

KEY STAGE 3 INFORMATION BOOKLET 2020



"Pupils have exceptionally positive attitudes to their learning". Estyn

ART & DESIGN

At Key Stage 3 Art & Design here at Bryntirion, pupils are given the opportunity to build on the experiences they have had during the foundation phase. Our aim is to give pupils a wide breadth of art experiences using a range of mediums and techniques.

Each term we give pupils a career based task where they must work to a commissioned brief within one specific creative industry area. The idea behind this approach is to not only give pupils an experience and awareness of the wider world of work, but to also promote independence, divergent thinking and problem solving.

AIMS

- 1. To undertake a balanced programme of Art, Craft and Design
- 2. To develop a stimulating working environment
- 3. To understand, experiment, express personal feelings and be innovative through a range of media
- 4. The ability to record from direct observation and personal experience
- 5. To develop sequential work from first hand observation or ideas
- 6. To be part of a whole school approach to help students develop literacy and numeracy
- 7. To develop creative use of ICT and digital media

ASSESSMENT

- Pupils are assessed via research, preparatory work, termly projects and end of year examinations
- Pupils are expected to give termly feedback on their assessment and create personal learning targets

YEAR 7

- ⇒ Observational drawing
- ⇒ Experimenting with different materials
- ⇒ Artist/Art work analysis
- ⇒ Colour theory
- ⇒ Photography
- ⇒ ICT
- ⇒ Painting
- ⇒ Literacy & Numeracy
- ⇒ Designing
- ⇒ Photoshop editing

During Year 7, pupils focus on the idea: 'Ways of Recording' under the umbrella theme 'Segments'. We encourage observational drawings and development of a wide range of media and materials. We regularly analyse and evaluate artists and art work, developing use of ICT and photography.

Throughout KS3 term, pupils will have the opportunity to experience a range of design briefs based on a wide range of Creative Industry Pathway, working to commissioned briefs, developing a portfolio of practical and written outcomes.





ART & DESIGN

YEAR 8

- **Observational drawing**
- **Experimenting with a range of** materials
- **Analysis of artists and designers**
- **Photography**
- **Painting**
- **Literacy & Numeracy**
- **Graphic design briefs**

During Year 8 pupils will continue to work in a range of creative pathways, mediums and techniques. Pupils will look at traditional and contemporary ways of working and have the opportunity to show independence and individuality within their own practice.

Project 1 - Street Art

Project 2 - Digital Drawing

Project 3 - Animation

Project 4 - Surface Pattern Design







ART CLUBS

Years 7 & 8 Afterschool Art Club Year 9 - 11 GCSE Art Club

COMPETITIONS

Local and national

PRAISE CERTIFICATES AND **POSTCARDS**

Key words in Art & Design

Texture - Tone - Colour - Contrast - Effective - Brightness - Light - Bold -Interesting - Line - Contemporary - Shade - Vibrant - Compare - Shadow -Layer - Surface - Pattern - Shape

PRACTICAL WORK IN ART AND DESIGN IS ASSESSED THROUGH...

- 1. 2. 3. Research and preparatory work
- Quality of ideas
- Technical ability
- Literacy & Numeracy

CYMRAEG

NOD-AIM

- To stimulate and foster an interest in the enjoyment of Welsh.
- To develop confidence in the use of Welsh in the three areas of reading, writing and oral work.
- To prepare pupils to deal with the situations in everyday life.
- To make pupils aware of the extensive use of the Welsh language outside the classroom and in the workplace.

ASESU - ASSESSMENT

Pupils are assessed regularly throughout the year. Formal assessments focus on oracy, reading and writing.









GWEITHGAREDDAU -ACTIVITIES

Pupils are encouraged to speak Welsh in lessons.

Pupils have the opportunity to visit the Urdd Camps at Llangrannog and Glan Llyn where they will experience an all Welsh community. In addition, participation at Eisteddfodau is key to promoting Welsh culture and traditions.

Learning will also be reinforced through interactive Welsh language apps and pupils will view programmes on S4C to support their learning.



CYMRAEG

BLWYDDYN 7 - YEAR 7

A detailed study of the present tense with a focus on all three skills, reading, writing and oracy. This module will develop vocabulary, grammar and enhance literacy skills.

