

# Learning Plan 1

YEAR: 11

SUBJECT: Maths (Higher)

BLWYDDYN: 11

PWNC: Mathemateg (Uwch)

Knowledge focus: number, algebra, geometry and statistics



## Skills, knowledge and understanding to be developed in this Learning Plan:

- Percentages in context
- Fractions in context
- Indices, standard form and surds
- Proportional relationships
- Algebraic fractions
- Graphs
- Solving equations and inequalities
- Circle theorems
- Trigonometry
- Averages
- Charts and diagrams
- Probability

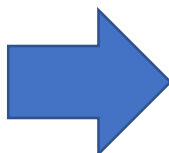
## Key terms to be learned in this LP:

Evaluate, solve, calculate, estimate, simplify, express, describe, explain, prove, construct

### Week/Wythnos 1 Learning Objectives:

#### Number revision as directed by class teacher, to include:

- Calculate with percentages in a variety of contexts (tax, bills, AER, compound interest)
- Calculate with fractions in a variety of contexts
- Recall and use index notation, standard form, index laws and surds
- Solve problems involving proportional relationships (e.g. ratio, direct proportion, inverse proportion, similarity)



#### Objective assessments:

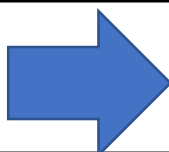
Be able to:  
Answer GCSE questions on percentages, fractions and other proportional relationships

#### Homework/Gwaith cartref:

Set:  
Due:

### Week/Wythnos 2 Learning Objectives:

- Apply knowledge and skills (including calculator skills) to revision tasks
- Completion of a GCSE Maths Unit 2 paper
- Read and respond to bespoke teacher feedback on the GCSE Maths Unit 2 paper



Assessment:  
Maths Unit 2  
paper

#### Objective assessments:

Be able to:  
Complete a Unit 2 maths paper in exam conditions

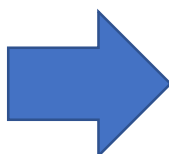
#### Homework/Gwaith cartref:

Set:  
Due:

### Week/Wythnos 3 Learning Objectives:

#### Algebra revision as directed by class teacher, to include:

- Simplify algebraic fractions
- Solve equations involving algebraic fractions
- Use the quadratic formula
- Draw and interpret linear/non-linear graphs
- Apply transformations of functions
- Convert recurring decimals to fractions
- Form and solve simultaneous equations
- Form and solve inequalities



#### Objective assessments:

Be able to:  
Answer GCSE questions on algebraic fractions, the quadratic formula, graphs, functions, equations and inequalities

#### Homework/Gwaith cartref:

Set:  
Due:

## Learning Plan 1

YEAR: 11

SUBJECT: Maths (Higher)

BLWYDDYN: 11

PWNC: Mathemateg (Uwch)

Knowledge focus: number, algebra, geometry and statistics



### Week/Wythnos 4 Learning Objectives:

- Apply knowledge and skills (including calculator skills) to a GCSE Numeracy Unit 2 paper, with targeted support and intervention from class teacher in lessons



### Objective assessments:

Be able to:

Complete GCSE Numeracy Unit 2 questions

### Homework/Gwaith cartref:

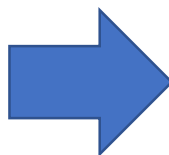
Set:

Due:

### Week/Wythnos 5 Learning Objectives:

#### Geometry revision as directed by class teacher, to include:

- Know, recall and use circle theorems to calculate angles/lengths
- Use the three trigonometric ratios to find missing angles/lengths
- Calculate missing angles/lengths using the sine and cosine rules, and use the formula for area of a triangle using trigonometry



### Objective assessments:

Be able to:

Answer GCSE questions on circle theorems and trigonometry

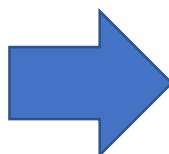
### Homework/Gwaith cartref:

Set:

Due:

### Week/Wythnos 6 Learning Objectives:

- Apply knowledge and (non-calculator) skills to a GCSE Maths Unit 1 paper, with targeted support and intervention from class teacher in lessons



### Objective assessments:

Be able to:

Complete GCSE Maths Unit 1 questions

### Homework/Gwaith cartref:

Set:

Due:

### Week/Wythnos 7 Learning Objectives:

#### Statistics revision as directed by class teacher, to include:

- Calculating, estimating and using averages
- Drawing and interpreting charts and diagrams (pie charts, cumulative frequency, box and whisker, histograms)
- Understanding and using probability, including conditional probability and relative frequency

### Objective assessments:

Be able to:

Answer GCSE questions on averages, charts/diagrams and probability

### Homework/Gwaith cartref:

Set:

Due: