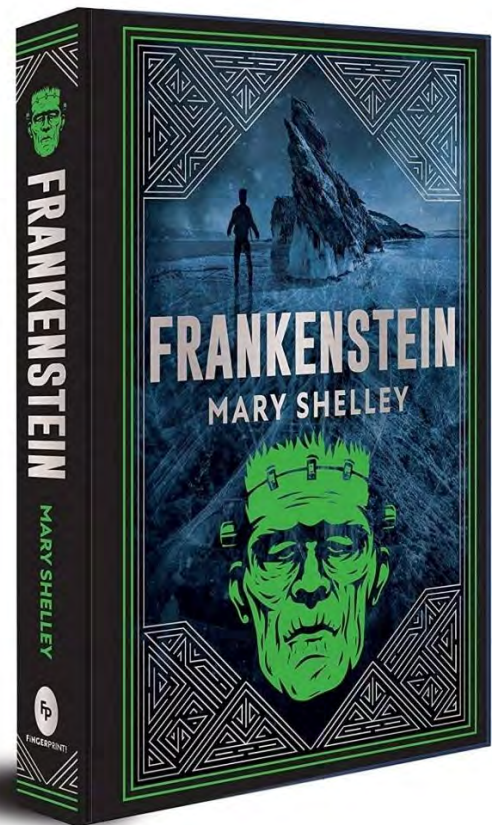
Parents whose children have been set compulsory independent study will receive a weekly email from Sparx, which includes an update on how much independent study their child has completed as well as any they have outstanding from the previous few weeks. Most importantly, the email contains a link to a short video that parents can watch and use to help support their child in answering one of their target questions.

English Department – Independent Study Information

Independent study for English is based around revision Gothic literature and Face. You will find the tasks for each week outlined below with a reminder of hand-in dates. Complete all tasks in your IS book.

You will find a variety of tasks for the next three terms, including vocabulary, punctuation and creative writing.

Tasks will be marked in English lessons. You can find the topics and reminders of hand-in dates outlined in this booklet.



Term 4 Topic – The Gothic

| Week | Task |
|-------------------|--|
| w/c 23rd February | <p><u>Vocabulary:</u> Ominous Isolated Tyrannical</p> <p>For each word write the following:</p> <ul style="list-style-type: none"> ● Definition ● Synonym (word which means the same) ● Antonym (word which means the opposite) ● Example sentence linked to Gothic texts |
| w/c 2nd March | <p><u>Creative:</u> Choose one of the Gothic settings from the Knowledge Organiser (on the next pages). Write five sentences describing the setting using pathetic fallacy.</p> <p>Hint: Pathetic Fallacy uses the weather and emotions to set the atmosphere</p> |
| w/c 9th March | <p><u>Punctuation:</u> Re-write this paragraph adding in the correct punctuation:</p> <p>a cold wind slipped through the broken windows carrying with it the faint scent of damp stone in the darkness something shifted slowly as though it had been waiting for someone to notice a low trembling sound rose from the floorboards as if the house itself were waking</p> |
| w/c 16th March | <p><u>Vocabulary:</u> Neatly draw/sketch an image or an icon to represent each of the following words/vocabulary: Supernatural Submissive Tyrannical</p> <p>And, write a sentence explaining how each word links to Gothic Fiction</p> |
| w/c 23rd March | <p><u>Creative:</u> Choose one of the Gothic settings from the Knowledge Organiser (on the next pages - choose one that you have not previously chosen). Write five sentences describing the setting using personification.</p> <p>Hint: Personification describes non-human things with human qualities. Example: The wind whispered.</p> |
| w/c 30th March | <p><u>Character:</u> Pick a Gothic character from the Knowledge Organiser (on the next pages). Write five sentences introducing your character to a Gothic story. Can you use:</p> <ul style="list-style-type: none"> ● 3 ambitious adjectives ● A simile <p>Example: He moved silently across the courtyard, drifting like smoke through the deepening dusk. The villagers watched from their windows, unsure whether he was seeking help or hiding something unspeakable. When he finally spoke, his voice was low and steady, as if he carried centuries of secrets in every breath.</p> |

Term 4 – The Gothic Knowledge Organiser








Year 8 English Gothic: Fear and Foreboding

Page 1

| Values and ideas held by Gothic writers | Terminology | |
|---|----------------------------|---|
| <ul style="list-style-type: none"> • Gothic writers are preoccupied with the supernatural because they believe that not everything has a scientific explanation. • They believed that nature is 'sublime': it has the power to simultaneously inspire awe and terror in people. • They challenged society's expectations about propriety and emotion. To show wild emotion was seen as crass and uncouth, but not to the gothic writers, who often depicted passion and rage. • They explored the role of the female characters: often in gothic texts, there are powerful female roles, which contrasted the contemporary society. • They were very interested in the psychological exploration of characters, particularly in relation to themes of madness. | Unreliable narrator | A narrator who cannot be trusted |
| | Personification | Describing something non human using human qualities |
| | Pathetic fallacy | when an author gives human emotions and traits to nature or inanimate objects. It is often used when describing weather to show characters' moods |
| | Antagonist | The character who opposes and works against the main character |
| | Tension | The feeling that something bad will happen - the feeling of uneasiness |

Year 8 English Gothic: Fear and Foreboding

Page 2

| Typical Genre Features | Archetypal Characters | Typical Settings | Vocabulary to learn | |
|--|---|--|---------------------|---|
| 1. Death and darkness  | 1. Mysterious characters with high social status e.g Princes, counts  | 1. Remote, uninhabited places (older gothic) or monsters intermingling in everyday life (newer gothic) | Isolation | the condition of being alone or separate from others, or the fact that something is not connected to other things |
| 2. Supernatural (magic, ghosts, vampires, curses)  | 2. Female or feminine characters that are threatened by powerful men | 2. Medieval Style castles, churches or abbeys  | Submissive | To obey the orders of others |
| 3. Curses or prophecies  | 3. Threatening women who are monsters or vampires | 3. Gloomy, decayed and ruined environments | Supernatural | attributed to some force beyond scientific understanding or the laws of nature. |
| 4. Madness and intense emotions/paranoia | 4. Powerful, tyrannical male figures | 4. Wild landscapes  | Ominous | giving the impression that something bad or unpleasant is going to happen; threatening |
| 5. Mystery, terror and suspense | 5. Villains, vampires, ghosts, werewolves, giants | 5. Volatile and threatening weather (symbolism)  | Tyrannical | Exercising power in a cruel and controlling way |
| | | | Foreboding | A feeling that something bad will happen |

Term 5 Topic – Face


| Week | Task |
|----------------|---|
| w/c 20th April | <p><u>Persuasive Writing:</u> Re-write this paragraph adding in the correct punctuation (Hint: Don't forget question marks):</p> <p>every day students in our school walk past the dull empty courtyard and pretend not to notice how unwelcoming it looks but why should we accept a space that feels so lifeless when it could be transformed into a bright inviting area where everyone wants to spend time imagine colourful benches vibrant plants and a quiet reading corner isnt that the kind of space we all deserve</p> |
| w/c 27th April | <p><u>Persuasive Writing:</u> Rewrite these sentences making them more persuasive. Use rhetorical questions, emotive language or triples.</p> <ol style="list-style-type: none"> 1) The school library is quite small and could be improved. 2) Some people think we should reduce the amount of plastic we use. 3) The local park needs repairs because it is a bit old. 4) The canteen menu doesn't have many healthy options. 5) Many teenagers spend a lot of time on their phones. |
| w/c 4th May | <p><u>Persuasive Writing:</u> Choose one of the following topics (school uniform, screen time, fast fashion). Write five persuasive sentences as the opening of a speech. Include:</p> <ul style="list-style-type: none"> ● A rhetorical question ● Some emotive language ● A triple |
| w/c 11th May | <p><u>Vocabulary:</u> Neatly draw/sketch an image or an icon to represent each of the following words/vocabulary: Resistance Resilience Justice</p> <p>And, write a sentence using each word.</p> |
| w/c 18th May | <p><u>Characters:</u> Using the character Past Martin from the play, write three adjectives to describe him and three sentences explaining why each word links to the character.</p> <p>Example for Natalie: <i>Three adjectives:</i> shallow, vain, superficial <i>Sentence 1:</i> Natalie is superficial because she lacks empathy and fails to support Martin after his accident, prioritizing looks over loyalty.</p> |
| w/c 30th March | <p><u>Vocabulary:</u> Write a sentence for each of the following words. Link your sentences to the play, Face. Prejudice Disfigurement Disability Vanity</p> |

Term 6 Topic – Face

| Week | Task |
|---------------|--|
| w/c 1st June | <p><u>Vocabulary:</u> Resilient Vanity/vain Justice</p> <p>For each word write the following:</p> <ul style="list-style-type: none"> ● Definition ● Synonym (word which means the same) ● Antonym (word which means the opposite) ● Example sentence using the word |
| w/c 8th June | <p><u>Characters:</u></p> <p>Finish these sentences using the because, but, so connectives:</p> <ul style="list-style-type: none"> ● Martin feels angry after the crash because ● Martin feels angry after the crash, but ● Martin feels angry after the crash, so <p>and , complete these:</p> <ul style="list-style-type: none"> ● Natalie tries to help Martin because ● Natalie tries to help Martin, but ● Natalie tries to help Martin, so |
| w/c 15th June | <p><u>Analysis:</u></p> <p>Using the extract, highlight the Stage Directions.</p> <p>AMY: I can't believe you left the bag <i>again</i>. <i>(She folds her arms and steps back.)</i></p> <p>JORDAN: I didn't "leave" it. I just... misplaced it. <i>(He glances around the room, nervously tapping his foot.)</i></p> <p>AMY: That's the same thing, Jordan. <i>(Amy walks towards him, lowering her voice.)</i></p> <p>Explain in 3–4 sentences what each direction tells the actor to do and why it might matter.</p> |
| w/c 22nd June | <p><u>Themes:</u></p> <p>Write a sentence explaining why you think each of the following themes/ideas link to Face the play:</p> <ol style="list-style-type: none"> 1) Appearance vs reality 2) Friendship 3) Prejudice |
| w/c 29th June | <p><u>Creative Task:</u></p> <ol style="list-style-type: none"> 1) Create 5 interview questions that you would like to ask any characters in Face. State which character you would like to ask them to. 2) For three questions, imagine how the character may respond. <p><u>Example:</u></p> <p>Past Martin: How did you feel about your appearance before the accident? Past Martin's response: I never really thought about my face before. It was just normal to me, and I cared more about fitting in and what my mates thought than how I looked.</p> |
| w/c 6th July | <p><u>Vocabulary:</u></p> <p>Write a sentence for each of the following words. Link your sentences to the play, Face.</p> <p>Shallow Identity Loyalty</p> |

| | |
|---------------|--|
| w/c 13th July | <p>Characters: Using your own words, write an answer to the following questions about Face the play.</p> <ol style="list-style-type: none"> 1) What do you think is the purpose of the Street Voices? 2) What is the difference between Narrative Martin and Present Martin? <p>Why does Zephaniah have three different Martins in the story?</p> |
| w/c 20th July | <p>Creative Task: Create your own book cover for Face the play.</p> |

