



My Child's Learning Journey  
A Guide for Parents



## **Mathematics and Numeracy**

### **Achieving Second Level**



*Imagine with all your mind.  
Believe with all your heart.  
Achieve with all your might.*





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The aim of this guide is to help you understand your child's learning journey through mathematics. They are on their way to learning skills and building knowledge to help them in this journey.

It should be noted, that this is a **guide** only. Your communication with the school and your child's class teacher will give you more specific information about what your child is learning, skills they have acquired and their next steps.

### **Resources**

In working through maths your child will use a range of resources including but not exclusively Heinemann Mathematics, Sumdog and Teejay resources too.

### **How we assess your child's progress through the level**

Throughout the year, your child will complete a range activities and assessments both formal and informal, along with the review of ongoing daily activities. These combined help your child's teacher to make professional judgements on your child's learning.

Your discussion with your child's teacher at parent's evening and throughout the course of the year will allow you to discuss in detail your child's progress, needs and next steps.

A summary of their progress will be given in their end of year report given home in June.

Should you have any questions about your child's learning then please contact the school for an appointment to discuss this.



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Mathematics at the end of Second Level involves the following:

(Please note that this list includes main learning but cannot cover all steps in learning)

Number, Money and Measure	Number, Money and Measure	Number, Money and Measure	Shape, Position and Movement Information Handling
<p><b>I am learning to:</b></p> <ul style="list-style-type: none"> <li>• read, write and order whole numbers to 1 000 000, starting from any number in the sequence.</li> <li>• read, write and order sets of decimal fractions to three decimal places.</li> <li>• add and subtract multiples of 10, 100 and 1000 to and from whole numbers and decimal fractions to two decimal places.</li> <li>• add and subtract whole numbers and decimal fractions to two decimal places, within the number range 0 to 1 000 000.</li> <li>• apply the correct order of operations in number calculations when solving multi-step problems.</li> <li>• multiply and divide whole numbers by multiples of 10, 100 and 1000.</li> <li>• multiply whole numbers by two digit numbers.</li> <li>• multiply and divide decimal fractions to two decimal places by 10, 100 and 1000.</li> <li>• multiply decimal fractions to two decimal places by a single digit.</li> <li>• apply the order of operations to problems involving brackets and indices.</li> <li>• solve problems involving negative numbers mentally .</li> <li>• round numbers to 2 decimal places.</li> </ul>	<p><b>I am learning to:</b></p> <ul style="list-style-type: none"> <li>• round whole numbers to the nearest 1000, 10 000 and 100 000.</li> <li>• round decimal fractions to the nearest whole number, to two decimal places.</li> <li>• add and subtract whole numbers and decimal fractions to two decimal places, within the number range 0 to 1 000 000.</li> <li>• multiply and divide decimal fractions to two decimal places by 10, 100 and 1000.</li> <li>• divide whole numbers and decimal fractions to two decimal places, by a single digit, including answers expressed as decimal fractions, for example, <math>43 \div 5 = 8.6</math>.</li> <li>• express fractions in their simplest form.</li> <li>• calculate simple percentages of a quantity, and use this knowledge to solve problems in everyday contexts, for example, calculates the sale price of an item with a discount of 15%.</li> <li>• reduce fractions to the simplest form .</li> <li>• compare costs and determine affordability within a given budget.</li> <li>• use decimals and negative numbers in the context of money .</li> <li>• talk about profit and loss in buying and selling activities and make calculations for this.</li> </ul>	<p><b>I am learning to:</b></p> <ul style="list-style-type: none"> <li>• use budgeting skills to make responsible decisions regarding spending.</li> <li>• identify multiples for fractions and decimals.</li> <li>• apply knowledge of multiples, square numbers and triangular numbers to generate number patterns.</li> <li>• solve simple inequalities.</li> <li>• solve simple algebraic equations with one variable, for example, <math>a - 30 = 40</math> and <math>4b = 20</math>.</li> <li>• estimate then measure accurately: length, height and distance in millimetres (mm), centimetres (cm), metres (m) and kilometres (km); mass in grams (g) and kilograms (kg); and capacity in millilitres (ml) and litres (l).</li> <li>• convert between common units of measurement using decimal notation.</li> <li>• read and record time in both 12 hour and 24 hour notation and convert between the two.</li> <li>• apply my knowledge of 12 and 24 hour notation to plan a journey using timetables.</li> <li>• calculate the length of a journey across the hour if I know the start and finish times.</li> <li>• use the language of probability.</li> <li>• use data to predict the outcome of a simple experiment .</li> <li>• interpret maps, models or plans with simple scales.</li> </ul>	<p><b>I am learning to:</b></p> <ul style="list-style-type: none"> <li>• calculate the area of squares, rectangles and right-angled triangles in square millimetres (<math>\text{mm}^2</math>), square centimetres (<math>\text{cm}^2</math>) and square metres (<math>\text{m}^2</math>).</li> <li>• find the volume of a simple 3D shape.</li> <li>• calculate the volume of cubes and cuboids in cubic centimetres (<math>\text{cm}^3</math>) and cubic metres (<math>\text{m}^3</math>).</li> <li>• extract key information from a variety of data sets including charts, diagrams, bar graphs and tables.</li> <li>• collect, organise and display data accurately in a variety of ways including through the use of digital technologies, for example, creating surveys, tables, bar graphs, line graphs, frequency tables, simple pie charts and spread sheets.</li> <li>• analyse, interpret and draw conclusions from a variety of data.</li> <li>• draw conclusions about the reliability of data.</li> <li>• describe 3D objects and 2D shapes using specific vocabulary including regular, irregular, diagonal, radius, diameter and circumference.</li> <li>• use appropriate mathematical language including acute, obtuse, straight and reflex to describe and classify a range of angles.</li> <li>• measure and draw a range of angles.</li> </ul>



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We try to develop these mathematical skills across the curriculum where it is most relevant. Your child may use mathematics and numeracy across other curricular areas of learning which helps them to deepen their understanding of the skills and concepts involved.

### **Supporting your child**

Some children will require support in learning and developing these skills through additional one to one teaching time, additional support through working at a different pace, different material and resources to support their learning or spending time out of the class working within small group to support learning. Children may also need additional support to challenge them to achieve their potential and this may involve working at a quicker pace, covering additional activities or working at a slightly higher level than would normally be expected.

Your child's class teacher will know the needs and abilities of your child and will prepare a range of activities to support their learning. For this purpose children work in groups within mathematics. These groups are fluid and change throughout the course of the year as your child learns new skills, reinforces other skills or perhaps needs a little additional support or challenge. As the concepts in mathematics can be quite different, children can have a range of mathematical abilities. For example, children may be confident and capable when using the four number process of addition, subtraction, multiplication and division but less confident and need more support when it comes to telling the time. In this way we encourage a change in groups as it helps children to understand their own learner needs and matches the learning more specifically to meet those needs.

### **You can continue to support your child's learning by:**

Allowing your child to use as much real life maths as possible including using clocks, money in shops and using timetables or durations of times from TV guides.

Discuss planning of events, costs and multipacks ( e.g. birthday party)

Discuss time and distance in journeys ( home and abroad).

Discuss the probability of events.



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