BLWYDYN 8 -YEAR 8

A detailed study of the past tense with a focus on reading, writing and oracy. This module will develop the past tense through a variety of topics.

ASESU - ASSESSMENT

Formal assessments are held three times a year.



SCHOOL EISTEDDFOD 2020



DESIGN TECHNOLOGY

AIMS

To provide a progressive experience of Design Technology appropriate to the ability of the pupils and their needs in a technological society.

To encourage and stimulate interest and enthusiasm for designing and making.

To provide a wide range of projects in a range of materials.

To enable the pupil to produce and evaluate quality products through active-hands on experience.

To provide a foundation of transferable knowledge and skills that pupils can build on to enhance their future education, leisure or vocation.

ASSESSMENT

Pupils are assessed in two main areas, Designing and Making, the focus areas of the National Curriculum.

Assessment is continuous throughout the projects and the focus tasks. Particular skills and abilities are targeted e.g. problem analysis, communication, idea generation, planning, making, evaluation.

The assessment is linked directly to the N.C. throughout Key Stage 3 and is finally reported as a moderated teacher assessment level at the end of the Key Stage in Year 8.

Pupils are encouraged to take part in extracurricular activities, such as:-

Product Design Club - Year 8

Year 8 Resistant materials projects have been designed to reflect the manufacturing content of GCSE Product Design.

The Department also run a STEM (Science, Technology, Engineering & Maths) event every year where pupils explore the global impact of Technology in a whole day timetable with outside speakers.



YEAR 7

The year is divided into a series of modules to maximise the range of activities, stimulate interest and ensure progress.

There is an emphasis on the importance of health and safety in the workshop environment. The aim is to make pupils aware of the tools and machinery around them and the rules they have to follow in order to work safely.

In order to develop their skills and knowledge pupils will work through 3 modules in rotation.

- Food (compliant materials)
 Food Sandwich, pizza/garlic bread and fruit salad
- Resistant Materials 1
 Designing and Making in Wood Note
 Holder Project
- Resistant Materials 2
 Planning and making a personalised
 Name tag out of wood

Graphic design, including Computer Aided Design, is an integrated part of all rotations.



DESIGN TECHNOLOGY



MODULE 3—PRODUCT DESIGN Inclusive design.



ENGLISH

AIMS

- to encourage pupils to develop their abilities within an integrated programme of Oracy, Reading and Writing;
- to develop their communication skills across the curriculum;
- to stimulate an interest in reading a wide variety of literature, including reading independently for enjoyment;
- to encourage pupils to develop their skills at writing for a variety of purposes and to create their own distinctive and original writing styles.

ASSESSMENT

Pupils will explore a number of themes throughout the Key Stages:

	Year 7	Year 8
Term 1	Gothic & Supernatural	Myths & Legends
Term 2	Crime & Punishment	Dystopia
Term 3	Journeys	Literary Heritage

STRAND: Oracy

Pupils are given opportunities throughout the Key Stage to talk and listen attentively for a range of purposes, including:

- explanation, description and narration:
- argument, debate and persuasion;
- the development of thinking;
- analysis of literature and the media.

TYPICAL ACTIVITIES

Role-play, debates, the performance of scripted and un-scripted plays, evaluating their own and others' performance, solo talks.



ENGLISH DEPARTMENT VISIT TO THE HAY FESTIVAL

ENGLISH

STRAND: Reading

Pupils are given opportunities throughout the Key Stage to read:

- plays;
- novels and short stories:
- poetry;
- texts from other cultures and traditions;
- major works of literature from the English Literacy Heritage in previous centuries, for example Shakespeare;
- works by Welsh authors writing in English, or works that have a Welsh setting or special relevance to Wales;
- non fiction texts;
- media texts.





STRAND: Writing

Pupils are given opportunities to write:

- for aesthetic and imaginative purposes;
- in a range of continuous and noncontinuous texts;
- to inform others:
- to develop thinking.

Pupils are encouraged to spell and punctuate accurately and to use neat, legible handwriting.

TYPICAL TEXT TYPES

Diaries, letters, accounts, reports, blogs, reviews, essays, advertisements, poems, stories, playscripts, newspaper articles, autobiographies and biographies.

SCHOOL DEBATING TEAMS

FRENCH

FEATURES OF LEARNING A MODERN FOREIGN LANGUAGE

In French pupils are involved in a variety of learning methods including:

PowerPoint presentations, videos, games, individual, pair and group work, singing, role-play and drama. The department has a variety of resources to draw upon.