Term 5&6 - Face Knowledge Organiser




Year 8 English

Face: Resilience and Resistance

Page 1

| Vocabulary to learn | | Terminology | |
|-----------------------|--|-------------------------|--|
| Resilience | To recover quickly from difficulties | Prologue | a separate introductory section of a literary, dramatic, or musical work |
| Resistance | The refusal to accept or comply | Epilogue | a section or speech at the end of a book or play that serves as a comment on or a conclusion to what has happened: |
| Vanity | Excessive pride in your appearance | Stage Directions | instructions that guide actors on various aspects of a performance - movement and tone of voice |
| Disability | a physical or mental condition that limits a person's movements, senses, or activities | Rhetoric | The art of persuasive speaking or writing |
| Disfigurement | the action of spoiling the appearance of something or someone | Pathos | A quality that evokes pity and sadness |
| Discrimination | the unjust or prejudicial treatment | Logos | Appealing to reason, logic and understanding |
| Justice | Fairness | Ethos | Credibility |
| Prejudice | preconceived opinion that is not based on reason or actual experience | | |



Year 8 English

Face: Resilience and Resistance

Page 2

| Characters | | Characters | |
|-------------------------|---|-----------------------|---|
| Street voices | They act as a Greek Chorus, reflecting public opinion, highlighting themes of prejudice and judgment, and helping to shift scenes, bridging the gap between Martin's internal experience and the external world's scrutiny. | Present Martin | Present Martin represents the physical and emotional aftermath of the accident, serving to highlight the contrast between his former shallow life and his new, more mature, and resilient identity. |
| Narrative Martin | Serves as a bridge between the past (pre-accident) and present (post-accident), providing crucial insight into the protagonist's emotional transformation | Matthew | Matthew serves as a crucial foil to the main character, Martin, representing a more cautious, responsible, and grounded approach to life compared to the reckless, image-obsessed, and risky, "cool" life lived by the "Gang of Three" before the accident. |
| Past Martin | Past Martin exists to provide a stark contrast to Present Martin, highlighting the dramatic shift in his character, values, and life circumstances after a disfiguring car accident | Mark | Mark serves as a foil to the protagonist, Martin, highlighting the themes of loyalty, superficiality, and changing priorities after Martin's disfiguring accident |
| Natalie | Natalie serves as a focal point for exploring the themes of superficiality, image-driven society, and the loss of shallow friendships following a life-altering event. | Anthony | Anthony acts as a pivotal, positive role model for the protagonist, Martin Turner. |

Science Department – Independent Study Information

Independent study for science is completed in this booklet with knowledge organisers to help you recall or research information.

You will find the worksheets over the next series of pages and the knowledge organisers to help you answer the questions.

The questions will be marked in your science lessons, and any misconceptions will be corrected to support your learning.

You can find the topics and reminders of hand-in dates outlined below.

| TITLE | HAND IN DATE |
|---------------------------------|---------------------|
| Evolution | 23.02.26 |
| Evolution | 02.03.26 |
| Evolution | 09.03.26 |
| Reactivity of metals | 16.03.26 |
| Reactivity of metals | 23.03.26 |
| Reactivity of metals | 30.03.26 |
| Photosynthesis | 20.04.26 |
| Photosynthesis | 27.04.26 |
| Ecosystems | 04.05.26 |
| Ecosystems | 11.05.26 |
| Ecosystems | 18.05.26 |
| Evolution of Earth's atmosphere | 01.06.26 |
| Evolution of Earth's atmosphere | 08.06.26 |
| Earth's changing atmosphere | 15.06.26 |
| Earth's changing atmosphere | 22.06.26 |
| Earth's changing atmosphere | 29.06.26 |
| Rocks | 06.07.26 |
| Rocks | 13.07.26 |

1. Variation

All of the tomatoes in the world look slightly different. Their colour, shape and size is not identical. This means they show variation.



VARIATION: Differences in characteristics .

4. Genetic and Environmental Variation

Some variation is passed on from parents to offspring, via genes, during reproduction. This is **genetic variation** and examples include eye colour, sex and ability to roll your tongue.

Some variation is the result of differences in the surroundings, or what an individual does such as lifestyle, culture and climate you live in. This is called **environmental variation** and examples include your language and religion.

Some variation is caused by a mixture of both genetic and environmental factors and examples include your weight and height.



6. Extinction

Changes in the environment may leave individuals less well adapted to compete successfully for resources such as food, water and mates. Sometimes an entire species may become unable to compete successfully and reproduce. These problems can lead to **extinction**.

Extinction is the loss of an entire species.

Causes of extinction:

1. new disease
2. new predator
3. climate change
4. competition

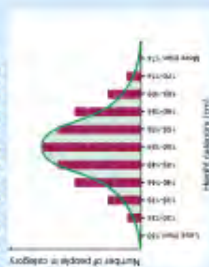
Examples of animals who have gone extinct: the dodo, dinosaurs and the West African Black Rhinoceros.



2. Continuous Variation

Human height is an example of continuous variation. It ranges from that of the shortest person in the world to that of the tallest person. Any height is possible between these values – making it an example of continuous variation.

A bell-shaped curve represents continuous variation.



KS3 Science Evolution



7. Biodiversity

Biodiversity: the variety of living organisms in an area.

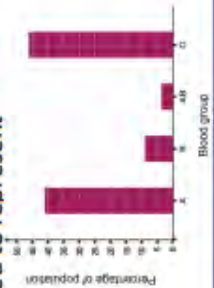
Biodiversity is important for:

1. Food
2. Resources
3. Medicine
4. Well-being



3. Discontinuous Variation

If a characteristic can be categorised into a group, it is labelled **discontinuous variation**. Examples of this include eye colour, blood group and shoe size. A bar chart can be used to represent discontinuous data.



5. Evolution

If all the individuals of a species were genetically identical they would be vulnerable to the same diseases. If this were the case a single disease could wipe out an entire species! As a result of their genes, some individuals of a species might have better camouflage, or be able to run faster. These individuals are more likely to survive. This is called the **survival of the fittest**.

The members of a species that survive may reproduce. Their offspring are likely to have the desirable characteristics of their parents. This process is known as **evolution**.



8. Conservation Measures

Some species in Britain are endangered, including the skylark, red squirrel and grass snake. They could be helped by conservation measures such as:

- education programmes
- captive breeding programmes
- legal protection and protection of their habitats
- making artificial ecosystems for them to live in.

Plant species can also be endangered. Seed banks are a conservation measure for plants. Seeds are carefully stored so that new plants may be grown in the future.



Science: EVOLUTION 1**Due: week commencing 23.02.26**

| | | |
|--|--|---|
| 1. Define the term variation, including an example. | 2. State one example of continuous variation. | 3. State one example of discontinuous variation. |
| 4. Define genetic variation. | 5. Describe the causes of variation. | 6. Describe how discontinuous variation is represented. |
| 7. Explain why variation within a species is important for survival. | 8. Explain why human height is an example of continuous variation. | 9. Explain two reasons why biodiversity is important to humans. |

Science: EVOLUTION 2**Due: week commencing 02.03.26**

| | | |
|---|--|---|
| 1 State the cause of hair colour. <ul style="list-style-type: none"> o Continuous o Environment o Genetics o Discontinuous | 2 Name 2 organisms that have gone extinct. | 3 Define the word extinction. |
| 4 Describe the possible causes of extinction. | 5 Describe what is meant by the word 'biodiversity'. | 6 Describe how you inherit characteristics from your parents. |
| 7 Explain how a new predator can cause a species to become extinct. | 8 Explain why biodiversity is important. | 9 Explain why seed banks are used. |

| | | |
|--|---|--|
| 1 State the cause of eye colour. <ul style="list-style-type: none">○ Continuous○ Environment○ Genetics○ Discontinuous | 2 Name 2 British organisms that are endangered. | 3 Define the term <i>variation</i> . |
| 4 Describe the possible causes of extinction. | 5 Describe the shape of a graph that shows continuous variation. | 6 Describe how a person's weight is caused by a combination of genetic and environmental factors. |
| 7 Mountain gorillas live in areas which are used for mining. Explain why they are at risk of going extinct. | 8 Explain why biodiversity is important. | 9 Explain why all individuals of a species being identical is a risk to their survival. |

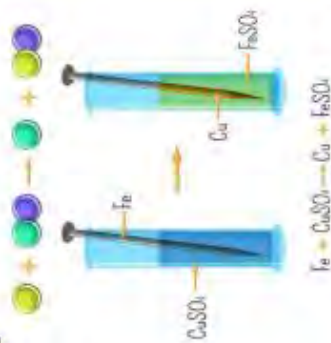
Additional Notes

1. Displacement reactions

Displacement reactions are used to help establish the order of reactivity for metals.

In these reactions a more reactive metal replaces a less reactive metal to form a salt.

Colour changes are a good indicator of displacement.



4. Acid and Metal Reactions

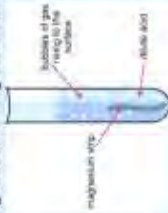
Acid and metal reactions are used to determine a metal's reactivity.

The general equation for this is:



Bubbles of hydrogen gas are observed.

Example



2. The Reactivity Series

The reactivity series is the order of metals based on their reactivity.

We can use this to predict what is made in a reaction. Carbon and hydrogen are included as carbon is sometimes used to extract metals from their ores.

| | |
|-----------|----------------|
| Potassium | most reactive |
| Sodium | |
| Calcium | |
| Magnesium | |
| Aluminium | |
| Carbon | |
| Zinc | |
| Iron | |
| Tin | |
| Lead | |
| Hydrogen | |
| Copper | |
| Silver | |
| Gold | |
| Platinum | least reactive |

6. Naming Salts

Salts are produced during reactions with metals.



| acid | alkali | salt |
|-------------------|--------|---------------|
| Hydrochloric acid | | Salt Produced |
| Sulfuric acid | | Chloride |
| Nitric acid | | Sulfate |
| | | Nitrate |

EG:
Hydrochloric acid + sodium hydroxide → sodium chloride + water
Hydrochloric acid + magnesium → magnesium chloride + hydrogen

7. Tests for Carbon Dioxide and Hydrogen

CO₂ – Carbon Dioxide

1. Lit splint is extinguished (goes out) in the presence of CO₂ gas.
2. lime water turns from colourless to cloudy.



H₂ – Hydrogen

Squeaky pop test – a lit splint, in the presence of hydrogen makes a squeak pop sound.



3. Acid and Alkali Reactions

An acid and an alkali can be reacted together in a neutralisation reaction. This produces salt and water.

The general equation for this is:



Example:
Hydrochloric acid + sodium hydroxide → sodium chloride + water

5. Acid and Metal Carbonate Reactions

The general equation for these reactions:



Bubbles of carbon dioxide gas are observed.

