

# Mathletics

## Ireland Curriculum

### Activities (Courses)



**5th - 6th Class**

March, 2026



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Activities (Courses)

March, 2026

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# 5<sup>th</sup> Class

## Number

### Place value and base ten


Investigate how decimals and percentages (and fractions) can be compared, ordered and expressed in related terms	
Activities	
<b>Number and place value</b>	Place Value to Millions
	Place Value to Billions
	Numbers from Words to Digits 1
	Numbers from Words to Digits 2
	Partition and Rename 3
	Equal, Less or Greater than?
	Decimal Place Value
	Decimal Order
	Decimals on a Number Line
	Decimals from Words to Digits 1
	Decimals from Words to Digits 2
	Comparing Decimals
	Rounding Decimals 1
	Integers on a Number Line
Square Roots	
<b>Decimals and percentages</b>	Modelling Percentages
	Complementary Percentages


### Sets and operations

Build upon, select and make use of a range of operation strategies	
Activities	
<b>Addition and subtraction</b>	Estimate Sums
	Estimate Differences
	Bump Add and Subtract
	Split Add and Subtract
	Jump Add and Subtract
	Compensation - Add
	Compensation - Subtract
	Add 3-Digit Numbers: Regroup
	Add Three 3-Digit Numbers: Regroup
	Adding Colossal Columns
	Column Subtraction
	Subtracting Colossal Columns
	3-Digit Differences: 2 Regroupings
	3-Digit Differences with Zeros
<b>Multiplication</b>	Multiplication Facts
	Multiples of
	Lowest Common Multiple
	Double and Halve to Multiply
	Mental Methods Multiplication 1
	Grid Methods 2

	Grid Methods 3
	Multiplying Whole Numbers by 10, 100, and 1000
	Multiply: 1-Digit Number
	Single Digit multipliers
	Contracted Multiplication
<b>Division</b>	Division Facts to Twelve
	Find the Factor
	Highest Common Factor
	Divisibility Tests (2, 5, 10)
	Dividing by 10, 100, 1000
	Mental Methods Division 1
	Rounding Numbers for Division
	Divide: 1-Digit Divisor 2
	Divide: 1-Digit Divisor, Remainder
	Divide: 2-Digit Divisor, Remainder
	Estimation: Multiply and Divide
	Prime or Composite?


## Fractions


Explore (model, compare and convert) the relationships between fractions, decimals and percentages	
 <b>Activities</b>	
<b>Fractions</b>	<ul style="list-style-type: none"> <li>The Equivalent Fraction</li> <li>Simplify Fractions</li> <li>Fraction Wall Labelling 1</li> <li>Compare Fractions 1b</li> <li>Compare Fractions 2</li> <li>Mixed and Improper Fractions on a Number Line</li> <li>Converting Mixed and Improper</li> <li>Add: No Common Denominator</li> <li>Subtract: No Common Denominator</li> <li>Add Unlike Mixed Numbers</li> <li>One Take Fraction</li> <li>Fraction Fruit Sets 2</li> <li>Fraction Word Problems</li> <li>Fraction by Whole Number</li> <li>Model Fractions to Multiply</li> </ul>
<b>Decimals and percentages</b>	<ul style="list-style-type: none"> <li>Fractions to Percentages (Non-Calculator)</li> <li>Percentages to Fractions (with and without simplification)</li> <li>Percentages to Decimals</li> <li>Decimal to Percentage</li> <li>Match Decimals and Percentages</li> <li>Calculating percentages (Mental)</li> <li>Decimals to percentages</li> </ul>

Investigate proportionality and ratios of quantities (sets)	
 <b>Activities</b>	
<b>Teacher directed</b>	


## Algebra

### Patterns, rules and relationships

Identify, explain and apply generalisations, including properties of operations, mathematical models and patterns	
 <b>Activities</b>	
<b>Patterns</b>	Increasing Patterns
	Decreasing Patterns
	Describing Patterns
	Pick the Next Number


Represent mathematical structures in multiple ways, including verbal expressions, diagrams and symbolic representations	
 <b>Activities</b>	
<b>Patterns</b>	Table of Values


