SUBJECT: ENGLISH GCSE

CURRICULUM THIS HALF TERM:

This half term prepares learners for Functional Skills and GCSE pathways by developing reading and writing for real-life purposes. Reading focuses on identifying audience, purpose and format, comparing viewpoints and recognising bias within a range of authentic texts.

Writing includes emails, letters, reports, articles and instructions. Pupils learn to adapt tone for formal and informal situations, organise information logically and communicate clearly for different audiences.

Grammar teaching secures punctuation, spelling accuracy and sentence clarity while independent editing encourages learners to take responsibility for the accuracy and effectiveness of their writing.

VOCABULARY:

audience	Who the writing is for.
purpose	Why something was written.
format	The layout or type of text.
bias	A one-sided opinion.
formal	Serious and professional language.
informal	Relaxed, everyday language.
compare	Identify similarities and differences.
justify	Support an idea with evidence.
analyse	Explore something in detail.
tone	The writer's attitude.

RECOMMENDED TALKING POINTS:

What text are you studying at the moment?
Which new vocabulary have you learnt this week?
Can you explain the writer's message?
What evidence supports your answer?
How did you adapt your writing for your audience?
What English skill have you improved most this half term?

SUBJECT: ENGLISH FUNCTIONAL SKILLS

CURRICULUM THIS HALF TERM:

This half term prepares learners for Functional Skills and GCSE pathways by developing reading and writing for real-life purposes. Reading focuses on identifying audience, purpose and format, comparing viewpoints and recognising bias within a range of authentic texts.

Writing includes emails, letters, reports, articles and instructions. Pupils learn to adapt tone for formal and informal situations, organise information logically and communicate clearly for different audiences.

Grammar teaching secures punctuation, spelling accuracy and sentence clarity while independent editing encourages learners to take responsibility for the accuracy and effectiveness of their writing.

VOCABULARY:

audience	Who the writing is for.
purpose	Why something was written.
format	The layout or type of text.
bias	A one-sided opinion.
formal	Serious and professional language.
informal	Relaxed, everyday language.
compare	Identify similarities and differences.
justify	Support an idea with evidence.
analyse	Explore something in detail.
tone	The writer's attitude.

RECOMMENDED TALKING POINTS:

What text are you studying at the moment?
Which new vocabulary have you learnt this week?
Can you explain the writer's message?
What evidence supports your answer?
How did you adapt your writing for your audience?
What English skill have you improved most this half term?

SUBJECT: MATHEMATICS GCSE

CURRICULUM THIS HALF TERM:

This half term, pupils will develop their understanding of trigonometry and percentages. The trigonometry unit begins with identifying the hypotenuse, opposite and adjacent sides of a right-angled triangle. Pupils will learn to use the tangent, sine and cosine ratios to calculate unknown side lengths and angles, choosing the most appropriate method for each problem. They will also explore key angles in right-angled triangles and apply trigonometry to three-dimensional shapes, extending their reasoning beyond two-dimensional diagrams.

Pupils will then explore percentages and how they can be used to describe and calculate changes in quantities. They will find percentages of amounts, calculate percentage increases and decreases, and express one number as a fraction or percentage of another. They will learn to express a change as a percentage and work backwards to find an original value after a percentage change. The unit also introduces simple and compound interest, helping pupils understand how percentages are used in financial contexts. Pupils will practise selecting appropriate methods to solve a range of percentage problems.

Throughout the half term, pupils will develop their accuracy, mathematical reasoning and confidence in applying methods to unfamiliar problems. They will learn to interpret information carefully, choose suitable calculations and explain why their methods work, building skills that will support their future mathematical study.

VOCABULARY:

- **Hypotenuse** – The longest side of a right-angled triangle, opposite the right angle.
- **Opposite** – The side directly opposite the angle being considered in a right-angled triangle.
- **Adjacent** – The side next to the angle being considered, other than the hypotenuse.
- **Trigonometric ratio** – A relationship between the sides and an angle in a right-angled triangle, such as sine, cosine or tangent.
- **Sine** – A trigonometric ratio comparing the opposite side with the hypotenuse.
- **Cosine** – A trigonometric ratio comparing the adjacent side with the hypotenuse.
- **Tangent** – A trigonometric ratio comparing the opposite side with the adjacent side.
- **Percentage** – A way of expressing a quantity as a number of parts out of 100.
- **Percentage change** – The increase or decrease in a quantity expressed as a percentage of its original value.
- **Original value** – The amount before a percentage increase or decrease is applied.
- **Simple interest** – Interest calculated on the original amount only.
- **Compound interest** – Interest calculated on the original amount and on interest already added.

RECOMMENDED TALKING POINTS:

How can sine, cosine and tangent help us find a missing length or angle in a right-angled triangle?
Where might trigonometry be useful in real life, such as in construction, design or measuring distances?
What is the difference between a percentage increase and a percentage decrease?
Why might it be useful to calculate the original price after a discount or increase?
How does compound interest differ from simple interest, and where might each be used?



SUBJECT: SCIENCE

CURRICULUM THIS HALF TERM:

During this half term children will explore Plants and the Carbon Cycle, which is a Biology topic. Children have previously learnt that plants are producers that make their own food using sunlight, water, and air, while relying on roots, stems, leaves, and flowers to grow and reproduce They should also understand that animals breathe out carbon dioxide and plants take it in, alongside foundational concepts of how energy moves through food chains and how dead organisms decompose back into the soil.

In this topic children will study the carbon cycle and the mechanisms by which carbon is cycled around the Earth, with photosynthesis being a key stage in this cycle. They will build on their foundational knowledge and move from simply knowing that plants need light to understanding the exact chemical reaction that powers life on Earth. To see this process in action during school lab experiments, students will perform a chemical test using iodine, watching a leaf turn a dramatic blue-black colour to prove that the plant has successfully stored excess food as starch. They will explore how every part of a plant is perfectly engineered for this job; roots are spread wide to absorb water, stems act as transport highways, and thin leaves are packed with green chloroplasts to capture sunlight while using tiny pores called stomata to take in gases. Children will also be diving deeper into how the carbon cycle relies heavily on decay or decompostion, where microscopic bugs, bacteria, and fungi break down dead plants and animals, releasing trapped carbon back into the atmosphere while returning vital nutrients to the soil. We will be diving in to the real life consequences of human activities like deforestation which severely disrupt this natural balance. Cutting down forests removes the trees that would normally clear carbon dioxide from our air, and burning or rotting that wood releases massive amounts of stored carbon all at once, which drives global warming

VOCABULARY:

- **Photosynthesis:** The chemical process where plants use sunlight, water, and carbon dioxide to create their own food (glucose) and release oxygen.
- **Glucose:** A type of sugar produced during photosynthesis that plants use as their primary source of energy.
- **Combustion:** A chemical reaction – burning
- **Respiration:** The chemical process by which living cells break down glucose (food) to release energy
- **Starch:** The form in which plants store excess glucose for later use, which can be identified in the lab using a chemical test.
- **Iodine Solution:** An orange-brown liquid used in science experiments that turns blue-black when it comes into contact with starch.
- **Chloroplast:** The microscopic structure inside a plant cell where photosynthesis takes place, containing the green pigment that traps sunlight.
- **Stomata:** Microscopic pores found mainly on the underside of leaves that open and close to allow gases to enter and exit.
- **Carbon Cycle:** The continuous movement of carbon through the atmosphere, oceans, soil, and living organisms on Earth.
- **Decay/Decomposition:** The natural breakdown of dead organisms and waste material by bacteria and fungi, which recycles nutrients back into the environment.
- **Decomposer:** Microscopic organisms, such as bacteria and fungi, that get their energy by breaking down dead plants and animals.

- **Deforestation:** The large-scale clearing or burning of forested land, which reduces the planet's ability to absorb carbon dioxide from the air

RECOMMENDED TALKING POINTS:

If a plant only takes in carbon dioxide gas and water, how does it end up making the solid sugars and starch that we are eating right now
Why does a plant bother to convert its leftover glucose into starch? Why not just keep it as sugar?
How does being thin and wide help this leaf catch sunlight and breathe in gases?
When humans cut down or burn a massive forest, how does that disrupt the natural carbon cycle in two different ways at the same time?

SUBJECT: HISTORY

CURRICULUM THIS HALF TERM:

GCSE Unit: Medicine Through Time

Topic 1: 1700s to 1900s

Lessons will explore:

- **John Snow and cholera**
- **The role of Nightengale in improving Nursing**

Pupils will examine how John Snow used evidence to challenge ideas about the cause of cholera and how Nightengale influenced hospital care and nursing standards.

Topic 2: Modern Medicine

Lessons will include:

- **Fleming and Penicillin**
- **Crick and Watson and DNA**
- **Modern Technology and the introduction of the NHS**
- **Case Study: Lung Cancer**

Pupils will study the impact of scientific discovery on diagnosis and treatment, and assess how the NHS changed access to medical care. The lung cancer case study will support understanding of modern health challenges, prevention and treatment.