Example:



Metals and Reactivity



Science: Metals and Reactivity 1**Due: week commencing 16.03.26**

| | | |
|---|--|--|
| 1. State whether potassium is a metal or non-metal. | 2. State the general equation for a metal reacting with an acid. | 3. Name the gas produced by a metal reacting with an acid. |
| 4. Complete this word equation: sodium hydroxide + hydrochloric acid → | 5. Name the salt produced when potassium hydroxide reacts with hydrochloric acid. | 6. State the general equation for a metal carbonate reacting with an acid. |
| 7. Complete the equation: barium hydroxide + hydrochloric acid → | 8. Name the non-metal which is more reactive than copper, but less reactive than lead. | 9. Describe the test for hydrogen gas. |

Science: Metals and Reactivity 2**Due: week commencing 23.03.26**

| | | |
|--|--|--|
| 1. Define displacement reaction. | 2. Less reactive metals displace more reactive metals from compounds. True or false? | 3. Iron is added to copper sulfate solution. Name the metal that is displaced. |
| 4. Iron is added to copper sulfate solution. Describe the colour change that you would observe. | 5. Describe what the reactivity series is. | 6. Name two metals that are more reactive than carbon. |
| 7. Explain why metals above carbon in the reactivity series extracted differently from those below carbon. | 8. Name the type of reaction that happens when an acid reacts with an alkali. | 9. Write the general word equation for an acid + alkali reaction. |

| | | |
|--|---|--|
| 1. Hydrochloric acid reacts with sodium hydroxide. Name the salt produced. (1) | 2. Write the general word equation for an acid reacting with a metal. (2) | 3. Name the gas which is produced when a metal reacts with an acid. (1) |
| 4. Magnesium reacts with hydrochloric acid. Write the word equation for this reaction. (2) | 5. Write the general word equation for an acid reacting with a metal carbonate. (2) | 6. Name the gas produced when an acid reacts with a metal carbonate. (1) |
| 7. Copper carbonate reacts with hydrochloric acid. Name the salt that is formed. (1) | 8. Describe the test for Carbon dioxide. (2) | 9. Describe the test for Hydrogen. (2) |

Additional Notes

KS3 Science Photosynthesis

1. Photosynthesis in Plants

Animals need to eat food to get their energy. But green plants and algae do not. Instead they make their own food in a process called **photosynthesis**. Almost all life on Earth depends upon this process. Photosynthesis is also important in maintaining the levels of oxygen and carbon dioxide in the atmosphere.



2. Photosynthesis equation

Word equation

carbon dioxide + water → glucose + oxygen

Balanced symbol equation



4. Adaptations of the leaf

The leaf is adapted to carry out photosynthesis:

| | |
|-------------|---|
| Thin | a short distance for CO ₂ to move by diffusion |
| Chlorophyll | Absorbs light |
| Stomata | Allows CO ₂ to move in by diffusion |
| Guard cells | open and close the stomata depending on the conditions |
| Tubes | To transport water (xylem) and glucose (phloem) |

3. Location of photosynthesis

Photosynthesis takes place inside the **chloroplasts** of the plant cells, these contain a green pigment, **chlorophyll**. This absorbs the light energy needed to make photosynthesis happen.

Most photosynthesis happens in the leaves of the plant.

They are green as they contain lots of chloroplasts.

No photosynthesis happens in the root hair cells of the plant as they are underground.

5. Measuring the effect of light intensity on photosynthesis

Method:

1. Leave for five minutes for the pondweed to acclimatise to the new environment.
2. Count the number of bubbles given off in one minute.
3. Move the light 10 cm further back.
4. Leave for five minutes for the pondweed to acclimatise again.
5. Count the number of bubbles given off in one minute.
6. Repeat by moving the lamp away by 10 cm intervals until 50 cm is reached.



Science: Photosynthesis 1**Due: week commencing 20.04.26**

| | | |
|--|---|---|
| 1. Define photosynthesis. | 2. Explain why animals need to eat food, but green plants do not. | 3. State one way photosynthesis is important for life on Earth. |
| 4. Describe how leaves are adapted for photosynthesis. | 5. Write the word equation for photosynthesis. | 6. State the reactants for photosynthesis. |
| 7. State the products of photosynthesis. | 8. Describe where in a plant photosynthesis takes place. | 9. Explain why a leaf is thin. |

Science: Photosynthesis 2**Due: week commencing 27.04.26**

| | | |
|---|---|--|
| 1. Name the part of the cell where photosynthesis happens. | 2. Describe what chlorophyll is. | 3. Explain why roots do not usually carry out photosynthesis. |
| 4. Describe the role of stomata. | 5. Name the tube which transports water in plant. | 6. Name the tube which transports glucose in plant. |
| 7. In the pondweed experiment, explain why the plant left for five minutes before counting bubbles. | 8. Explain why bubbles counted when measuring the rate of photosynthesis in pondweed. | 9. Name the independent variable (the one you change) in the photosynthesis practical. |

1. Habitats and ecosystems

An **ecosystem** consists of **communities** of different living things, in single species **populations** living in their habitats. Examples of these include habitats include coral reefs, marshes and lakes. All the living things (**biotic factors**) and non-living things (**abiotic factors**) in an ecosystem depend upon each other for survival. This interdependence includes through feeding, pollination.



3. Food Chains

A food chain shows the different species of an organism in an ecosystem, and what eats what. Organisms at each level have different terms:



KS3 Science Ecosystems



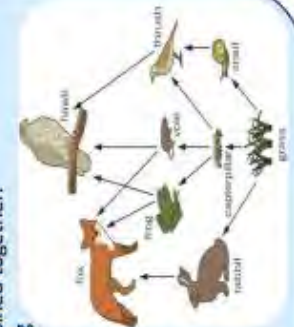
4. Pyramids of biomass and numbers

The population of each organism in a food chain can be shown in a bar chart or a pyramid of biomass where the bars are drawn to scale. Energy is lost to the surroundings as we go from one level to the next, so there are usually fewer organisms at each level in this food chain.



5. Food Webs

When all the food chains in an ecosystem are joined up together, they form a **food web**. Although it looks complex, it is just several food chains joined together.



This leads to some interesting effects if the population in the food web decreases. Some animals can just eat more of another organism if food is in short supply, while others may starve and die. This in turn can affect the populations of other organisms in the food web.

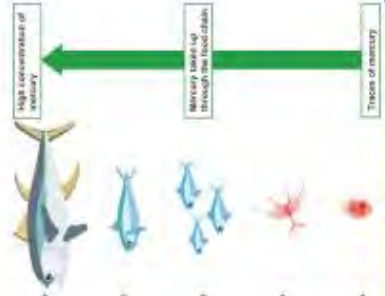
2. Sampling techniques

Sampling is done to look at the organisms in a population within an ecosystem. Counting each one individually is not always feasible, it takes too much time, so instead scientists take a sample. This is usually done using quadrats. A quadrat is usually a square made of wire. It is placed on the ground in the area you are sampling. The organisms underneath, usually plants, can then be identified and counted. Quadrats may also be used for slow-moving animals, e.g. slugs and snails.



6. Pollution and Pesticides

Some pollutants (including pesticides) quickly break down in the environment whilst others do not. These bio-accumulate in the food chain and damage the organisms in it. The predators at the end of the chain are most affected because the top of the food chain then experiences the highest concentration of harmful substances.



Science: Ecosystems 1**Due: week commencing 04.05.26**

| | | |
|---|--|---|
| 1. Define ecosystem. | 2. Define community. | 3. Explain why scientist use sampling instead of counting every organism. |
| 4. Describe what a quadrat is. | 5. Describe why plants are described as producers. | 6. State the term used to describe an animal that eats plants. |
| 7. Explain why there are fewer organisms higher up in a pyramid of biomass. | 8. Name the type of chemicals used to kill pests. | 9. Draw a possible food chain for an ocean ecosystem. |

Science: Ecosystems 2**Due: week commencing 11.05.26**

| | | |
|--|--|---|
| 1. Define habitat. | 2. Give two examples of biotic factors. | 3. Give two examples of abiotic factors. |
| 4. Describe how you would use a quadrat. | 5. Describe what a food chain shows. | 6. State the term used to describe an animal that eats other animals. |
| 7. Give an example of a food chain for a pond ecosystem. | 8. Give an example of a food chain for a desert ecosystem. | 9. Describe what happens to a food web if one population decreases. |

Science: Ecosystems 3**Due: week commencing 18.05.26**

| | | |
|--|--|---|
| 1. Define population. | 2. State what type of organisms are usually counted using a quadrat. | 3. Define interdependence. |
| 4. Give one example of how organisms depend on each other. | 5. Describe why food webs are more realistic than a food chain. | 6. Explain why predators are most affected by pollution. |
| 7. Write two food chains from the food web on the knowledge organiser. | 8. Name one top predator on the food web on the knowledge organiser. | 9. Name the three primary consumers on the food web on the knowledge organiser. |

Additional Notes

1. Composition of the Earth

The Earth's crust, its atmosphere and the oceans are the only sources of natural resources for human life!



- The Earth has four layers:
- Crust (thin and rocky)
 - Mantle (properties of solid but flows easily)
 - Outer core (made from nickel and iron)
 - Inner core (made from nickel and iron)

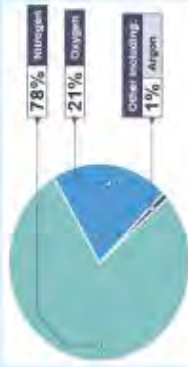
2. Composition of the Early Atmosphere

The Earth's early atmosphere was composed of 95% carbon dioxide, 4% water vapour and 1% of trace gases which included nitrogen, ammonia and methane.



4. Composition of the Today's Atmosphere

Nitrogen is the most abundant gas in today's atmosphere at 78%. Today's atmosphere contains 21% Oxygen and 1% Argon.



5. Generating Electricity

About three-quarters of the electricity generated in the UK comes from power stations fuelled by fossil fuels.

Energy from the burning fuel is used to boil water.

The steam turns turbines, and these turn electrical generators.

KS3 Science Evolution of Earth's atmosphere



6. Fossil Fuels

Crude oil, coal and gas are fossil fuels. They were formed over millions of years from the remains of dead organisms.

Coal was formed from dead trees and plant matter.

Crude oil and gas were formed from dead marine organisms.

3. Evolution of Atmosphere

In the 4.5 billion years since the Earth formed, its atmosphere has changed considerably. This has happened in three main stages:

Stage 1: THE EARTH'S EARLY ATMOSPHERE – Volcanoes:

The majority of the early atmosphere was carbon dioxide and water vapour. This was produced by volcanoes. The temperatures on Earth were very high. After a time, the Earth cooled and the water vapour condensed and formed the oceans.

Stage 2: EVOLUTION OF PHOTOSYNTHESISERS – Green plants:

Green plants and algae evolved and used the carbon dioxide for photosynthesis. They also produced oxygen. Basic organisms evolved that were able to use the oxygen.

Stage 3: TODAY'S ATMOSPHERE – Complex animals:

The oxygen allowed more complex organisms to form. The ozone layer formed and this allowed further evolution of complex organisms.