Progression in MFL is assessed in the following skills:-

Listening to spoken French, understanding what has been said and communicating orally in French.
Reading and understanding a text written in French.
Writing in French.



FRENCH

FRENCH

TOPICS TAUGHT IN YEAR 7

Topic 1 - About me Topic 2 - My holidays Topic 3 - Descriptions

Topic 4 - Hobbies and opinions

TOPICS TAUGHT IN YEAR 8

Topic 1 - Where I live Topic 2 - A past holiday

Topic 3 - Sports Topic 4 - School

AIMS

- To provide pupils with their entitlement to a Modern Foreign Language.
- To stimulate interest and enjoyment in the learning of French.
- To develop the ability to communicate effectively in French.
- To encourage positive attitudes to foreign language learning and to speakers of foreign languages and a sympathetic approach to other cultures.

ASSESSMENT

In French pupils are assessed regularly by class tests and tasks, homework tasks, end of topic tests and end of year examinations.







GEOGRAPHY

KEY STAGE 3 AIMS

- To develop geographical skills and techniques, and to extend geographical vocabulary.
- To study contrasting environments and to explain some of the differences found.
- To describe, analyse and explain geographical processes and patterns.
- To become more familiar with the globe; where places are and their interdependence.
- To recognise issues and views of different people.

These key aims can be answered by: "What is it?"

"Where is it?"

"What is it like?"

"How did it get like this?"

"How and why is it changing?"

"What are the implications?"

A wide variety of texts and other materials are available and an emphasis is placed on pupil-centred learning. Pupils are encouraged to participate in lessons and are often asked to undertake individual research using text books, atlases or the internet.

Homework is given on a regular basis. This, along with class work and half termly assessment tasks will allow a 'level' to be allocated confidently at the end of the Key Stage.

Particular attention is paid to the presentation and organization of work and pupils are expected to be equipped with all their writing materials in every lesson.





TOPICS TAUGHT IN YEAR 7

- My Geography this topic looks at our place in the world at a variety of different scales, it attempts to develop an awareness of location.
- Distinctive Places: This is a fairly new, research based topic where students investigate places that interest them and present their findings.
- Using Maps: with particular reference to 1:25,000 ordnance survey maps, this introduces the foundation of constructing and reading maps, scale, distance, direction, relief and grid references.
- Our Climate: This unit is a study of the characteristics and causes of our weather patterns in Wales.
- Recording the Weather: This topic is a hands-on introduction to weather recording equipment.
- Microclimate Enquiry a detailed levelled independent enquiry based upon practical individual investigation of the wider school environment.
- Stop the Floods

 — this is a decision
 making exercise based on looking at
 flood defences and constructing a
 plan.

GEOGRAPHY

TOPICS TAUGHT IN YEAR 8

- Violent World: This is a study of the origins and structure of the Earth and the processes which change it, introducing Plate Tectonics and a range of skills.
- Volcanoes and Earthquakes: this topic continues from Plate Tectonics, to look at the hazards associated with Plate Boundaries, such as volcanoes, Earthquakes and Tsunamis as well as their management.
- Unequal World: this unit introduces the topic of Global Development and the Development Gap between the rich and poor countries in the world.
- Natural World: this unit looks at the relationship between living and non-living things to create distinctive zones such as Rainforests and the plants and animals which have adapted to live in them.
- Global Issues: This is an enquiry based topic, where after a series of mini introductory lessons covering a variety of different current Global Issues, students can choose one which interests them to investigate in more depth and present in whichever format they choose.
- Tourism: the final unit in Key Stage 3 investigates the nature of tourist destinations within the local area, further afield and even new or adventurous activities. It looks at the costs and benefits of the industry, how it is managed and mismanaged.









Fieldwork



HISTORY

TYPE OF WORK UNDERTAKEN

A great deal of the work is evidence based, using skills which develop over the whole period of the Key Stage.

As well as learning the facts, pupils are asked to evaluate, find similarities and differences between people and between situations, discover the causes and consequences of events and interpret those events.

Maps and diagrams are used to illustrate particular situations and are evaluated.



