

# Baldragon Academy 

Mathematics
Course Plan

S4
National 4

## Term 1a-June

24 Periods (based on 5 weeks at 5 periods per week)
Revision of CfE Level 3 for Numeracy Assessment
Numeracy Revision 1

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Calculate percentage of a value, increase and decrease | 2 |
| Foreign Exchange | 1 |
| Homework 1 | 1 |
| Calculate time intervals \& complete timetables | 1 |
| Calculate decimal of hours from hours and minutes | 2 |
| Calculate Speed Distance Time (part hours) | 2 |
| Calculate the perimeter of a shape (basic and composite) | Total 9 |
| Homework 2 |  |
| Revise and complete questions 1-6 of Numeracy <br> Assessment. |  |

Numeracy Revision 2

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Solve problems using weights in grams and kilograms | 1 |
| Solve problems using ratio | 2 |
| Solving problems using negative numbers in context | 2 |
| Hire Purchase | 1 |
| Measure lines and angles | 1 |
| Homework 3 | Total 7 |
| Revise and complete questions 7-11 of Numeracy <br> Assessment. |  |

## Term 1b

## August - October

40 Periods (based on 8 weeks at 5 periods per week)

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Reading Tables | 1 |
| Understanding pie charts | 2 |
| Calculating Probability | 2 |
| Homework 4 | Total 5 |
| Revision - Complete Numeracy Assessment |  |

## Expressions and Formulae - Part 1

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Collecting Terms | 1 |
| Multiply and simplify algebraic terms involving a bracket. | 3 |
| Homework 5 | 3 |
| Factorising using a numerical common factor | 3 |
| Patterns in Diagram form - determine and use formula | 3 |
| Homework 6 <br> Evaluating an expression or a formulae which has more than one <br> variable <br> Calculate the gradient of a slope \& line <br> Homework 7 | 3 |
| Revise and complete questions 1-6 of Expressions and <br> Formulae | Total 16 |

## Expressions and Formulae - Part 2

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Calculate the circumference of a circle (with diameter and radius) | 3 |
| Calculate the area of a circle (with diameter and radius) | 3 |
| Homework 8 |  |
|  | Total 6 |

## Term 2

## October - December

40 Periods (based on 8 weeks at 5 periods per week)

Expressions and Formulae - Part 2

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Area of 2D shapes (triangles and quadrilaterals) | 4 |
| Homework 1 | 4 |
| Calculate the surface area of a prism | 4 |
| Homework 2 | 3 |
| Calculate the volume of a 3D shape | 3 |
| Produce rotationally symmetrical shapes (on a plane and in a <br> coordinate grid) | Total 14 |
| Homework 3 |  |
| Revise and complete questions 7-11 of Expressions and <br> Formulae |  |

## Expressions and Formulae - Part 3

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Generate frequency tables (un-grouped and grouped data) | 2 |
| Calculate mean, median, mode and range of a data set | 3 |
| Homework 4 |  |
| Generating pie charts | 4 |
| Calculate probability of an event | 2 |
| Homework 5 | Total 11 |
| Revise and complete questions 12-15 of Expressions <br> and Formulae |  |

## Relationships - Part 1

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Drawing and recognising a graph of a linear equation. | 5 |
| Homework 6 | 5 |
| Solving Equations: <br> - Simple equations <br> -2 steps equations <br> - Harder equations <br> - Equations with brackets |  |
| Homework 7 |  |
|  | Total 10 |

## Term 3

## January - March

55 periods (based on 11 weeks at 5 periods a week)

## Relationships - Part 1

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Solving Equations: <br> $-\quad$ Equations with negative numbers | 3 |
| Solve inequalities | 2 |
| Homework 1 3 <br> Change subject of an equations Total 8 <br> Revise and complete questions 1-4 of Relationships  $\mathbf{l}$ |  |

## Relationships - Part 2

| Learning Intention To be able to - | Periods |
| :--- | :---: |
| Use Pythagoras' Theorem | 6 |
| Homework 2 | 3 |
| Use a fractional scale factor to enlarge or reduce a shape | 2 |
| Using parallel lines, symmetry and circle properties to calculate angles |  |
| Homework 3 | 3 |
| Using parallel lines, symmetry and circle properties to calculate angles | 3 |
| Trigonometry |  |
| Homework 4 | 5 |
| Trigonometry | 2 |
| Generate a scatter graph, line of best fit and interpret | Total 24 |
| Homework5 |  |
|  |  |
| Revise and complete questions 5-11 of Relationships |  |

Revise for the AVU assessment
Do any resits

Revision for Added Value (non-calculation)

| Learning Intention. To be able to - | Periods |
| :--- | :---: |
| Revision: |  |
| - Fractions, percentage, decimals | 1 |
| - Pie-chart | 1 |
| - Scale factor | 1 |
| - consolidation | 1 |
| Assessment | 1 |
| Total | 5 |

## Revision for Added Value (calculation)

| Learning Intention. To be able to - | Periods |
| :--- | :---: |
| Revision: |  |
| - equations | 1 |
| - area | 1 |
| - TDS | 1 |
| - Pythagoras | 1 |
| - Trigonometry | 1 |
| - Scattergraph and probability | 1 |
| Assessment | 1 |
| Total | 7 |