Science: Evolution of Earth's atmosphere 1**Due: week commencing 01.06.26**

| | | |
|---|---|--|
| 1. Name the 4 layers of the Earth. (4) | 2. State the percentage of oxygen in Earth's atmosphere today. (1) | 3. Describe the composition of Earth's early atmosphere. (3) |
| 4. Describe how the amount of oxygen in our atmosphere has changed. (1) | 5. Compare carbon dioxide levels in Earth's early atmosphere with today's atmosphere. (1) | 6. Describe how Earth's early atmosphere formed. (2) |
| 7. Describe how coal forms. (1) | 8. Explain why the amount of water vapour in our atmosphere has decreased. (3) | 9. Explain why leaf cells have lots of chloroplasts. (2) |

Science: Evolution of Earth's atmosphere 2**Due: week commencing 08.06.26**

| | | |
|--|--|---|
| 1. True or false. (1) Plants absorb oxygen during photosynthesis. | 2. Name 3 fossil fuels. (3) | 3. Name the most abundant gas in today's atmosphere and state the percentage. (2) |
| 4. Name the thinnest layer of Earth. (1) | 5. Write the word equation for photosynthesis. (2) | 6. Describe how electricity is generated. (4) |
| 7. Describe how oil forms. (1) | 8. Explain why the amount of oxygen in our atmosphere has increased. (2) | 9. Explain why root hair cells have no chloroplasts. (3) |

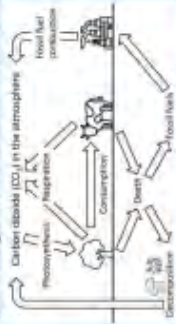
1. Non-renewable Energy Sources

Non-renewable energy sources include fossil fuels such as coal, oil and natural gas. These sources are a finite resource, which means when they have been used up, they cannot be replaced. Worryingly, humans are using them faster than they are forming!



4. Carbon Cycle

All cells - whether animal, plant or bacteria - contain carbon. Carbon is passed from the atmosphere (as carbon dioxide) to living things, passed from one organism to the next and returned to the atmosphere as carbon dioxide again. This is known as the carbon cycle.



6. Carbon Cycle

Step 3: Passing carbon from one organism to next
When an animal eats a plant, carbon from the plant becomes part of the fats and proteins in the animal. Microorganisms and some animals feed on waste material from animals, and the remains of dead animals and plants. The carbon then becomes part of these microorganisms and detritus feeders.

Step 4: Returning carbon dioxide to the atmosphere
When fossil fuels are burned (combustion) in factories or transportation, carbon is released into the atmosphere as carbon dioxide gas.



2. Renewable Energy Sources

Scientists are trying to find alternative methods of generating electricity using renewable energy sources. These are energy sources that will not run out or produce carbon dioxide and other greenhouse gases. They are 'cleaner' and more sustainable although they do come with advantages and disadvantages.



KS3 Science Earth's changing atmosphere



7. Greenhouse Effect

The greenhouse effect is when greenhouse gases (carbon dioxide, methane and water vapour) in the Earth's atmosphere trap radiation from the sun and heat up the planet. Without the greenhouse effect the Earth would be too cold for us to survive on it.



3. Renewable Energy Resources

| Resource | CO ₂ | Advantages | Disadvantages |
|---------------|--------------------|-----------------------------|---------------|
| Wind | No CO ₂ | Unsightly, not always windy | |
| Solar | No CO ₂ | Expensive, not always sunny | |
| Hydroelectric | No CO ₂ | Destroys habitat | |
| Geothermal | No CO ₂ | Specific locations | |

5. Carbon Cycle

Step 1: Removing carbon dioxide from atmosphere
Green plants remove carbon dioxide from the atmosphere by photosynthesis. The carbon becomes part of complex molecules such as proteins, fats and carbohydrates in the plants.

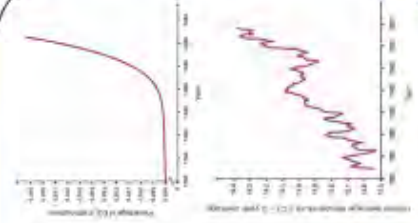


Step 2: Returning carbon dioxide to atmosphere
Organisms return carbon dioxide to the atmosphere by respiration. It is not just animals that respire. Plants and microorganisms do, too.



8. Global Warming

The extra greenhouse gases released by human activity lead to the enhanced greenhouse effect. More heat is trapped by the atmosphere, causing the planet to become warmer than it would be naturally. The increase in global temperature this causes is called global warming.



Science: Earth's changing atmosphere 1**Due: week commencing 15.06.26**

| | | |
|---|--|---|
| 1. Name three non-renewable fuels. (3) | 2. Name one greenhouse gas. (1) | 3. List one advantage and one disadvantage of hydroelectric power. (2) |
| 4. Describe how carbon is passed from one organism to another. (2) | 5. Describe how CO ₂ moves into the atmosphere. (2) | 6. Describe how carbon is removed from the atmosphere. (3) |
| 7. Explain why some people are for, and others are against, wind power. (2) | 8. Explain why the greenhouse effect is useful. (3) | 9. Explain why increasing the carbon dioxide levels is increasing the temperature on Earth. (3) |

Science: Earth's changing atmosphere 2**Due: week commencing 22.06.26**

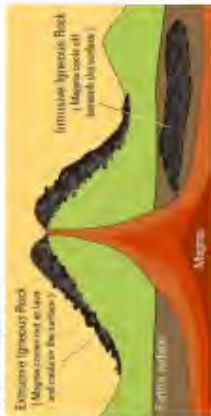
| | | |
|---|--|--|
| 1. Name 2 renewable energy sources. (2) | 2. State the process that removes carbon dioxide from the atmosphere. (1) | 3. Name the structure inside a plant cell that carries out photosynthesis. (1) |
| 4. Describe the disadvantages of solar energy as an energy resource. (2) | 5. Complete the word equation below: _____ + _____ → Carbon dioxide Oxygen | 6. Describe how carbon is passed from one organism to the atmosphere. (2) |
| 7. Describe the general trend in average global temperatures since the year 1900. | 8. Explain why geothermal energy is not an energy resource used in all countries. | 9. Explain why carbon dioxide is released when a fuel burns. |

| | | |
|--|---|--|
| 1. Name one gas found in Earth's atmosphere. (1) | 2. Name one gas in Earth's atmosphere that has increased in the last 4.5 billion years. (1) | 3. Name the most abundant gas in Earth's atmosphere today. (1) |
| 4. List one advantage and one disadvantage of geothermal energy. (2) | 5. Describe what happened to carbon dioxide levels in Earth's atmosphere between 1700 and 1800. (1) | 6. Describe, using evidence, what happened to carbon dioxide levels in Earth's atmosphere between 1950 and 2000. (2) |
| 7. Calculate the change in average global temperature between 1870 and 1990. (2) | 8. Explain why producing carbon dioxide is a disadvantage of burning fossil fuels. (2) | 9. Explain the consequences of global warming. (2) |

Additional Notes

1. Igneous Rocks

Igneous rocks are formed from the cooling of molten rock (lava). Molten rock is rock that has been heated to such a high temperature that it melts into a liquid.



2. Sedimentary Rocks

Sedimentary rock is made of layers of sediment that has been carried by water. The oldest layers are at the bottom and the youngest layers are at the top.

THE FORMATION OF SEDIMENTARY ROCK:

1. Transport
2. Deposition
3. Sedimentation
4. Compaction
5. Cementation

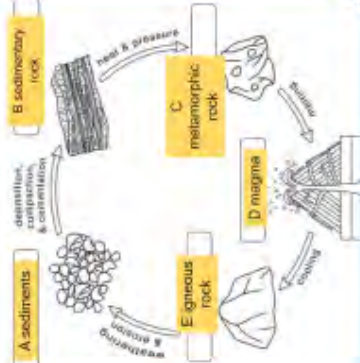
3. Metamorphic Rocks

Metamorphic rocks are formed from other rocks which change due to **heat** or **pressure**. The original rocks are usually sedimentary rocks or igneous rocks. Sometimes one metamorphic rock can be turned into a different metamorphic rock.



4. The Rock Cycle

The Rock cycle is the ways in which rocks can be changed between the three main types. It happens over the course of millions of years.



KS3 Science Rocks



6. Particles and Density

The particles in a solid are more closely arranged than a gas.

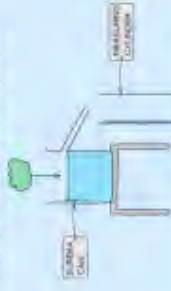
Density is measure of how closely together particles are arranged.

Therefore, solids have a higher density than liquids and gases.



7. Investigating Density

The density of a solid can be measured by using a Eureka can. The Eureka can is filled with water and the object is placed into the can. The volume of water that exits the can through the spout can be measured using a measuring cylinder. The volume of water that leaves the can is the same as the volume of the object.



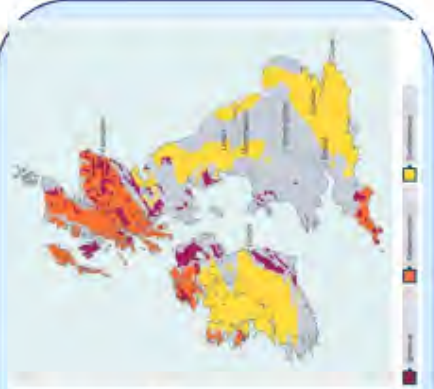
8. Density of Rocks

Solids can all have different densities. Rocks are the same. The three rock types differ in density due to how they are formed.



5. Distribution of Rocks

The UK has a wide distribution of the three rock types, caused by the movement of tectonic plates.



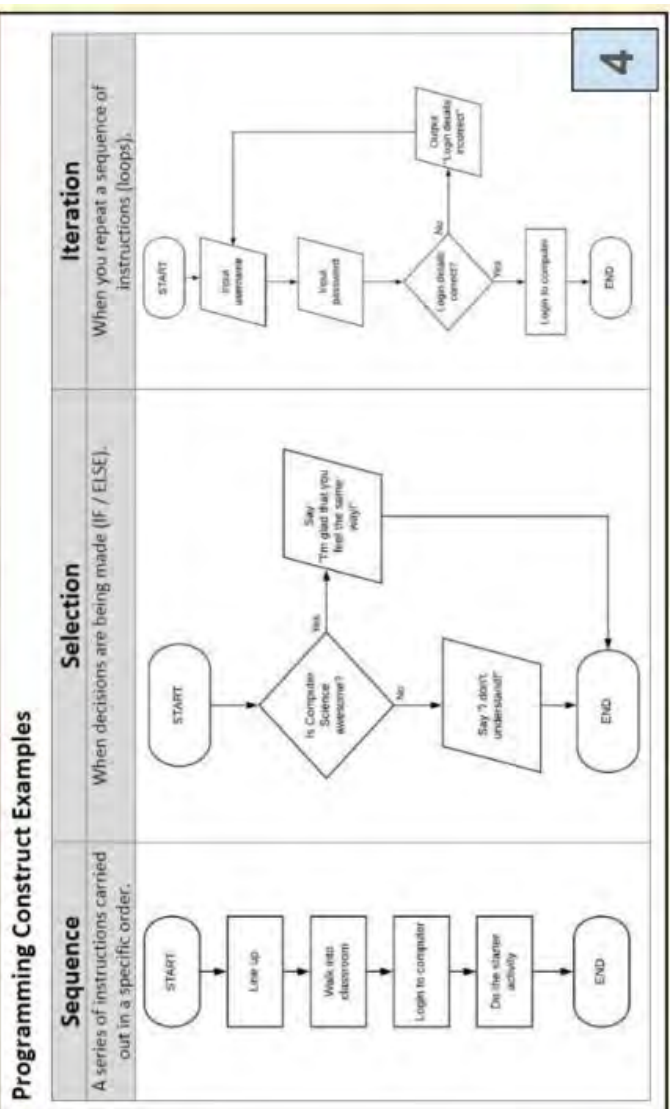
Science: ROCKS 1**Due: week commencing 06.07.26**

| | | |
|--|---|---|
| 1. Name the rock type formed from cooled lava. (1) | 2. Name the type of igneous rock which is formed on the surface of a volcano. (1) | 3. List the stages in the formation of sedimentary rock. (5) |
| 4. List two conditions under which sedimentary and igneous rock are transformed into metamorphic rock. (2) | 5. Name the main rock type found in Scotland. (1) | 6. Describe the arrangement of particles in a solid. (2) |
| 7. Explain what happens to the density of a substance as it turns from a solid into a liquid. (2) | 8. Describe how to measure the volume of a rock using a Eureka can. (4) | 9. Compare the density of igneous, sedimentary and metamorphic rocks. (2) |