### Expressions and equations

Articulate, represent and solve mathematical situations through the use of expressions and equations that include letter-symbols	
 <b>Activities</b>	
<b>Equations</b>	Order of Operations 1 (BIDMAS)
	I am Thinking of a Number!
	Find the Missing Number 1
	Find the Missing Number 2

## Measures

### Measuring

Determine and calculate units of measurement in fractional and/or decimal form to solve practical problems	
 <b>Activities</b>	
<b>Length, perimeter and area</b>	Converting Units of Length
	Metres and Kilometres
<b>Weight and capacity</b>	Which Unit of Measurement?
	Grams and Kilograms
	Converting Units of Mass
	Millilitres and Litres

Find, interpret and deduce measures experimentally with increasing precision	
 <b>Activities</b>	
<b>Length, perimeter and area</b>	Measuring Length
	Operations with Length
	Perimeter of Shapes
	Perimeter Detectives 1
	Perimeter: Triangles

## Time

Solve and pose practical tasks and problems involving the interpretation and calculation of time	
<b>Activities</b>	
<b>Time</b>	24 Hour Time
	Elapsed Time
	Time Mentals
	Time Conversions: Whole Numbers 2
	Time Conversions: Simple Fractions
	Hours and Minutes
	Using Timetables

## Money

Solve and pose practical tasks to investigate and make informed judgements about transactions and financial plans	
<b>Activities</b>	
<b>Teacher directed</b>	

## Shape and Space

### Spatial awareness and location

Describe location on the full co-ordinate plane	
<b>Activities</b>	
<b>Space and shape</b>	Coordinate Graphs: 1st Quadrant

Interpret scale maps and create simple scale drawings	
<b>Activities</b>	
<b>Space and shape</b>	More Directions!
	Scale


## Shape


Construct 3-D and 2-D models or structures given defined measurements and/or specific conditions	
<b>Activities</b>	
<b>Space and shape</b>	Properties of Quadrilaterals
	Triangle Tasters
	Identify Parts of Circles 1
	What Prism am I?
	What Pyramid am I?
	Prisms and Pyramids
	Faces, Edges and Vertices

Investigate and construct angles in the context of shape; and solve angle-related problems	
<b>Activities</b>	
<b>Lines and angles</b>	What Type of Angle?
	Classifying Angles

	Triangles: Acute, Right, Obtuse
	Measuring Angles
	Complementary, Supplementary or Neither
	Angle Sum of a Triangle


## Transformation


Perform and devise a range of steps involving transformations	
 <b>Activities</b>	
<b>Space and shape</b>	Symmetry or Not?
	Rotational Symmetry of Shapes
	Transformations

Analyse and show how shapes are enlarged on scaled diagrams	
 <b>Activities</b>	
<b>Teacher directed</b>	


## Data and Chance


### Data

Pose questions, collect, compare, summarise and represent data selectively to answer those questions	
 <b>Activities</b>	
<b>Chance and data</b>	Bar Graphs 2
	Line Graphs: Interpretation
	Compound Bar Chart
	Pie Charts

Critically analyse and evaluate findings; and communicate inferences, conclusions and implications from the findings	
 <b>Activities</b>	
<b>Chance and data</b>	Finding the Average

### Chance

Use probability to make informed decisions and predictions	
 <b>Activities</b>	
<b>Chance and data</b>	Fair Games

Represent and express probability in different forms	
 <b>Activities</b>	
<b>Chance and data</b>	How many Combinations?
	Introductory Probability

# 6<sup>th</sup> Class

## Number

### Place value and base ten


Investigate how decimals and percentages (and fractions) can be compared, ordered and expressed in related terms	
Activities	
<b>Place value, powers and integers</b>	Numbers from Words to Digits 1
	Numbers from Words to Digits 2
	Partition and Rename 3
	Place Value to Billions
	Comparing Numbers
	Integers on a Number Line
	Directed Numbers
Ordering Integers (Number Line)	