Topic 3: Medicine in the Trenches on the Western Front in World War One

Lessons will cover:

- **The trench network**
- **The chain of Evacution**
- **Topical injuries**

Pupils will consider the practical difficulties of treating soldiers on the Western Front, including the organisation of trench systems, the evacuation process and the nature of injuries caused by warfare.

VOCABULARY:

- Cholera
- Evidence
- Penicillin
- DNA
- Evacution
-

RECOMMENDED TALKING POINTS:

How did John Snow challenge existing ideas about the spread of cholera?
In what ways did Nightingale improve nursing and hospital care?
Why were developments such as penicillin, DNA research and the NHS important for modern medicine?

SUBJECT: GEOGRAPHY

CURRICULUM THIS HALF TERM:

This half-termly unit focuses on Global Resources: Food, Water and Energy. Students will explore the global distribution of these resources and develop an understanding of why access is uneven across countries and regions. The unit also examines renewable and non-renewable sources of energy, with specific attention to the pros and cons of fracking as a method of energy extraction.
A key aspect of the unit is the study of water and food shortages, including the social, economic and environmental factors that contribute to scarcity. Students will consider the impact of resource distribution on people's lives, the environment and future development.

Learning Focus
By the end of the half term, students should be able to:

- describe the global distribution of food, water and energy resources
- explain the difference between renewable and non-renewable energy sources
- assess the advantages and disadvantages of fracking
- identify causes and consequences of water and food shortages
- apply geographical knowledge to explain resource inequality at different scales

GCSE Examination Link
Students should be aware that in the GCSE exams they can choose to answer questions on any 2 of the 3 natural resources they have studied. This means it is essential that they develop secure knowledge across all three resources, while also practising examination answers that compare and evaluate key ideas.

VOCABULARY:

- Resource distribution
- Renewable energy
- Non-renewable energy
- Fracking
- Scarcity

RECOMMENDED TALKING POINTS:

Why are some parts of the world better supplied with food, water and energy than others?
What are the main advantages and disadvantages of fracking?
How do shortages of water and food affect people, communities and development?



SUBJECT: COMPUTER SCIENCE

CURRICULUM THIS HALF TERM:

Unit 1 – Computer Systems: Networks

Pupils will develop an understanding of how computers and devices communicate across networks. They will learn about different network topologies, networking hardware, wired and wireless networks, and methods used to keep networks secure.

Topics will include:

- What a computer network is and why networks are used
- **Star topology**
- **Mesh topology**
- Advantages and disadvantages of different topologies
- Networking hardware including **switches, routers, wireless access points and network interface cards (NICs)**
- Wired networks and the use of **Ethernet**
- Wireless networks and **Wi-Fi**
- Comparing wired and wireless connections
- Network security threats
- Methods of protecting networks, including **strong passwords, encryption, firewalls and authentication**
- Applying networking knowledge to real-world scenarios

Pupils will practise interpreting and drawing simple network diagrams and explaining why a particular networking solution might be suitable for a given situation.

VOCABULARY:

- Network
- Device
- Topology
- Star
- Mesh
- Node
- Switch
- Router
- wireless access point
- NIC, Ethernet
- Wi-Fi
- Wired
- Wireless
- Bandwidth
- Connection
- network security
- threat, firewall
- encryption
- authentication

- password
- malware
- hacking

RECOMMENDED TALKING POINTS:

How does the internet get information from one computer or device to another, and how can we keep that information safe?

SUBJECT: BTEC CONSTRUCTION

CURRICULUM THIS HALF TERM:

In this unit, pupils will develop their practical construction skills, technical knowledge and understanding of the built environment. They will be introduced to the construction industry and begin to explore the core trades involved in building and maintaining homes, workplaces and public spaces.

A strong emphasis is placed on health and safety. Pupils will develop an understanding of the importance of personal protective equipment (PPE), hazard awareness and risk assessment, as well as how to work safely in a workshop or practical setting. They will also learn about the correct use of tools and equipment and the expectations for safe working practice.

Throughout the unit, Pupils will be encouraged to understand the role of the construction industry, explore a range of construction trades, identify hazards and manage risk, use PPE appropriately, work safely with tools and equipment, follow workshop routines and safe practice and begin developing the skills needed for further study or employment.