Science: ROCKS 2**Due: week commencing 13.07.26**

| | | |
|--|---|---|
| 1. Name 3 types of rock. | 2. State the name given to lava underground. | 3. Name the equipment used to measure temperature. |
| 4. Describe how igneous rocks form. | 5. Describe how an igneous rock can transform into sedimentary rocks. | 6. Describe the arrangement of particles in a liquid. |
| 7. Describe the movement of particles in a solid rock. | 8. Explain why crystals are larger in intrusive igneous rock. (2) | 9. The inner core is approximately 6000°C and the outer core is 4000°C. Calculate the temperature difference. |

| Computational Thinking | Abstraction | Decomposition | Pattern Recognition | Algorithms | Sequence | Selection |
|--|---|--|---|---|---|--|
| Computational thinking allows us to take a complex problem, understand what the problem is and develop possible solutions. We can then present these solutions in a way that a computer, a human, or both, can understand. | Focusing on the important information only. Ignoring the details that are not needed. | Breaking down a complex problem or system into smaller, more manageable parts. | Looking for similarities among and within problems. Looking for patterns. | Developing a step-by-step solution to the problem, or the rules to follow to solve the problem. | Following an ordered set of instructions. | Making a decision within a computer program to decide which instruction to carry out next. |



Variables & Data Types

A **variable** is used to **store data** that **can change while the program is running**. The variable name (e.g. score) is used to identify the memory location of the data that is stored in RAM

A variable can be used to store different types of data:

| | |
|-----------|---|
| Character | One character such as a letter or symbol |
| Real | A number with a decimal point in it (e.g. 3.14) |
| Integer | A whole number (e.g. 3) |
| Boolean | Can either be True or False |
| String | One or more characters (e.g. Hello) |

Comparison Operators

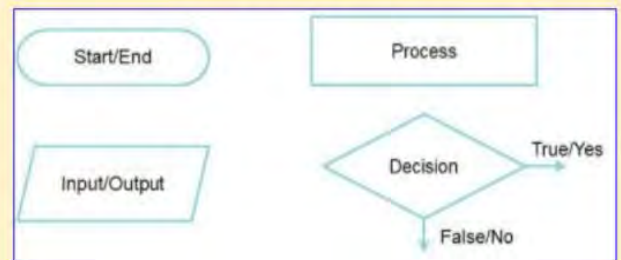
| | |
|--------------------------|----|
| Greater than | > |
| Less than | < |
| Greater than or equal to | >= |
| Less than or equal to | <= |
| Equal to | == |
| Not equal to | != |

Arithmetic Operators

| | |
|----------|---|
| Add | + |
| Subtract | - |
| Multiply | * |
| Divide | / |



Flowchart Shapes



Representing Characters

Why is text represented as a binary number?

Computers don't understand letters and numbers the way that we do. Everything in a computer is represented by an electrical signal which can be in one of two states: **on** or **off**. These two states (**on** and **off**) can be **represented** by two numbers (**1** and **0**). This means that we must **represent** all information, including text, as a **binary number** (made up of 1s and 0s). So we came up with **standard systems** for **representing** each character as a **binary number**. One **standard system** for representing characters is **ASCII Code** and another is **Unicode**



ASCII Code

ASCII stands for **American Standard Code for Information Interchange**. Originally, **ASCII Code** represented each character as a **binary number** with **8 binary digits (8 bits)**. That's a binary number, made up of 8 values and each value will be either 1 or 0. For example, 1000001. So ASCII Code can represent 256 different characters (2^8).

■ the letter 'a' has the binary number 0110 0001

■ the letter 'b' has the binary number 0110 0010

■ the letter 'c' has the binary number 0110 0011

Character Set

Characters are grouped together to form a **character set**. The **character set** is **all the characters** that a computer **understands** and **can display**. A **character set** includes:

- ✓ letters and numbers
- ✓ symbols (*, &, : etc.)
- ✓ control characters (e.g. Shift, Escape)

Unicode

Unicode was created to allow more characters to be represented. This allowed emoticons and characters from languages other than English to be represented. Unicode uses **16 bits** to represent each character (65,536 different characters: 2^{16}) and adapted versions of Unicode now use up to **32 bits**.

Representing Images

An image is made up of **pixels**. Each **pixel** will have a colour and the **higher the number of colours** that you want to use, the **higher the number of bits** you will need to represent each colour.

The **resolution** of the image is the number of **pixels per inch** that we use to display an image. The higher the resolution the **better the picture quality** but the **larger the file size**



The number of bits needed to represent an image is called the **colour depth**. The greater the colour depth, the **greater the number of colours** and the **better the image quality...**

...but the **more bits** we use for each pixel, the **larger the image file size** because each bit takes up space in the file

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Representing Images: Colour Depth Calculator

| | | | | | | | |
|-------------------------|-------------------|-----------------|---------------|---------------|--------------|--------------|--------------|
| 00000000 | 0000000 | 000000 | 00000 | 0000 | 000 | 00 | 0 |
| 8 bits | 7 bits | 6 bits | 5 bits | 4 bits | 3 bits | 2 bits | 1 bit |
| 2^8 | 2^7 | 2^6 | 2^5 | 2^4 | 2^3 | 2^2 | 2^1 |
| 2x2x2x2 x2x2x2x 2 | 2x2x2x2 x2x2x2 | 2x2x2x2 x2x2 | 2x2x2x2 x2 | 2x2x2x2 | 2x2x2 | 2x2 | 2 |
| 256 colours | 128 colours | 64 colours | 32 colours | 16 colours | 8 colours | 4 colours | 2 colours |



Converting Binary to Denary

- In **binary**, each **binary digit (bit)** can only have a value of **0** or **1**.
- Our number system (counting in tens) is called **denary**.
- To convert an **8 bit binary number** to a **denary number** we put the binary digits in separate columns (see the table below).
- Each 1 will have the denary value of the column that the 1 is in.

| | | | | | | | |
|-----|----|----|----|---|---|---|---|
| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |

We just add the numbers together of all columns with a **1** in. So, this number has a **denary value** of **8 + 2 = 10**

Binary Units

| Bit | Nibble | Byte | Kilobyte | Megabyte | Gigabyte | Terabyte |
|-----------------|--------|--------|----------------------|--------------------------|--------------------------|--------------------------|
| A single 1 or 0 | 4 bits | 8 bits | 1000 Bytes (1024) | 1000 Kilobytes (1024) | 1000 Megabytes (1024) | 1000 Gigabytes (1024) |

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Adding Binary Numbers

When two numbers that are less than 10 are added together in denary, sometimes we need two columns, two numbers to write the answer.

For example $7 + 5$

$$\begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array}$$

The same is true in binary.....but in binary, there are four rules that need to be followed. Here are the rules...

Binary Addition Rules

$$0 + 0 = 0$$

$$1 + 0 = 1$$

$$1 + 1 = 0 \text{ (carry the one)}$$

$$1 + 1 + 1 = 1 \text{ (carry the one)}$$

Overflow Errors

If there are **not enough bits available** to store the result of a calculation (for example adding in binary) it will cause an overflow error. The result is not correct and this can cause catastrophic effects such as the explosion of the Ariane 5 rocket.²⁴

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French Knowledge Organisers

Present tense holidays Year 8 French 8.7 Knowledge Organiser

The present and future tenses



There are three types of verbs in French and in their infinitive form they end in:

-er -ir -re

For the **present tense**, depending on the pronoun, we change the ending of the verb using the table below :

| Pronouns | -er | -ir | -re |
|----------------------------|------|---------|------|
| Je (I) | -e | -is | -s |
| Tu (you) | -es | -is | -s |
| il (he), elle (she) | -e | -it | / |
| Nous (we) | -ons | -issons | -ons |
| Vous (you) (pl) | -ez | -issez | -ez |
| ils / elles (they) | -ent | -issent | -ent |

Examples:

Porter = **to** wear > je porte = **I** wear

Finir = **to** finish > nous finissons = **we** finish

Vendre = **to** sell > ils vendent = **they** sell

The Near Future :

The near future **tense** (le futur proche) is used to express something that will be happening in the very near future. It is formed by conjugating the verb **aller** (to go) in the present tense, followed by an infinitive.

| English | To go (present) | Infinitive |
|------------------------------|-----------------|------------|
| I am going to go | Je vais | aller |
| You are going to play | Tu vas | jouer |
| He/she/we are going to visit | Il/elle/on va | visiter |
| We are going to swim | Nous allons | nager |
| You (pl.) are going to read | Vous allez | lire |
| They are going to do | Ils/elles vont | faire |

Going to or living in a country

In French the word "to" or "in" with countries changes depending on if they are masculine, feminine, plural or a town/city. Countries which end in "e" are almost always feminine (this really helps)

Examples :