AIMS

- 1. To stimulate interest, curiosity and enjoyment in the study of History.
- 2. To give ALL pupils the opportunity to learn the events which shaped our lives from 1066 to present day.
- 3. To give ALL pupils the opportunity to acquire the skills necessary to interpret and understand these events.
- 4. To give ALL pupils the opportunity to experience history at first hand through a programme of visits.

ASSESSMENT

Assessment takes several forms but will include the following:-

- 1. Pupils will be marked and given either a grade, mark or level as appropriate.
- 2. Tests will take place during the course of the year, culminating in an end-of-year examination.
- 3. At the end of the Key Stage a Teacher Assessment Level will be given to each pupil.

TOPICS TAUGHT IN YEAR 7

The focus in this year is on acquiring historical skills on the Norman Invasion and the Medieval Period.



- The Battle of Hastings and its results
- The Norman Conquest of England and Wales
- Life in the Middle Ages
- The Tudors



HISTORY

TOPICS TAUGHT IN YEAR 8

This is the year we start studying more modern history:

- Industrial Revolution
- The Slave Trade
- The Titanic Disaster
- First World War
- Life in Nazi Germany and the Holocaust

These investigations are supported by source materials from different mediums, such as video clips, documentaries, photographs and artefacts.



HISTORY VISIT TO FRANCE & BELGIUM MARCH 2020

INFORMATION & COMMUNICATION TECHNOLOGY

INTRODUCTION TO KEY STAGE 3

At Key Stage 3, pupils are given opportunities to build on the knowledge, understanding and skills acquired at Key Stage 2.

Pupils are introduced to both our own school network and the Microsoft Office 365 platform. Pupils are taught to be proficient users of the Office 365 applications such as Word, PowerPoint and Excel through completing engaging classroom projects.

The Office 365 platform also includes Microsoft Teams which is the vehicle for home learning for all subjects in the school and pupils are taught how to access this both in school and from home.

Pupils are taught to become increasingly independent users of ICT and aware of the way in which ICT tools and information sources can help them in their work.

Well developed ICT skills are very important in modern society. It is our objective to provide our pupils with a rich ICT experience that allows them to maximise their learning potential in all aspects of the curriculum.

The curriculum relating to ICT is changing in Wales and from September 2021 pupils will be preparing for the new GCSE in Digital Technology which will replace the current qualification in ICT.

Computer Science

Pupils also have the option of studying GCSE Computer Science in Key Stage 4 and to further develop Computer Science within the department, we have recently invested in the following Units and Resources.

- Using computers safely, effectively and responsibly
- Computer crime and cyber security
- Understanding computers
- HTML and website development
- Python
- Database development





INFORMATION & COMMUNICATION TECHNOLOGY

Key Stage 3 projects are written with emphasis placed on relevant, scenario based activities that promote problem solving through levelled tasks. Tasks cover skills, knowledge and understanding to promote ICT capability.

Microsoft Office applications such as Word, Publisher, PowerPoint, Excel and Access are used, as well as other industry applications such as Fireworks, Audacity, Movie Maker and Serif (animation). Classes are taught at all levels throughout the school.

The national curriculum strands that are delivered include:-

- ♦ Find & Analyse Information
- Create & Communicate Information

A variety of teaching styles are employed to suit the activity, including exposition and demonstration, collaborative, exploring information and computer based learning packages.

Discrete lessons are delivered at Key Stage 3 and there is a very healthy uptake in the option choices at Key Stage 4. Interest in the subject at sixth form level is strong, with good sized A level classes.

AIMS

- To provide pupils with a broad ICT curriculum
- To stimulate curiosity, interest and enjoy the study of ICT
- To promote the interest in the use of ICT to produce work for other curriculum areas
- To allow pupils to use modern technology and topics appropriate to their study needs
- * To raise pupil awareness of the ways in which ICT tools and information sources can help their work.
- To provide pupils with a rich ICT experience in preparation for modern society.









MATHEMATICS

MATHEMATICS AT BRYNTIRION

Mathematics is the study of relationships and pattern in number and space and their application to a variety of problem-solving activities.

It is an important and unique means of communication. It develops skills, which have a wide range of application, and it encourages logical, imaginative and creative thinking.

ASSESSMENT

Assessment is an integral part of the teaching process. Formal assessment is also carried out through class tests, homework tasks (on paper and computer) and investigative tasks.

