

MATHS PROGRAM IN YEAR 4

Level 4 at a glance



(Here is a <u>very</u> brief snapshot of the level 4 curriculum)

(Students in year 4 can work at many different levels. If this applies to your child and you would like more detail about their Maths learning please see their classroom teacher)

NUMBER and ALGEBRA

Numbers – Use the four operations with odd and even numbers and investigate "rules" eg when you add an odd number and an odd number the answer is an even number.

Counting – Count fluently by 3,4,6,7,8 and 9 and investigate the patterns these sequences make.

Place Value – Represent, order and read numbers to at least tens of thousands.

Addition/Subtraction - Continue to build on efficient mental and written methods and strategies. Check answers.

Multiplication – Recall multiplication facts up to 10x10 and develop appropriate strategies for multiplication eg. doubling.

Division - Recall division facts from the multiplication facts eg 2x5=10 so $10\div5=2$. Develop appropriate strategies to solve division problems with **no remainder** eg halving.

Fractions – Investigate equivalent fractions eg 2 quarters is the same as 1 half. Count by quarters, halves and thirds including mixed numbers eg. 1½. Order fractions on a number line.

Decimals – Explore tenths and hundredths and relate to fractions.

Money – Solve problems involving purchases and giving change to the nearest 5c with and without calculators.

Patterns and Algebra - Explore and describe number patterns resulting from performing multiplication.

Solve word problems by using number sentences involving multiplication or division where there is no remainder.

Use an effective algorithm that involves a short sequence of steps and decisions. Eg for the multiplication of 2 digit numbers.



MEASUREMENT AND GEOMETRY

Length, temperature, capacity and mass – Use scaled instruments to measure.

Area and volume – compare using metric units.

Time – convert between units of time and use am and pm notation.

Maps – Use a grid reference system, identify landmarks.

Shape – Informally compare the areas of regular and irregular shapes.

- Identify the 2d shapes that make up 3d objects and create models.

-Explain and compare the geometric features of 2d shapes and 3d objects.

Location and Transformation – Use simple scales, legends and directions to interpret maps.

-Create symmetrical patterns, pictures and shapes. **Angles** - Compare angles and recognise them as equal to, greater than or less than a right angle.

STATISTICS AND PROBABILITY

Data – Pose questions, trial methods to collect data and collect and display data in a variety of ways.

-Interpret data displays and pose and answer questions from these.

Graphs – Create a range of graphs including column graphs, dot plots, tables etc. with and without computers.

Chance and Probability – Conduct chance experiments (eg chance of winning a game). Recognise that probabilities range from 0-1.

-Describe possible everyday events and their chance of occurring and identify events where one cannot happen if the other happens.

ASSISTING WITH MATHS AT HOME

Confidence is essential in any learning, especially mathematics. Children need to experience success frequently to give them confidence to extend their understandings and enjoy exploring maths. Your attitude to maths will have a great influence on this and on their attitude towards maths learning.

Much of the daily experience of children in the home and during leisure activities involves them in using and developing numeracy skills. Parents and other adults can assist children by sharing the maths they are using and encouraging children to talk about what they are doing, for example:

Sitting with them and assisting them with their maths home learning

- Telling the time (and whether it is am or pm); estimating how long a journey/game/task will take.
- Practise answering multiplication facts (up to 10x10) efficiently (ask your child which one they are working on at the moment).
- Practise answering the division facts from these multiplication facts eg. 2x5=10 10÷5=2.

- Make cards and play games involving the multiplication and division facts.
- Reading and recording events on the calendar or in a diary.
- Using a calendar to work out how long before a particular event.
- Setting the alarm clock.
- Estimating distances.
- Measuring and recording people's height and mass at regular intervals.
- Scoring and strategies in sports.
- Measuring ingredients for cooking.
- Noting sizes of packets when shopping.
- Describing containers in terms of their capacity.
- Planning family activities.
- Handling money and calculating change to the nearest 5c.
- Building using construction kits, models, household materials.
- Cooking, gardening.
- Reading maps, plans eg. of a place you visit such as the Zoo.
- Show them how you decide which train or bus to catch.

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Games are a wonderful way of developing number and strategy skills, as well a providing the opportunity for family fun:

- Board games (Monopoly, snakes and ladders, draughts, ...).
- Card games (traditional or snap, concentration, Numero, UNO ...), Dominoes.
- Strategy games and activities (Sudoku, Connect 4, Backgammon, Chess, Battleships, Mastermind, ...).
- Jigsaws (commercial or homemade including cut-up squares, triangles etc. ...).

RESOURCES TO ASSIST

<u>Mathletics – Your child will have their own user name and password – it is designed to be used for 5-10 minutes at a time http://www.mathletics.com.au/</u>

Make sure you sit with your child whilst **THEY** complete their activities and talk to them about what they are doing. Look in the Dictionary or check out the Concept search to help if you need to.

Here is a link to the Department Website that describes what your child will learn in Year 4 in Mathematics, with links to activities etc. http://www.education.vic.gov.au/school/parents/learning/schoolmate/year4/Pages/maths.aspx

SchoolMate The SchoolMate app, produced by the Department, provides the information from this section in a simple and easy to use way. It allows you to tailor your view so you see what is relevant to your child and their interests. For more information and to download the app, see: SchoolMate

201 Literacy and Maths Tips to help your child. This is a fantastic booklet full of great advice and ideas to help with both Literacy and Numeracy. It is divided into two sections that you can download. The first section is Before school to year 2 and the second is year 3 to year 6. This resource is also translated into 22 different languages

http://www.education.vic.gov.au/school/parents/involve/Pages/literacynum.aspx



