# 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.



Pupils enjoying a visit from TECHNIQUEST



## YEAR 7 VISIT TO TECHNIQUEST

#### **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>rectangle</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
- Money
- Fractions, Decimals, Percentages
- Ratio

#### **SHAPE AND SPACE**

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

### **ALGEBRA**

- 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. They will sit one or both maths exams at the end of Year 10 and in November of Year 11. If re-sits are not necessary pupils are encouraged to sit additional qualifications.

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.