HOMEWORK IN YEAR 7 AND YEAR 8

The introduction of the Literacy and Numeracy tests at the end of every year have helped us develop a brand new set of homeworks for the coming year. These homeworks will help develop the numeracy skills that will help the pupils later on in their mathematical careers. We are also continuing to use MyMaths for specific online homework. The MyMaths website is also an incredible tool for parents to have an active part in their children's education.







MYMATHS

Bryntirion Maths department subscribes to this excellent educational website. To try out this resource type in www.mymaths.co.uk. The school's username is bryntirion and this year's password is <u>cuboid</u>. All pupils will be given their individual login and passwords when they start in Year 7, which parents can use to regularly check and see the online homeworks set. Pupils and parents can also use MyMaths to help study and practise topics covered in school using MyMaths lessons.

EQUIPMENT

Scientific calculator - Casio model.

MATHEMATICS

YEAR 7 & 8 TOPICS

NUMBER

- Number Facts
- Four Rules with Decimals
- Fractions, Decimals, Percentages
- Ratio

SHAPE AND SPACE

- Measuring
- Angles
- Area, Perimeter and Volume
- Properties of Shape
- **Transformations**

<u>ALGEBRA</u>

- Negative Numbers
- Simplifying Algebra
- Constructing Problems
- Solving Equations
- Number Patterns & Graphs

DATA

- Averages
- Probability
 Graphs & Charts

YEAR 9, 10 & 11

Pupils at Bryntirion Comprehensive School start their Numeracy and Mathematics GCSE's in Year 9. This encourages pupils to attain better results in their GCSE's by giving them more time to digest and practise the content. Most pupils will sit their GCSE Maths Numeracy in November of Year 11 and then their GCSE Maths in the Summer of Year 11. Pupils in Year 10 Set 1 usually have the opportunity to sit both GCSE's early at the end of Year 10.

There are three tiers of entry for Maths and Numeracy GCSE's:-

Higher - possible grades A*, A, B, C & U Intermediate - possible grades B, C, D, E & U Foundation - possible grades D, E, F G & U Pupils test and exam results in Year 9 and 10 will determine their tier of entry.

In Year 11 we currently have students who have achieved their grades, and are now studying Statistics and Additional Maths. This is a huge opportunity for those pupils as it will prepare them for A level and set them apart in competition for jobs and university places.



Extra Opportunities

We are committed to providing excellent teaching and learning for all our pupils. More able and talented pupils are continuously challenged in class with enrichment activities. In Years 7 to 10 pupils also participate in the UKMT Maths Challenges. Junior and Senior Teams also attend local competitions. MAT pupils are identified in KS3 and invited to attend after school sessions where they are given the opportunity to work together on challenging tasks and activities. Year 10 pupils have the opportunity to take on a mentoring role in these sessions as well as participating in their own challenges. Out of school activities include a Year 7 trip to Techniquest, a Year 8 trip to @Bristol as well as opportunities for Year 9 and 10 pupils to attend masterclasses at the University of South Wales.



MUSIC

AIMS

- To develop a sensitive response to music
- To acquire the necessary skills to perform and compose music of a variety of styles
- To develop social skills through making music together
- To encourage an awareness of musical tradition in a variety of cultures

ASSESSMENT

Pupils are assessed regularly with ongoing tests in performing, composing and appraising being carried out in class every half term.

A statement of the pupils' musical achievement is written at the end of Key Stage 3.

CLASSROOM ACTIVITIES

PERFORMING

- Individual, paired and group performances on keyboards
- Class performances on classroom and orchestral instruments
- Singing as an individual, group or class activity

COMPOSING

- Individual, paired and group compositions to a given stimulus, using instruments and/or voices
- Arrangements of selected works

APPRAISING

- Listening to and discussing music from a wide repertoire
- Discussing and evaluating pupils' own performances and compositions



MUSIC AND PERFORMING ARTS

EXTRA CURRICULAR ACTIVITIES

The Performing Arts department has varied activities which all pupils are welcome to participate in.

- Choirs (whole school, male voice and female voice) with participation in the school carol service and concerts
- Instrumental ensembles including the school orchestra
- Annual School Musical
- Performing Arts Club
- Shakespeare for Schools Festival
- Eisteddfod performances

INSTRUMENTAL LESSONS

Pupils have the opportunity to take up a musical instrument at the start of Year 7. A short test is given to allow selection to take place if the demand exceeds the number of instruments available.

