

ZETA MATHS

CfE Third Level

Maths & Numeracy

Condensed Checklist

This checklist covers every skill that learners need for success at Third Level maths and numeracy. Each section of this checklist corresponds to the **Zeta Maths CfE Third Level Maths & Numeracy** textbook (available from www.zetamaths.com or on [Amazon](#)). The topic names in this document are linked for easy navigation of the checklist and colour coded to correspond with skills: **numerical**, **algebraic**, **geometric** and **statistical**.

Section	Topic			
1 Rounding				
1.3	Rounding to 1, 2 and 3 decimal places			
1.4	Rounding for estimation			
2 Whole Numbers				
2.2	Mental addition and subtraction			
2.4	Mental multiplication			
2.6	Mental Division			
Learners should know and recall multiplication and division facts up to the 10 th multiplication table (see website for practice worksheets)				
Learners should be able to use who numbers skills to solve problems (see Maths in Context 1)				
3 Decimal Numbers				
3.2	Mental addition and subtraction			
3.4	Multiplication of a decimal number by a decimal number			
3.6	Division of a decimal number by a decimal number			
3.7	Multiplication by Multiples of 10, 100 and 1000			
3.8	Division by Multiples of 10, 100 and 1000			
Learners should be able to use decimal number skills to solve problems (see Maths in Context 1)				
4 Integers (positive and negative whole numbers)				
Integers are numbers with no fractional part that can be either positive or negative, e.g. ..., -2, -1, 0, 1, 2, ..., etc.				
4.2	Addition and subtraction of negative numbers			
4.3	Multiplication of a decimal number by a decimal number			
Learners should be able to use negative number skills to solve problems (see Maths in Context 1)				
5 Multiples, Factors & Primes				
5.1	Multiples			
5.2	The lowest common multiple (LCM)			
5.3	Factors			
5.4	The highest common factor (HCF)			
5.5	Prime numbers			
5.6	Prime factorisation			
Learners should be able to solve problems with multiples and factors (see Maths in Context 1)				

Section	Topic			
6 Powers				
6.1	Evaluating whole number powers			
6.2	Expressing whole numbers in index form			
7 The Order of Operations				
7.1	Simple operations (SECOND LEVEL)			
8 Fractions				
8.3	Converting improper fractions to mixed numbers			
8.4	Converting mixed numbers to improper fractions			
8.5	Finding a fraction of a whole number or quantity			
8.6	Adding and subtracting fractions			
8.7	Multiplying fractions by whole numbers			
8.8	Expressing fractions as decimals			
8.9	Expressing decimals as fractions			
9 Percentages				
9.1	Expressing a percentage as a fraction			
9.2	Expressing a fraction as a percentage			
9.3	Expressing a percentage as a decimal			
9.4	Expressing a decimal as a percentage			
9.5	Finding a percentage of a quantity (non-calculator)			
9.6	Finding a percentage of a quantity (calculator)			
10 Ratio				
10.1	Simplifying ratios			
10.1	Sharing ratios			
10.3	Using a ratio to find unknown values			
11 Simplifying Expressions				
11.1	Basic addition and subtraction			
11.2	Further addition and subtraction			
11.3	Multiplication of algebraic terms by letters and numbers			
11.4	Mixed simplifying – use of BIDMAS			

Section	Topic			
11.5	Division of algebraic terms by letters and numbers			
12	Substitution			
11.1	Basic substitution			
13	Solving Equations			
13.1	Solving equations: $x \pm a = b$			
13.2	Solving equations: $ax = b$			
13.3	Solving equations: $ax \pm b = c$			
13.5	Solving equations with rational/fractional solutions			
14	Measurement			
14.2	Converting units			
15	Area & Volume			
15.3	The area of any triangle			
15.4	The area of composite shapes			
15.6	The volume of composite objects			
17	Angle Properties			
17.2	Naming angles			
17.4	Vertically opposite angles			
17.5	Angles around a point			
17.6	Angles in a triangle			
17.7	Angles in a quadrilateral			
17.8	Angles and parallel lines			
17.9	Angle chasing			
17.10	Bearings			
18	Reflection Symmetry			
18.1	Identifying reflection symmetry			
18.2	Using reflection symmetry			
19	Scale Factors & Scale Drawing			
19.1	Calculating scale factors			
19.2	Using scale factors			
19.3	Using scale factors for drawing			
20	Drawing 2D Shapes			
20.1	Drawing squares and rectangles			
20.2	Drawing triangles			
20.3	Drawing regular polygons			
21	Money			
21.1	Currency conversions			

Section	Topic			
21.2	Choosing best value			
21.2	Choosing best value contracts			
22	Patterns & Sequences			
22.1	Finding numbers and describing a rule			
22.3	Using the formula for the n th term			
22.4	Finding a formula connecting two related terms			
23	Speed, Distance & Time			
23.1	Time intervals			
23.2	Calculating speed			
23.3	Calculating distance			
23.4	Calculating time			
23.6	Distance-time graphs			
24	Information Handling			
24.1	Data interpretation			
24.2	Comparative bar graphs			
24.3	Comparative line graphs			
24.4	Pie charts			
25	Probability			
25.1	Stating probability using words			
25.2	Stating probability using a scale from 0 to 1			
25.3	Calculating simple probability			
25.4	Using probability			