### Sets and operations


Build upon, select and make use of a range of operation strategies	
Activities	
<b>Operations (mental)</b>	Factors
	Multiples
	Highest Common Factor
	Lowest Common Multiple
	Prime or Composite Numbers
	Product of prime factors
	Multiplying Whole Numbers by 10, 100, and 1000
	Multiply 2 Digits Area Model
	Mental Methods Multiplication 2
	Divisibility Tests (2, 5, 10)
	Divisibility Tests (3, 4, 9)
	Dividing by 10, 100, 1000
	Mental Methods Division 2
	Mental Methods Division 3
	Money Problems: Four Operations
Order of Operations 1 (BIDMAS)	
Identifying errors in applying the order of operations	
<b>Operations (written)</b>	Single Digit multipliers
	Multiply: 2-Digit Number, Regroup
	Long Multiplication
	Contracted Multiplication
	Divide: 1-Digit Divisor 1
	Divide: 1-Digit Divisor, Remainder
	Divide: 2-Digit Divisor, Remainder
	Long Division
Short Division	
<b>Operations (decimals)</b>	Add Decimals 1
	Adding Decimals
	Decimal Complements

	Subtract Decimals 1
	Subtracting Decimals
	Multiply Decimals and Powers of 10
	Multiply Decimal by Whole Number
	Decimal by Decimal
	Divide Decimals: 10, 100, 1000
	Rounding Numbers for Division
	Divide Decimal by Whole Number
	Divide Decimal by Decimal
<b>Estimation</b>	Estimate Decimal Sums 1
	Estimate Decimal Differences 1
	Estimate Products
	Estimate Quotients
	Estimation: Multiply and Divide
<b>Fractions</b>	Add Like Mixed Numbers
	Subtract Like Mixed Numbers
	Add Unlike Fractions
	Add Unlike Mixed Numbers
	Subtract Unlike Fractions
	Subtract Unlike Mixed Numbers
	Fraction of an Amount
<b>Place value, powers and integers</b>	Negative or Positive?
	Square Roots
	Index Notation/Exponent Notation
	Scientific Notation 1

## Fractions


Explore (model, compare and convert) the relationships between fractions, decimals and percentages	
 <b>Activities</b>	
<b>Fractions</b>	The Equivalent Fraction
	Fraction Wall Labelling 2
	Simplify Fractions
	Counting with Fractions on a Number Line
	Mixed to Improper
	Improper to Mixed
	Ordering Fractions 1
	Add Unlike Fractions
	Add Unlike Mixed Numbers
	Subtract Unlike Fractions
	Subtract Unlike Mixed Numbers
	Fraction of an Amount
<b>Decimals</b>	Decimals on a Number Line
	Comparing Decimals
	Decimal Order
	Rounding Decimals
	Rounding Decimals 2
	Fraction to Terminating Decimal
	Fractions to Decimals
	Decimals to Fractions 2
	Decimals to Fractions 1
<b>Fractions, decimals, percentages</b>	Modelling Percentages


	Decimal to Percentage
	Percents and Decimals
	Percents to Fractions
	Percentages greater than 100% to Mixed Numerals
	Quantities to Percentages (no units)
	Quantities to Percentages (with units)
	Common Fractions as Percentages (AU)
	Fractions to Percentages (Non-Calculator)
	Match Decimals and Percentages
	Percent of a Number (Mental)
	Calculating Percentages 1
	Percentage Word Problems

Investigate proportionality and ratios of quantities (sets)	
 <b>Activities</b>	
<b>Ratio</b>	Word Problems: Ratio
	Ratio Word Problems
	Ratios


## Algebra

### Patterns, rules and relationships

Identify, explain and apply generalisations, including properties of operations, mathematical models and patterns	
 <b>Activities</b>	
<b>Patterns, rules and graphing</b>	Number Sequences Up to 1 Million


Represent mathematical structures in multiple ways, including verbal expressions, diagrams and symbolic representations	
 <b>Activities</b>	
<b>Patterns, rules and graphing</b>	Table of Values
	Find the Function Rule
	Pattern Rules and Tables
	Graphing from a Table of Values
	Reading Values from a Line