Je vais **en** Espagne (**feminine**) → I go **to** Spain

Je vais **au** Portugal (**masculine**) → I go **to** Portugal

Je vais à l'hôtel (**vowel**) → I go **to** the hotel

Je vais **aux** États-Unis (**plural**) → I go **to** the USA

Je vais à Paris (**town/city**) → I go **to** Paris

8.7 Present Holidays - French Vocab List

| Tu vas où? | Where do you go? |
|-------------------|----------------------|
| Je vais | I go |
| À Paris/ Londres | to Paris / to London |
| En France | to France |
| En Espagne | to Spain |
| En Angleterre | to England |
| En Écosse | to Scotland |
| En Irlande | to Ireland |
| Au Pays de Galles | to Wales |
| Au Portugal | to Portugal |
| Au Pakistan | to Pakistan |
| En Pologne | to Poland |
| En Somalie | to Somalia |
| Aux Caraïbes | to the Caribbean |
| Au Royaume Uni | to the UK |
| Aux États-unis | to the States |
| Aux Pays Bas | to the Netherlands |

| Qu'est-ce que tu visites? | What do you visit? |
|---------------------------|------------------------------|
| Je visite/ Nous visitons | I visit /We visit |
| La plage | The beach |
| La piscine | The swimming pool |
| Le centre-ville | The town centre |
| Le musée | The museum |
| Le marché | The market |
| Le stade de foot/ rugby | The (football/rugby) stadium |
| Le parc d'attraction | The theme park |
| Les monuments | The monuments |
| Les magasins | The shops |
| Les cafés | The cafés |
| Les restaurants | The restaurants |
| L'office de tourisme | The tourist office |

| Tu restes où? | Where do you stay? |
|-------------------------|----------------------------|
| Je reste dans | I stay in |
| un hôtel cinq étoiles | A (five star) hotel |
| Un camping | A campsite |
| Un appartement | An apartment |
| Une caravane | A caravan |
| Une tente | A tent |
| Une auberge de jeunesse | A youth hostel |
| Un mobil-home | A static caravan |
| Chez mes grand-parents | At my grand-parents' |
| Un hôtel de luxe | A state-owned luxury hotel |
| Un B&B | A B&B |

| Comment Voyager? | How do you travel? |
|-----------------------------------|-------------------------|
| Je voyage/ nous voyageons | I travel / We travel |
| à pied | by foot |
| à vélo | by bike/pushbike |
| en moto | by motorbike |
| en voiture | by car |
| en train | by train |
| en bateau/ en bateau de croisière | by boat / by cruiseship |
| en métro | by tube |
| en car | by coach |
| en bus | by bus |
| en avion | by plane |

| Quel temps fait-il ? | What is the weather like? |
|-------------------------------|---------------------------|
| Il fait beau/ il fait mauvais | It is good /bad weather |
| Il fait chaud/ froid | It is hot/cold |
| Il y a du soleil | It is sunny |
| il fait 25 degrés | It is 25 degrees |
| Il pleut | It is raining |
| Il neige | It is snowing |
| Il y a du vent | It is windy |
| Il y a des nuages | There are clouds |

| Que fais-tu? | What do you do...? |
|-------------------------|--------------------------|
| Se relaxer | To rest |
| S'amuser (je m'amuse) | To have fun (I have fun) |
| Bronzer | To sunbathe |
| Visiter des monuments | To visit monuments |
| Aller à la plage | To go to the beach |
| Aller au restaurant | To go to the restaurant |
| Faire du shopping | To go shopping |
| Se promener | To go for walks |
| Prendre des photos | To take photos |
| Acheter des souvenirs | To buy souvenirs |
| Faire du sport | To do (play) sports |
| Faire du sport nautique | To do water sports |
| Danser en boîte | To dance in a club |

| C'est où? | Where is it...? |
|--------------------------------|--------------------------------------|
| C'est loin | It's far |
| C'est proche/ à proximité | It's nearby |
| C'est à 5 minutes d'ici | It's 5 minutes away |
| C'est à 300 mètres d'ici | It's 300 metres away |
| Allez tout droit | Go straight on |
| Aux feux, continuez tout droit | At the traffic lights go straight on |
| Au rond-point tournez à droite | At the roundabout turn right |
| Tournez à gauche | Turn left |
| Tournez à droite | Turn right |
| Prenez la première | Take the first |
| Prenez la deuxième | Take the second |
| Traversez le pont | Cross the bridge |

Past holidays 8.8 French Knowledge Organiser

Reflexive verbs, the perfect tense (past tense)

A **verb** is a doing, being or having word. e.g. to speak, to eat, to be.
Reflexive verbs in French are verbs which usually mean an action done to yourself (e.g. straighten your hair, brush your teeth, etc.). Many are regular -er verbs and they need an extra **reflexive pronoun**.

| Subject pronouns | Reflexive pronoun |
|------------------------------|-------------------|
| je (I) | me |
| tu (you) | te |
| il (he), elle (she), on (we) | se |
| nous (we) | nous |
| vous (you) (pl) | vous |
| ils/elles (they) | se |

Examples:

Se lisser les cheveux - to straighten one's hair
 Je **me** lisse les cheveux > I straighten my hair
Se brosser les dents - to brush one's teeth
 On **se** brosse les dents > we brush our teeth
Se doucher - to shower
 Tu **te** douches le matin ou le soir? Do you shower in the morning or in the evening?

The perfect tense:

You can talk about the past by using the **perfect tense** (*le passé composé*). The perfect tense has 3 parts:

1. The subject pronoun (eg. Je, nous)
2. The auxiliary (*avoir* or *être*)
3. The past participle

To form the past participle, take off the infinitive endings (-er, -ir or -re) and add the following endings instead:

- ER verbs > - é
- IR verbs > - i
- RE verbs > - u

Examples:

J'ai acheté des baskets au centre commercial. I **have bought** trainers at the shopping mall.

Hier il **a joué** au foot dans le parc. Yesterday he **played** football in the park.

Je **suis allé** en ville hier? I **went** to town yesterday?

The 2 auxiliary verbs are AVOIR or ÊTRE.

- Use **AVOIR** with most verbs.
- Use **ÊTRE** with **reflexive verbs** and **DR. MRS VANDERTRAMP** verbs. [*Devenir* (to become), *Revenir* (to come back), *Monter* (to go up), *Retourner* (to return), *Sortir* (to go out), *Venir* (to come), *Aller* (to go), *Naître* (to be born), *Descendre* (to go down), *Entrer* (to enter), *Rentrer* (to go home/to return), *Tomber* (to fall), *Rester* (to remain), *Arriver* (to arrive), *Mourir* (to die), *Partir* (to leave).]

| AVOIR | ÊTRE |
|----------------|-----------------|
| J'ai | Je suis |
| Tu as | Tu es |
| Il /elle a | Il /elle est |
| Nous avons | Nous sommes |
| Vous avez | Vous êtes |
| Ils /elles ont | Ils /elles sont |

Remember!

When using *être* to form the perfect tense your past participle must agree with the subject pronoun.

Add -e if feminine e.g. elle est allée

Add -s if plural e.g. ils sont allés

Add -es if feminine plural eg. elles sont allées



Past holidays 8.8 French Vocab list



| les participes passés irréguliers? | Irregular past participles |
|------------------------------------|----------------------------|
| Faire → fait | To do → did |
| Prendre → pris | To take → took |
| Boire → bu | To drink → drank |
| Voir → vu | To see → saw |
| Lire → lu | To read → read |
| Vouloir → voulu | To want → wanted |
| Dire → dit | To say → said |
| Devenir → devenu | To become → became |
| Avoir → eu | To have → had |
| Écrire → écrit | To write → wrote |

| Les opinions | Opinions |
|------------------|----------------------|
| C'était | It was ... |
| Génial | Great |
| Fantastique | Fantastic |
| Intéressant | Interesting |
| Touchant | Moving (emotionally) |
| Inoubliable | Unforgettable |
| Incrovable | Incredible |
| Trop court | Too short |
| Ennuyeux/barbant | Boring |
| Trop long | Trop long |
| Passionnant | Exciting |
| Émouvant | Emotional |

| Quand? | When? |
|-----------------------------|------------------------------|
| Aujourd'hui | Today |
| Normalement | Normally |
| D'habitude | Usually |
| Parfois/quelquefois | Sometimes |
| Pendant la pause/ le trajet | During breaktime/the journey |
| Le weekend | On the weekend |
| Après le collège | After school |
| deux fois par semaine | Twice a week |
| souvent | Often |
| Toujours | Always |
| Rarement | Rarely |
| De temps en temps | From time to time |
| Le lundi | On Monday |
| Hier | Yesterday |
| Récemment | Recently |
| Le weekend dernier | Last weekend |
| La semaine dernière | Last week |
| L'année dernière | Last year |
| Il y a un mois | A month ago |
| Demain | Tomorrow |
| Bientôt | Soon |
| A l'avenir | In the future |
| Le weekend prochain | Next weekend |
| La semaine prochaine | Next week |
| L'année prochaine | Next year |
| Dans un mois | In a month |

| Qu'est-ce que tu fais normalement? | What do you do normally? |
|--|--------------------------|
| Se reposer (je me repose) | To relax |
| Se relaxer (je me relaxe) | To relax |
| S'amuser (je m'amuse) | To have fun |
| Se baigner (je me baigne) | To bathe |
| S'habiller (je m'habille) | To get dressed |
| Se lever (je me lève) | To get up |
| Se laver (je me lave) | To wash |
| Se réveiller (je me réveille) | To wake up |
| S'entendre avec (je m'entends avec) | To get on with |
| Se brosser les dents/ les cheveux (je me brosse) | To brush teeth/hair |
| Se doucher (je me douche) | To shower |
| Se maquiller (je me maquille) | To put on make-up |

| Quel temps faisait-il? | What was the weather like? |
|--------------------------|----------------------------|
| Il faisait beau | It was good weather |
| Il faisait chaud | It was hot |
| Il faisait froid | It was cold |
| Il faisait 25 degrés | It was 25 degrees |
| Il faisait mauvais | It as bad weather |
| Il pleuvait | It was raining |
| Il neigeait | It was snowing |
| Il y avait du vent | It was windy |
| Il y avait des nuages | It was cloudy |
| Il y avait des orages | It was stormy |
| Il y avait du brouillard | It was foggy |
| Il y avait du soleil | It was sunny |

Past holidays 8.8 French Vocab list

| When | What | Where | How | Who with | Past auxiliary (AVOIR) | Activities (past participle) | Opinion |
|--|----------------------------------|---------------------------------|----------------------|---|---|---|---|
| Hier Yesterday | Je suis allé(e) I went | À Bristol to/in Bristol | En voiture By car | Avec ma famille With my family | J'ai (I) Tu as (you) Il a (he) | fait du ski / des sports nautiques (did skiing / water sports) | C'était... it was ... |
| Récemment Recently | Tu as voyagé You travelled | À Londres to/in London | En ferry By ferry | Avec mes parents With my parents | Elle a (she) On a (we - informal) | acheté des souvenirs (bought souvenirs) | Génial great Fantastique Intéressant |
| Le week-end dernier Last weekend | Elle est restée She stayed | En France to/in France | En car By coach | Avec mes grands-parents With my grandparents | Nous avons (we - formal) Vous avez (you singular) | mangé des plats typiques (ate local dishes) | Émouvant emotional Touchant moving Inoubliable unforgettable Incroyable incredible |
| La semaine dernière Last week | On a séjourné We stayed in | En Espagne to/in Spain | En avion By plane | Avec mes copains With my friends | Ils ont (they - male) Elles ont (they female) | bu des cocktails (drank cocktails) | Trop court too short Trop long too long Passionnant exciting |
| le mois dernier Last month | | En Allemagne to/in Germany | | Avec mon école With my school | | joué au volley de plage (played beach volley) | |
| L'année dernière Last year | | Au Portugal To/in Portugal | En train By train | Seul(e) On my own | | visité des monuments (visited monuments) | |
| Il y a deux ans Two years ago | | Aux États-Unis To/in the USA | | | | pris des photos (took photos) | |
| Quel temps faisait-il? | What was the weather like? | | | | Past auxiliary (ÊTRE) | | |
| Il faisait chaud il faisait froid | It was hot it was cold | | | | Je suis (I) Tu es (you) Il est (he) | allé* dans les magasins (went into the shops) | |
| il y avait du soleil il y avait du vent | It was sunny It was windy | | | | Elle est (she) On est (we - informal) | parti* tôt (left early) arrivé* à temps (arrived on time) rentré* tard (came back late) | |
| il pleuvait il neigeait | It was raining It was snowing | | | | Nous sommes (we - formal) Vous êtes (you plural) Ils sont (they - male) Elles sont (they female) | sorti* le soir (went out in the evening) resté* cinq jours / une semaine (stayed for five days / one week) | |