LONDON THEATRE WORKSHOPS





PHYSICAL EDUCATION

AIMS

- To promote physical fitness, understanding and interest in a variety of activities.
- To provide for and develop motor skills in a wide range of physical activities.
- To provide opportunities for self fulfilment, competition and to experience a sense of achievement in individual, small groups and team activities.
- To develop desirable personality traits, individuality, initiative, perseverance, creativity and responsibility and leadership skills.
- Physical Education lessons provide opportunities for pupils to experience different roles within the lesson to develop self esteem, leadership and communication skills.

DEVELOPING YOUNG PEOPLE THROUGH SPORT

In partnership with the Active Young People Department (BCBC), there are opportunities for pupils to follow a Leadership Pathway to become Young Sports Leaders and go on to follow a Young Ambassador Program.







PHYSICAL EDUCATION

ACTIVITIES TAUGHT IN KEY STAGE 3

GYMNASTICS

SWIMMING

HOCKEY

NETBALL

RUGBY

FOOTBALL

ATHLETICS

TENNIS

ROUNDERS

BASEBALL

HEALTH, FITNESS & WELLBEING ADVENTUROUS ACTIVITIES



EXTRA CURRICULAR ACTIVITIES SPORT FOR ALL

Pupils are encouraged to play and train for teams. Practises and matches are held lunch time and after school.

The school has a Rugby Development Officer to aid and further enhance the provision of boys and girls rugby within Bryntirion and the feeder primary schools.

Many activities are on offer through the schools extra curricular program, 5X60 timetable and The Girls Engagement Program.



RELIGIOUS EDUCATION

AIMS

- To facilitate a pupil's search for meaning and purpose
- To encourage attitudes of respect, tolerance and sensitivity for those who hold beliefs different from their own
- To promote an awareness of the pupil's own experiences of life and religion and those of others
- To develop a knowledge and understanding of religious belief and practice today
- To develop through a reflective approach, appropriate skills for exploring, responding and expressing

ASSESSMENT

Pupils are assessed regularly by formal assignments as well as homework tasks. Examinations are set at the end of the Summer term for Year 7 and 8.

EDUCATIONAL VISITS

The social and cultural dimension of religion is recognised as having an active part to play in our society. Educational visits to local churches, synagogues, mandir and the mosque are a natural part of learning about religion as a way of life.

Senior pupils also have the opportunity to visit the Imperial War Museum, London to view the Holocaust exhibition. The RE department has also visited Rome, Poland, Amsterdam and Prague over recent years

Teaching is supplemented with guest speakers and an extensive collection of religious artefacts.

RE DEPARTMENT VISIT TO
AUSCHWITZ
CONCENTRATION CAMP



RELIGIOUS EDUCATION

The core programme of study for KS3 through Christianity and Hinduism are:-

CU1 - Worship & Celebration

CU2 - Journey of Life

CU3 - Leaders & Texts

CU4a - Looking for God

CU4b - Stewardship

TOPICS TAUGHT IN YEAR 7

- Transition Programme What is RE?
- Thematic Studies (Festivals of light Christianity and Hinduism)
- * Sikhism
- Journey of Life Christianity and Hinduism

TOPICS TAUGHT IN YEAR 8

- Looking for God Why do some people believe in God? What are the causes of evil and suffering?
- Peace and Conflict (Christianity and Hinduism)
- Relationships (Christianity and Islam)





SCIENCE

- To provide pupils with a broad and balanced Science Curriculum
- To stimulate curiosity, interest and enjoyment in the study of Science
- To promote an interest in the care for the environment
- To allow pupils to "find out" for themselves by carrying out practical investigations
- To allow pupils to develop thinking skills through "Thinking Science"
- To help pupils develop the key skills of numeracy, literacy and ICT
- To prepare Key Stage 3 pupils for GCSE

ASSESSMENT

Pupils are assessed regularly by end of unit tests, classwork and homework tasks (which are added to individual pupil portfolios) and examinations. All of which contribute to the teacher assessed end of Key Stage level.

ENQUIRY WORK

Pupils are involved in active learning using a "hands on" approach. They are encouraged to investigate scientific problems by enquiry.