This unit supports the development of important learning skills, including practical application, independence, attention to detail, safe working, problem solving, industry awareness and employability skills.

By the end of the unit, pupils will have a stronger understanding of the construction sector, the importance of safety, and the basic knowledge needed to continue developing their skills for future study or industry pathways.

VOCABULARY:

Tier 1: Build, work, safe, tools, trade, job, site, house, wall, roof, floor, wear, check, risk, help.

Tier 2: Construction, industry, equipment, hazard, awareness, practice, process, role, develop, pathway, workplace, maintain, identify, manage, employability.

Tier 3: Personal protective equipment (PPE), risk assessment, built environment, workshop, safe working practice, construction trades, carpenter, bricklayer, plumber, electrician, site safety, hard hat, hi-vis, safety boots, hazard.

RECOMMENDED TALKING POINTS:

Why is health and safety so important in construction?
What does PPE mean, and why do construction workers need it?
What kinds of jobs and trades are involved in the construction industry?
How does safe workshop practice help people work effectively and responsibly?



SUBJECT: PE

CURRICULUM THIS HALF TERM:

Young people will engage in enhancing their physical skills and artistic expression. They will perform dances using advanced techniques across various styles and forms, allowing them to explore creativity and rhythm. Additionally, students will develop their technique in gymnastics, fostering both fitness and teamwork. A key component of our programme will involve analysing their performances against previous efforts, encouraging them to demonstrate improvement and strive for their personal best.

VOCABULARY:

- Structure
- Narrative
- Stimulus
- Confidence
- Synchronisation
- Technique
- Refinement
- Momentum
- Feedback
- Repetition

RECOMMENDED TALKING POINTS:

How did you organise and plan your routine?
What was the intent for the routine/performance?
How did you show synchronisation? How did you ensure you were in time?
Why are aesthetics important in dance/gymnastic routines?
How do we keep ourselves and others safe during routines?

ANY OTHER KEY INFORMATION:

Suitable footwear
Suitable clothing
Refillable water bottle



SUBJECT: BTEC HOME COOKING

CURRICULUM THIS HALF TERM:

The BTEC Level 1 Home Cooking Skills qualification is designed to help learners develop essential cooking skills that they can use at home and in everyday life. It aims to build confidence in the kitchen while promoting healthy eating, meal planning and an understanding of cooking as an important life skill.

Throughout the course, pupils will explore the basics of preparing meals, following recipes and using simple cooking techniques to make a range of dishes. They will also learn how to plan meals carefully, taking into account both budget and nutritional value, so that they can make informed and practical choices about food.
A key part of the course is learning about food safety and hygiene. Pupils will develop an understanding of how to handle, prepare and store food safely, as well as how to maintain good hygiene in the kitchen. The qualification also includes learning about nutrition, helping pupils understand how food supports a healthy lifestyle and how to make better choices when planning and preparing meals.
Throughout the course, Pupils will be encouraged to develop basic cooking skills and techniques, follow recipes to prepare simple dishes, plan meals that are both nutritious and cost-effective, understand the importance of food safety and hygiene, apply their skills to a variety of dishes and build confidence and independence in the kitchen.
This course supports the development of important life skills including independence, confidence, problem solving, organisation, healthy decision making and practical cooking skills. By the end of the qualification, Pupils will be able to cook a range of simple dishes, plan meals more effectively and apply their learning to everyday home cooking.

VOCABULARY:

Tier 1: Cook, food, meal, eat, wash, safe, clean, recipe, budget, healthy, hot, cold, boil, bake, mix.

Tier 2: Nutrition, plan, prepare, skills, method, choice, value, cost-effective, independence, confidence, hygiene, safety, variety, outcome, transfer.

Tier 3: Food safety, food hygiene, meal planning, budgeting, ingredients, portion, nutrition, balanced meal, recipe, preparation, cross-contamination, cookery, utensils, storage, shelf life.

RECOMMENDED TALKING POINTS:

Why is cooking an important life skill?
How can meal planning help us save money and eat well?
What are the most important food safety and hygiene rules in the kitchen?
How can learning to cook at home help with confidence and independence?

SUBJECT: PSHE

CURRICULUM THIS HALF TERM:

This Year 9 PSHE unit supports students in preparing for their GCSE option choices by encouraging them to reflect on their strengths, interests, values, and future aspirations. Students will explore how the subjects they choose can influence future education, training, and career pathways, while recognising that there are often many routes to achieving their goals. The unit helps learners develop decision-making skills, research opportunities, and consider the factors that may affect their choices. Through self-reflection and career exploration activities, students will build confidence in making informed decisions about their future and understand the importance of setting ambitious yet realistic goals for further education, employment, and personal success.