Weather phrases in the **past tense**, it's so easy! Use the same phrases from previous topic, and change **il y a...** > **il y avait...** and **il fait...** > **il faisait ...**

Spanish Knowledge Organisers

8.7 Present tense holidays Year 8 Spanish Knowledge Organiser

There are three types of verbs in Spanish and in their infinitive form they end in:
-ar -er -ir

The present tense : Depending on the pronoun, we change the ending of the verb using the table below :

| Pronouns | -ar | -er | -ir |
|------------------------------|-------|-------|-------|
| yo (I) | -o | -o | -o |
| tú (you) | -as | -es | -es |
| él (he), ella (she) | -a | -e | -e |
| Nosotros/nosotras (we) | -amos | -emos | -imos |
| Vosotros/vosotras (you) (pl) | -áis | -éis | -ís |
| ellos/ellas (they) | -an | -en | -en |

Example:

Descansar = **to** rest Comer = **to** eat vivir = **to** live
Descanso = **I** rest Comemos = **we** eat viven = **they** live

The present and future tenses



The Near Future :
The near future tense is used to express something that will be happening in the very near future. It is formed by conjugating the verb **ir** (to go) in the present tense + a + an infinitive.

Example: I'm going to travel by plane > Voy a viajar en avión.

| English | To go (present) | "a" | Infinitive |
|-----------------------------|-----------------|-----|------------|
| I am going to go | Voy | a | ir |
| You are going to play | Vas | a | jugar |
| He/she is going to visit | Va | a | visitar |
| We are going to swim | Vamos | a | nadar |
| You (pl.) are going to read | Vais | a | leer |
| They are going to do | Van | a | hacer |

Time markers tell us when something happens and help us work out which tense is being used. The following can be used with the future tense.

Mañana - tomorrow

La semana próxima- next week

El fin de semana que viene - next weekend

El próximo mes - next month

El año que viene - next year

En dos años - In two years

8.7 Present Holidays - Spanish Vocab List



| ¿Dónde vas? | Where do you go? |
|----------------------|----------------------|
| Voy | I go |
| a París / a Londres | to Paris / to London |
| a Francia | to France |
| a España | to Spain |
| a Inglaterra | to England |
| a Escocia | to Scotland |
| a Irlanda | to Ireland |
| a Gales | to Wales |
| a Portugal | to Portugal |
| a Pakistán | to Pakistan |
| a Polonia | to Poland |
| a Somalia | to Somalia |
| al Caribe | to the Caribbean |
| al Reino Unido | to the UK |
| a los Estados-Unidos | to the States |
| a los Países Bajos | to the Netherlands |

| ¿Qué visitas? | Where do you visit? |
|------------------------------|------------------------------|
| Visto / Visitamos | I visit / We visit |
| la playa | The beach |
| la piscina | The swimming pool |
| el centro | The town centre |
| el museo | The museum |
| el mercado | The market |
| el estadio (de fútbol/rugby) | The (football/rugby) stadium |
| el parque de atracciones | The theme park |
| los monumentos | The monuments |
| las tiendas | The shops |
| los cafés | The cafés |
| los restaurantes | The restaurants |
| la oficina de turismo | The tourist office |

| ¿Dónde te alojas? | Where do you stay? |
|-------------------------------|----------------------------|
| Me alojo en / Me quedo en | I stay in |
| un hotel (de cinco estrellas) | A (five star) hotel |
| un camping | A campsite |
| un apartamento | An apartment |
| una caravana | A caravan |
| una tienda | A tent |
| un albergue juvenil | A youth hostel |
| una caravana estática | A static caravan |
| en casa de mis abuelos | At my grand-parents' |
| un parador | A state-owned luxury hotel |
| una pensión | A B&B |

| ¿Cómo viajas? | How do you travel? |
|-----------------------|-------------------------|
| Viajo / Viajamos | I travel / We travel |
| a pie | by foot |
| en bici | by bike/pushbike |
| en moto | by motorbike |
| en coche | by car |
| en tren | by train |
| en barco / en crucero | by boat / by cruiseship |
| en metro | by tube |
| en autocar | by coach |
| en autobús | by bus |
| en avión | by plane |

| ¿Qué tiempo hace? | What is the weather like? |
|------------------------|---------------------------|
| Hace buen / mal tiempo | It is good / bad weather |
| Hace calor/frío | It is hot/cold |
| Hace sol | It is sunny |
| Hace 25 grados | It is 25 degrees |
| Llueve | It is raining |
| Nieva | It is snowing |
| Hay viento | It is windy |
| Hay nubes | There are clouds |

| ¿Qué haces...? | What do you do...? |
|---------------------------|--------------------------|
| Descansar | To rest |
| *Divertirse (me divierto) | To have fun (I have fun) |
| Tomar el sol | To sunbathe |
| Visitar monumentos | To visit monuments |
| *Ir a la playa | To go to the beach |
| *Ir al restaurante | To go to the restaurant |
| *Ir de compras | To go shopping |
| *Dar un paseo | To go for walks |
| Sacar/tomar fotos | To take photos |
| Comprar recuerdos | To buy souvenirs |
| *Hacer deporte | To do (play) sports |
| *Hacer deportes acuáticos | To do water sports |
| Bailar en la discoteca | To dance in the club |

| ¿Dónde está...? | Where is it...? |
|---------------------------------|--------------------------------------|
| Está lejos | It's far |
| Está cerca | It's nearby |
| Está a cinco minutos | It's 5 minutes away |
| Está a 300 metros | It's 300 metres away |
| ↑ Siga todo recto | Go straight on |
| En el semáforo siga todo recto | At the traffic lights go straight on |
| En la rotonda gira a la derecha | At the roundabout turn right |
| ↶ Gira a la izquierda | Turn left |
| ↷ Gira a la derecha | Turn right |
| 1 Tome la primera | Take the first |
| 2 Tome a segunda | Take the second |
| ⚡ Cruza el puente | Cross the bridge |

Past tense holidays 8.8 Spanish Knowledge Organiser

A **verb** is a doing, being or having word. e.g. to speak, to eat, to be.
Reflexive verbs in Spanish are verbs which usually mean an action done to yourself (e.g. wash yourself, shower etc.). Many are regular -ar verbs and they need an extra **reflexive pronoun**. We know a Spanish verb is reflexive because it will have «se» on the end of its infinitive eg. lavarse (to wash) and levantarse (to get yourself up).

| Subject pronouns | Reflexive pronouns |
|------------------------|--------------------|
| yo (I) | me |
| tú (you) | te |
| él (he), ella (she) | se |
| nosotros/as (we) | nos |
| vosotros/as (you) (pl) | os |
| ellos/ellas (they) | se |

Examples:

lavarse - to wash

me lavo > I wash

levantarse - to get up

nos levantamos > we get up

Ducharse - to shower

Te duchas > you shower

Reflexive verbs, the preterite (past tense)

The **preterite** is the past tense used in Spanish to describe a completed action at a specific time in the past (e.g. ayer (yesterday), el año pasado (last year)). For regular we take off -ar, -er -ir and add the below endings :

| | -AR | -ER / -IR |
|-----------|--------|-----------|
| I | é | í |
| You (sg) | aste | iste |
| He/she/it | ó | ió |
| We | amos | imos |
| You (pl) | asteis | isteis |
| They | aron | ieron |

Examples:

Tomar = to take
 To form "I took"

~~TOMAR~~ > tom > tomé

Hablar = to speak
 To form "she spoke"

~~HABLAR~~ > habl > habló

Careful! Not all verbs are regular in the preterite. Some key irregulars are :

| | |
|---------------------------|---|
| Hacer (to do) | hice, hiciste, hizo, hicimos, hicisteis, hicieron |
| Ir (to go) | fui, fuiste, fue, fuimos, fuisteis, fueron |
| Ser (to be) | fui, fuiste, fue, fuimos, fuisteis, fueron |
| Tener (to have) | tuve, tuviste, tuvo, tuvimos, tuvisteis, tuvieron |

8.8 Past holidays SPANISH



| Las opiniones | Opinions |
|------------------------|----------------------|
| 1. Fue genial | It was great |
| 2. Fue fantástico | It was fantastic |
| 3. Fue interesante | It was interesting |
| 4. Fue emocionante | It was exciting |
| 5. Fue inolvidable | It was unforgettable |
| 6. Fue increíble | It was incredible |
| 7. Fue demasiado corto | It was too long |
| Fue demasiado largo | It was too short |

| ¿Qué tiempo hacía? | What was the weather like? |
|--------------------|----------------------------|
| Hacía buen tiempo | It was nice weather |
| Hacía mal tiempo | It was bad weather |
| Hacía sol | It was sunny |
| Hacía calor | It was hot |
| Hacía frío | It was cold |
| Hacía viento | It was windy |
| Llovía | It was raining |

| ¿Qué hiciste durante las vacaciones? | What did you do on holidays? |
|--------------------------------------|------------------------------|
| Fui a la playa | I went to the beach |
| fui al restaurante | I went to the restaurant |
| fui de compras | I went shopping |
| Me quedé | I stayed |
| Comí | I ate |
| Bebí | I drank |
| Vi | I saw |
| Probé | I tried (food) |
| Hice deportes acuáticos | I did watersports |
| Descansé | I rested |
| Me relajé | I relaxed |
| Me divertí | I had fun |
| Visité monumentos | I visited monuments |
| Di paseos | I went walking |
| Saqué fotos | I took photos |
| Compré recuerdos | I bought souvenirs |
| Tomé el sol | I sunbathed |

| La vida cotidiana | Daily life |
|-------------------|------------------|
| La gente | People |
| Los habitantes | Inhabitants |
| Hablar | To speak |
| Vivir | To live |
| Celebrar | To celebrate |
| Preparar | To prepare |
| Ir a trabajo | To go to work |
| Ir al instituto | To go to school |
| Volver a casa | To go back home |
| Ver la tele | To watch TV |
| Cenar | To have dinner |
| Bañarse | To have a bath |
| Ducharse | To have a shower |

| ¿Cuándo? | When? |
|-------------------------|---------------|
| Ayer | Yesterday |
| La semana pasada | Last week |
| El fin de semana pasado | Last weekend |
| El mes pasado | Last month |
| El año pasado | Last year |
| Hace dos días | Two days ago |
| El otro día | The other day |

CAREERS AT HPA

Our Careers guidance and provision at Hans Price offers a wide range of experiences and opportunities to inform and develop aspirations for the future. In addition to a careers featuring in our SPACE curriculum and weaving through all subjects taught at Hans Price, all students use UniFrog to support their careers provision and their planning for Post-16 and beyond.

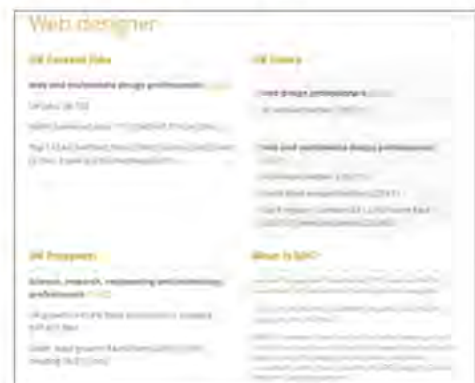


Unifrog is the universal destinations platform and is designed to support learners in making the most informed decisions about their futures. It has a range of tools that are suitable for all year groups. Each student has their own account where they can explore all the career and next step options available to them and find information on everything from managing their workload to writing a winning CV. Students have access to a wide variety of video and written content, and interactive quizzes and tests, information about careers and the local labour market and emerging industries.



Students can access Unifrog through the LCF Student Navigator page or searching for Unifrog online. Students initially sign up to the platform by clicking a link in their welcome email, where they create a password and can begin using the platform. They sign in to Unifrog using their Hans Price email address and password and they can do so from any computer, tablet, or smartphone. We would encourage you to use the platform with your child so you can support them through the process of deciding their next step.

You can also have your own Unifrog account. You'll be able to research careers, attend webinars delivered by employers and universities to learn more about their opportunities, and compare pathways so you can support your child in making an informed decision about their next steps. The sign up code you need is: **HPAMParents** and you can sign up here: www.unifrog.org/code. You can also sign up to Unifrog's parent/carer newsletter when you first sign



Upcoming Webinars

Past Webinars

Top tips for writing the perfect CV


Sign up for Applications and Interviews webinar series

Employers will use your CV to decide whether you're fit for the job. So you need to make sure it stands out from the crowd. In this webinar, professional careers network, Careers, Progress and Health Learning Study, and consistently first, Success Webinars, give their inside tips on how to write your CV to written application. Sign up today to join this live webinar!

Monday 27 November 11.00 AM to 12.00 PM | 45 mins | [View on TV](#) | [View on YouTube](#)



PERFORMING ARTS OPPORTUNITIES



SCHOOL MUSICAL:

SCHOOL MUSICAL IS IN JULY - REHEARSALS ARE TUESDAY & WEDNESDAY AFTER SCHOOL READY FOR THE SHOW IN JULY.

DANCE SHOW:

YOU CAN AUDITION FOR THE DANCE SHOW IN APRIL. AUDITIONS ARE USUALLY 3 WEEKS BEFORE THE SHOW.

MUSIC SHOW:

YOU CAN AUDITION FOR THE MUSIC SHOW IN FEBRUARY. AUDITIONS ARE USUALLY 3 WEEKS BEFORE THE SHOW.

PLEASE SEE YOUR MUSIC TEACHER FOR A LIST OF UP TO DATE CLUBS.

DANCE CLUB:

DANCE CLUB WITH ANGELS DANCE ACADEMY IS EVERY FRIDAY LUNCH IN THE DANCE STUDIO.

Extra-Curricular opportunities you can try this term. All clubs are free to attend.

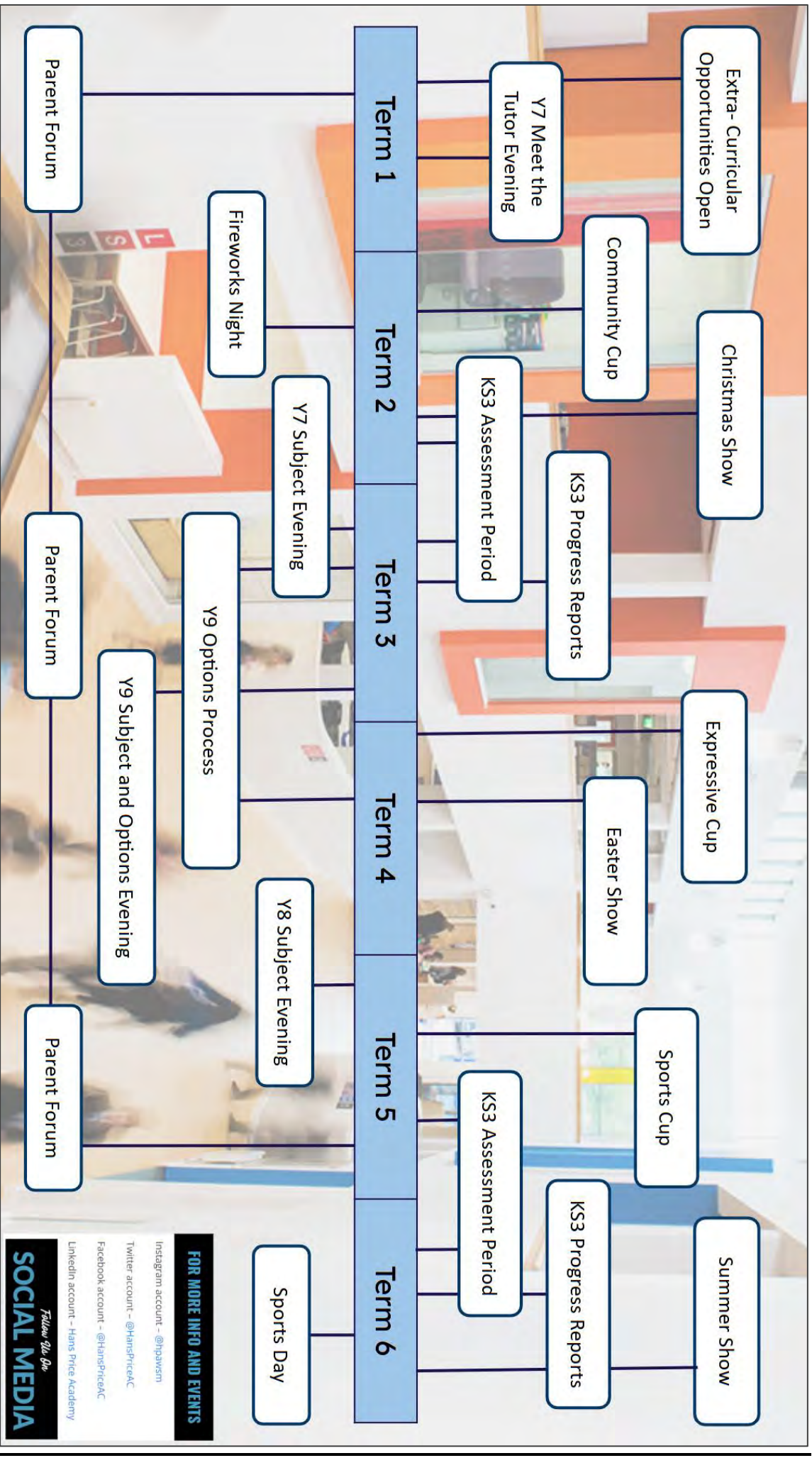
| | Monday | Tuesday | Wednesday | Thursday | Friday | |
|----------------------|---|---|---|---|---|--|
| Before School | Breakfast Club (ERO, TBE) 7.40 - 8.10am All students, Canteen | Breakfast Club (ERO, LPH) 7.40 - 8.10am All students, Canteen | Touch Rugby (SHO, KTO) 7.15 - 8am All students, Astro | Breakfast Club (ERO) 7.40 - 8.10am All students, Canteen | Breakfast Club (ERO, LPH) 7.40 - 8.10am All students, Canteen | <p>For all lunchtime sports clubs please bring trainers and fanny pack and blazer</p> <p>All new clubs noted with a </p> <p>Every club you attend = 1 ticket for a prize draw at the end of Term 1!</p> |
| Lunch | Morning Library Club (RAL) 8.20 - 8.35am | Morning Library Club (RAL) 8.20 - 8.35am | Breakfast Club (ERO, LPH) 7.40 - 8.10am All students, Canteen | Morning Library Club (RAL) 8.20 - 8.35am | Dance Club (SAN) All students Dance studio | |
| | Library (RAL) All students | Futsal (JGR) Year 9 Sports Hall | I.S. Club (DTU) Years 7, 8 & 9, G7 | Music Careers (OBO) All students, Music Room | Boys Wellbeing Fitness (AGA) KS4 Boys, Gym (Starts Week 3) | |
| | Futsal (EHO) Year 8, Sports Hall | I.S. Club (DTU) Years 7, 8 & 9, G7 | Card Games (FEL) All Students LRCl | I.S. Club (DTU) Years 7, 8 & 9, G7 | I.S. Club (DTU) Years 7, 8 & 9 G7 | |
| | Fitness Club (DDI) Y9, 10 & 11 Gym | Film Club (RAL) All years, Library | Futsal (HBR) Year 10 Sports Hall | I.S. Club (CGR) Year 11, Sports Hall | Futsal (LPU) Year 7 Sports Hall | |
| | I.S. Club (DTU) Years 7, 8 & 9 G7 | Songwriting (OBO) All students, A5 | I.S. Club Years 7, 8 & 9 G3A | Fashion & Textiles (SML, LST) Years 8, 9 & 10 (G3) | Card Games (FEL) All Students LRCl | |
| | Card Games (FEL) All Students LRCl | Girls Futsal (JGR) Year 9 Sports Hall | Theatre Club (BDA) Years 7-10 A6 | Strength & Conditioning (GGR) Y9 & 10 Outside Changing Rooms | | |
| | Chess Club (PMO) F5 | Gym Club (TRO) Years 8 & 9, Gym | Careers Support Drop-in time (JFI) Careers Office | Football (LPU, DDI) All students Outside Changing Rooms | | |
| | Eco Club (TSL) All Years, G6 | Football (LPU & DDI) Years 9&10 | School of Rock (MBR) Y7-10 Music Room | Girls Netball (GGR) Y10 Outside Changing Rooms | | |
| | Young Carers (ADA) G2 | Boys Basketball (GGR) All years Sports Hall | Duke of Edinburgh Y9 (JGR) | Hockey (EHO) All students Inside Changing Rooms | | |
| | Hero Club (OFA) All Students G1 | Drama Club Y7, 8 & 9 | | Girls Basketball (SAN) Inside Changing Rooms | | |
| | Cheerleading Club (LPH) All Students Sports Hall | Young Carers (ADA, JFO) Y7 & 8 Art Barn | | Stids Kids (CSK) A6 Musical Theatre Club Y7-10 I.S. Club Years 7, 8 & 9, G3A | | |
| | Darts Club Dance Studio (see Mr James) | I.S. Club Years 7, 8 & 9, G3A | Drums / Guitar / Singing lessons (every day) (External provider) Collect a letter from RGR | | | |
| | I.S. Club Years 7, 8 & 9 G3A | | | | | |

Enrichment Timetable Term 4

After School

Term 5/6 Additions

Hans Price Academy KS3 Timeline



Timetable