Baldragon Academy

Mathematics

Course Plan 2019-2020

S1

CfE Level 3

Term 1

August – October

32 Periods (based on 8 weeks at 4 periods per week)

Reviews to be completed at the end of each topic.

Rounding

Learning Intention. To be able to -	Periods
Round a number to any decimal place	1
Round a number to any given significant figure.	2
Estimate an answer using significant figures	1
Homework on Rounding	Total 4

Whole Numbers

Learning Intention. To be able to -	Periods
solve problems using mathematical operations	2
use quick methods to carry out mental calculations	2
multiply/divide by 30, 400, 2000 etc.	2
+, −, x, ÷ using the order of operations	2
Homework on Whole Numbers	Total 8

Money

Learning Intention To be able to -	Periods
Calculate different salary rates	2
Calculate bonuses and wage rises	1
Use percentages to calculate commission due	1
Calculate wages, including overtime	2
Calculate Gross Pay, Net Pay and Deductions	2
Homework on Money	Total 8

Angles

Learning Intention To be able to -	Periods
Find a complementary or supplementary angle	1
Calculate a missing angle round a point	1
Find missing angles using vertically opposite angles	1
Find a missing angle in a triangle	3
Homework on Angles	Total 6

Total = 26 periods

Term 2

October – December

32 Periods (based on 8 weeks at 4 periods per week)

Reviews to be completed at the end of each topic.

Ratio

Learning Intention. To be able to -	Periods
Compare different quantities using ratio	1
Simplify any given ratio as far as possible	2
Determine a missing quantity, knowing the other.	2
Homework on Ratio	Total 5

Fractions

Learning Intention To be able to -	Periods
Produce an equivalent fraction	1
Convert between top-heavy and mixed fractions	2
Add or subtract basic mixed fractions	1
Add or subtract harder fractions	2
Homework on Fractions	Total 6

Algebra

Learning Intention. To be able to -	Periods
Collect "like" terms & multiply terms in algebraic expressions	2
Expand out brackets	1
Expand out brackets, then collect like terms	1
Solve simple equations	1
Solve equations with brackets	2
Homework on Algebra-1	
Substitute numbers for letters	2
Construct and evaluate formula from statements and diagrams	2
Homework on Algebra-2	Total 11

Coordinates

Learning Intention. To be able to -	Periods
Plot a coordinate in any quadrant	3
Coordinate Picture - Xmas	2
Homework on Coordinates	Total 5

Total = 27 periods

Term 3

January – March

42 periods (based on 11 weeks at 4 periods a week)

Reviews to be completed at the end of each topic.

Integers

Learning Intention. To be able to -	Periods
Work with positive & negative numbers and 0 in the real world	2
Add & subtract positive and negative numbers	1
Recognise and use the double negative method	1
x and ÷ positive and negative numbers	2
Homework on Integers	Total 6

Percentages / Decimals / Fractions

Learning Intention. To be able to -	Periods
Find a percentage of a quantity without a calculator	2
Find a percentage of a quantity with a calculator	2
Convert between a fraction, decimal & percentage	2
Homework on Percentages / Decimals / Fractions	Total 6

Area and Perimeter

Learning Intention. To be able to -	Periods
Use formulae to find perimeter/area of a square, rectangle, triangle	2
Use formulae to find the area of a rhombus & a kite	2
Use formulae to find the area of a parallelogram	2
Find the area of a trapezium by making 2 triangles	2
Calculate the area of a figure made up of 2 or more shapes	2
Homework on Area and Perimeter	Total 10

Time

Learning Intention. To be able to -	Periods
Solve time, distance & speed problems using whole units of time	3
Solve TDS problems involving half hour/ quarter hour times	2
Change hours and minutes into decimal times	2
Change decimal times into hours and minutes	2
Interpret and do calculations using a TDS graph	1
Homework on Speed / Distance / Time	Total 10

Volume

Learning Intention. To be able to -	Periods
Calculate the volume of a cube or cuboid using a formula	2
Calculate the volume of a Triangular Prism	2
Find the capacity of a container and convert from l to ml	1
Homework on Volume	Total 5

Total = 37 periods

Term 4a

April – May (Change of timetable)

16 periods (based on 4 weeks at 4 periods a week)

<u>Circle</u>

Learning Intention. To be able to -	Periods
Investigate the circumference of a circle	1
Use a formula to find the circumference of a circle	1
Find perimeters of half/quarter circles	1
Find the diameter & radius of a circle given the circumference	1
Homework on Circumference of Circle	Total 4
Investigating the area	1
Use a formula to find the area of a circle	1
Find the area of half/quarter circles	2
Homework on Area of a Circle	Total 4

Total = 8 periods

Catch up with any topic reviews that have been missed.

Use problem solving tasks if course finished before allocated time.