Enquiry work in Science is assessed in the following categories:-

Fair test **Exploration** Pattern seeking Design a system Classification Use and apply a model



TOPIC - INTERDEPENDENCE OF ORGANISMS

Investigating how animals and plants are independent yet rely on each other for survival, applying this to life in countries with different levels of economical development.

YEAR 7 **CELLS**

Investigate the basic structure and function of some cells, tissues, organs and organ systems and how they support vital life processes.

YEAR 8

FEEDING RELATIONSHIPS

- Investigate the interdependence of organisms and their representation as food webs, pyramids of numbers and simple energy-flow diagrams.
- Investigate how and why food webs are affected by environmental factors e.g. light intensity, water availability, temperature and their fluctuations.
- Investigate how plants make their own food during photosynthesis. **FOOD AND DIGESTION**

- Investigate how food is used by the body as fuel during respiration.
- Investigate the components of a balanced diet and their effect on good health



SCIENCE

TOPIC - THE SUSTAINABLE EARTH

Investigating materials in the earth and its atmosphere and how they can change and apply this in contemporary contexts.

YEAR 7 CHEMICAL & PHYSICAL CHANGE

- Investigate the properties of solids, liquids and gases and how to move between them.
- Investigate what happens with chemical change and how to spot when this has occurred.

ACIDS AND ALKALIS

- Investigate the differences between acids and alkalis and their corresponding reactions
- Investigate how to test for the presence of acids and alkalis.

YEAR 8 ELEMENTS, MIXTURES & COMPOUNDS SOLUTIONS

- Investigate how mixtures can be separated by simple techniques.
- Understand the concepts of concentration/dilution and dissolving.

TOPIC - HOW THINGS WORK

Investigating the science involved in a range of contemporary devices/machines and evaluate different energy resources and possibilities.

<u>YEAR 7</u> ENERGY CONSERVATION

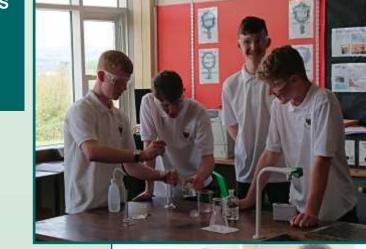
 Investigate the conservation of energy and ways in which energy can be stored.

<u>YEAR 8</u> ELECT<u>RICITY & MAGNETISM</u>

Investigate the theory and application of electricity and magnetism in devices.

ENERGY AND FORCES

 Investigate the applications of energy and forces in devices. Investigate the forces in devices and their relationship to work done and power.





HEALTH & WELLBEING

Health and Wellbeing Education at Bryntirion

Health and Wellbeing lessons provide an opportunity for learners to explore key issues related to their own personal development, their relationship to others and the world around them. Health and Wellbeing is delivered as a timetabled lesson, with all young people in Key Stage 3 & 4 taking part in one lesson a fortnight as well as most year 9 having an additional lesson, depending on option choices. Students have the opportunity to take part in a diverse range of learning activities such as Theatre in Education performances and presentations as well as workshops delivered by visiting speakers.

The Curriculum

Students follow a broad and relevant curriculum, the content of which is informed by the needs of our learners and our involvement in research projects lead by Cardiff University, which creates opportunity for self-reflection and personal growth. Themes include Relationships and Sex Education, social media ethics and behaviour, personal safety and responsibility and substance misuse. The curriculum is supported by the Police Liaison Officer, who delivers lessons as part of the All Wales School Core Liaison Programme and, in Year 9, the school nursing service. Nurse Stephanie Dixon is also available to meet with young people to discuss health concerns on a weekly basis.

Health and Wellbeing Support

Individual and groups of learners are able to access Health and Wellbeing support according to need. A School Counsellor and a family Mental Health Therapist work with young people on a weekly basis. Other intervention staff to include the Emotional Literacy Support Assistant (ELSA), the Pupil Intervention Officer and the Wellbeing Interventions Officer all work in conjunction with the Pastoral and Safeguarding Teams to ensure that learners are safe and have the emotional wellbeing for learning.





We hope the Open Evening has provided you with all the information you require.

If you require any further information please do not hesitate to contact the school.

This is a very exciting time to join

Bryntirion Comprehensive School

With ever increasing pupil numbers, outstanding record breaking results at Key Stage 3, GCSE and A-Level there has never been a better time to join us.

We look forward to you joining the Bryntirion Community!!