VOCABULARY:

- Employability
- Vocational
- Academic
- Progression
- Entrepreneurship
- Apprenticeship
- Higher education
- Career trajectory
- Labour market
- Transferable skills
- Professional development
- Financial independence

RECOMMENDED TALKING POINTS:

How can your interests, strengths, and values help you make informed GCSE option choices?
What different education, training, and career pathways are available after GCSEs, and how can they support your future goals?
Why is it important to research opportunities and consider long-term career aspirations when choosing your GCSE subjects?

SUBJECT: CAREERS

CURRICULUM THIS HALF TERM:

During this half term, Year 9 pupils will develop an understanding of how personal aspirations and ambitions can inform future career planning. Pupils will explore their interests, strengths, skills and values, and consider how these may relate to different education, training, and employment pathways. They will begin to create a personal **Career Plan**, identifying possible future goals and the steps required to work towards them. The programme will also introduce **SMART targets** for career goals and aspirations. Pupils will learn to set targets that are Specific, Measurable, Achievable, Relevant and Time-bound, enabling them to monitor progress and review their plans as their interests and circumstances develop.

Learning activities should encourage pupils to reflect on their current skills and identify areas for further development. Pupils may research a range of careers, consider the qualifications and experiences associated with different roles, and evaluate the importance of transferable skills such as communication, teamwork, organisation, problem-solving and resilience. They should understand that career planning is an ongoing process, and that aspirations may change as they gain further knowledge and experience.

VOCABULARY:

- Aspirations – hopes and ambitions for the future.
- Career – the different jobs, roles and experiences a person has throughout their working life.
- Career Plan – a personal plan outlining future goals and the steps needed to achieve them.
- Ambition – a strong desire to achieve a particular goal.
- Goal – an outcome that a person aims to achieve.
- SMART target – a target that is Specific, Measurable, Achievable, Relevant and Time-bound.
- Skills – abilities developed through learning, practice and experience.
- Strengths – areas in which a person performs confidently or effectively.
- Qualifications – recognised awards or certificates showing knowledge and skills.
- Transferable skills – skills that can be used in different subjects, workplaces, and careers.
- Pathway – the route a person follows towards further education, training or employment.

RECOMMENDED TALKING POINTS:

What are your current career aspirations and ambitions for the future?
Which skills and strengths could support these goals?
What SMART target could you set to develop your knowledge or experience?
Which education, training, or employment pathways might help you achieve your plans?
How might your Career Plan change as you learn more about different opportunities?

SUBJECT: RE

CURRICULUM THIS HALF TERM:

This term in Religious Education, Year 9 students will explore whether spiritual experiences can be transformative and how they may influence people's beliefs, values and actions. They will consider what people mean by a spiritual experience, including moments of awe, wonder, prayer, reflection and a sense of connection with something greater than themselves. Students will explore examples from religious traditions, such as the conversion of Saul on the road to Damascus and the Buddha's enlightenment, alongside non-religious experiences connected to nature, music and personal reflection. Through discussion, stories, creative responses and respectful debate, pupils will consider why people interpret similar experiences differently, whether these experiences can lead to lasting change, and how spirituality may shape identity, choices and relationships.

VOCABULARY:

- Spirituality – A sense of meaning, purpose or connection beyond everyday life.
- Spiritual experience – An event or moment that feels deeply meaningful or connected to something greater.
- Transformative – Causing an important or lasting change in a person.
- Awe – A strong feeling of wonder or amazement.
- Wonder – Curiosity and amazement about something special or surprising.
- Faith – Trust or belief, often connected to religion.
- Belief – Something a person accepts as true.
- Revelation – Something believed to be made known by God or a divine source.
- Conversion – A significant change in religious belief or commitment.
- Enlightenment – In Buddhism, deep understanding that helps free a person from suffering.
- Meditation – Focusing the mind to develop calm, awareness or insight.
- Prayer – Communicating with God or expressing spiritual thoughts.
- Reflection – Thinking carefully about experiences, feelings and ideas.
- Identity – How someone understands who they are.

RECOMMENDED TALKING POINTS:

What might make an experience feel spiritual or meaningful?
Can you describe a story in which a spiritual experience changed someone's life?
Why might two people interpret the same experience differently?
Do you think an experience can change someone's beliefs or behaviour? Why?