### Expressions and equations

Articulate, represent and solve mathematical situations through the use of expressions and equations that include letter-symbols	
 <b>Activities</b>	
<b>Equations and variables</b>	Find the Missing Number 2
	Solve Equations: Add, Subtract 1
	Solve Equations: Multiply, Divide 1
	Simple Substitution 1
	Simple Substitution 2
	Substitution in Formulae
	Writing Algebraic Expressions
	Like Terms: Add, Subtract


## Measures

## Measuring


Determine and calculate units of measurement in fractional and/or decimal form to solve practical problems	
 <b>Activities</b>	
<b>Lines and angles</b>	Measuring Angles
<b>Unit conversions</b>	Centimeters and Millimeters
	Metres and Kilometres
	Kilometre Conversions
	Converting Units of Length
	Grams and Kilograms
	Grams and Milligrams
	Converting Units of Mass
Millilitres and Litres	

Find, interpret and deduce measures experimentally with increasing precision	
 <b>Activities</b>	
<b>Perimeter, area, volume</b>	Perimeter Detectives 1
	Perimeter Detectives 2
	Perimeter: Triangles
	Area: Squares and Rectangles
	Area: Quadrilaterals
	Area: Right Angled Triangles
	Area: Composite Shapes
	Volume: Rectangular Prisms 2

## Time

Solve and pose practical tasks and problems involving the interpretation and calculation of time	
 <b>Activities</b>	
<b>Time and money</b>	Time Conversions: Simple Fractions
	Time Conversions: Simple Decimals
	Time Mentals
	What Time Will it Be?
	Time Zones
	Time taken

## Money

Solve and pose practical tasks to investigate and make informed judgements about transactions and financial plans	
 <b>Activities</b>	
<b>Time and money</b>	Best Buy
	Purchase Options

## Shape and Space

### Spatial awareness and location

Describe location on the full co-ordinate plane
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Activities	
Shape and space: 2D	Coordinate Graphs: 1st Quadrant
	Rotations: Coordinate Plane
	Transformations: Coordinate Plane

Interpret scale maps and create simple scale drawings	
Activities	
Shape and space: 2D	More Directions!
	Scale
	Scale Measurement

## Shape

Construct 3-D and 2-D models or structures given defined measurements and/or specific conditions	
Activities	
Shape and space: 2D	Triangles: Acute, Right, Obtuse
	Identify Parts of Circles 2
	Labelling Circles
	Properties of Quadrilaterals
Shape and space: 3D	What Prism am I?
	What Pyramid am I?
	Prisms and Pyramids
	Faces, Edges, and Vertices 1

Investigate and construct angles in the context of shape; and solve angle-related problems	
Activities	
Lines and angles	Measuring Angles
	Labelling Angles
	Angles in a Revolution
	Complementary, Supplementary or Neither
	Equal, Complementary or Supplementary Angles
	Vertically Opposite: Value of x
	Angle Sum of a Triangle
	Interior Angles


## Transformation


Perform and devise a range of steps involving transformations	
Activities	
Shape and space: 2D	Rotations: Coordinate Plane
	Transformations: Coordinate Plane

Analyse and show how shapes are enlarged on scaled diagrams	
Activities	
Shape and space: 2D	Scale factor


## Data and Chance


## Data

Pose questions, collect, compare, summarise and represent data selectively to answer those questions	
 <b>Activities</b>	
<b>Chance and data</b>	Interpreting tables
	Compound Bar Chart
	Line Graphs: Interpretation
	Pie Charts

Critically analyse and evaluate findings; and communicate inferences, conclusions and implications from the findings	
 <b>Activities</b>	
<b>Chance and data</b>	Mode
	Median
	Mean
	Mode from Frequency Table
	Median from Frequency Table
	Mean from Frequency Table
	Frequency Histograms
	Data Extremes and Range

## Chance

Use probability to make informed decisions and predictions	
 <b>Activities</b>	
<b>Teacher directed</b>	

Represent and express probability in different forms	
 <b>Activities</b>	
<b>Chance and data</b>	Probability Scale
	Find the Probability
	Simple Probability



For more information about Mathletics,  
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