STAGE 1- Helping your Year 1 or Year 2 child at home with Mathematics

This guide can help carers and parents support their Year 1 or Year 2 child at home with the learning area of mathematics.

Number and Algebra

Representing whole numbers

Representing whole numbers focuses on:

- understanding place value and two-digit and three-digit numbers
- representing numbers to 1000 and partitioning (splitting) numbers to record quantities.

You can help your Year 1 and Year 2 child at home by:

- counting the odd and even numbers on houses as you walk around your neighbourhood. Walk in the opposite direction and count them backwards
- counting numbers by ones up to 120 while skipping rope or throwing a ball to each other. Change the starting point of counting, for example beginning to count from 93
- counting backwards by ones from different starting numbers
- practising partitioning (or splitting) two-digit and three-digit numbers into smaller units. For example, *396 can be broken into 3 hundreds, 9 tens and 6 ones*
- using a hundreds chart to practise counting on and off the decade. For example, *10, 20, 30, 40, 50 …, 3, 13, 23, 33, 43, 53 …*

Combining and separating quantities

Combining and separating quantities focuses on:

- using addition and subtraction to solve problems.

You can help your Year 1 and Year 2 child at home by:

practising quick recall of double numbers to 10. Use double domino tiles to extend thinking to doubling numbers to 20

- finding and discussing numbers in everyday life that are not meant to be used with place value, such as phone numbers, pin numbers, bus numbers and postcodes
- using number bonds, or 'friends of 10', to assist with simple addition and subtraction problems. For example, *4 + 6 = 10, 6 + 4 = 10, 10 - 4 = 6, 10 - 6 = 4*
- using number bonds to solve addition problems by making groups of 10. For example, the problem of *26 + 8* can be solved by taking 4 from the 8 and adding it to the *26.* The new problem of *30 + 4* is much easier to solve
- solving problems using their knowledge of doubles. For example, the problem *8 + 9* can been seen as double *8 (8 + 8)* which is *16*. Add one more to make *17*
- building number bond knowledge to understand 'friends of 20'. These number pairs are *11 and 9, 12 and 8, 13*

and 7, 14 and 6, 15 and 5.

Forming Groups

Forming Groups focuses on:

- using groups to solve multiplication problems or share to solve division problems.

You can help your Year 1 and Year 2 child at home by:

- playing skip counting games or taking turns to count by 2s, 3s, 5s, and 10s
- using 5 cent, 10 cent or 2 dollar coins to skip count money
- drawing a skip counting hopscotch path with chalk. Use the hopscotch path in reverse to skip count backwards
- using collections of objects to show groups. For example, share a container of marbles equally between groups. Discuss the number of groups and the number of objects in each group. Refer to the leftover marbles as remainders.

Measurement and Space

Geometric measure

Geometric measure focuses on:

- describing the position of objects
- measuring and recording lengths
- halves, quarters and eighths to measure lengths.

You can help your Year 1 and Year 2 child at home by:

- practising kicking a ball to each other's left foot. Then change feet and kick the ball to each other's right foot. This helps understanding the perception of their left/right and your left/right when you are facing each other
- taking turns hiding an object in the house and giving directions to the find the object
- measuring the length of objects around the house and backyard using informal units of measurement. Examples include, *How many dominoes long is the table? How many of my feet long is the bedroom?* or *How many pencils long is my bicycle?* Make sure when using informal measurements the chosen units are placed touching end to end
- measuring your child's height vertically on a wall with both formal and informal units to compare results. For example, stacking and counting plastic connector blocks, using a ruler to measure in centimetres and using a tape measure to measure in metres and centimetres
- measuring the length of household items with a piece of string or a strip of paper. Find half the length by folding the paper or string in half.

Two-dimensional spatial structure

2D spatial structure focuses on:

- recognising, representing and describing a range of polygons (flat shapes which have 3 or more sides) and quadrilaterals (4-sided shapes)
- measuring and comparing area.

You can help your Year 1 and Year 2 child at home by:

- identifying polygons, quadrilaterals (4-sided shapes), pentagons (5-sided), hexagons (6-sided) and octagons (8-sided) around your home or yard
- using folding, colours, lines or patterns to find symmetry of shapes in everyday objects. Examples could include reflections of trees and mountains in water, butterflies, people's faces, buildings, a dart board, floor tile or brick patterns and windows
- completing origami art from symmetrical paper folding
- using grid paper to design a house for your pet or another animal. Areas could include places to eat, store equipment/food, areas to relax or exercise. Use the grid squares to find the area of each room and the total house area
- using Lego base plates to design flat shapes and patterns using different size and colour pieces. Add and compare the area of each colour by counting the Lego studs.

Three-dimensional spatial structure

3D spatial structure focuses on:

- recognising, representing and describing a range of familiar 3D objects
- measuring and comparing volume.

You can help your Year 1 and Year 2 child at home by:

- discovering and naming 3D shapes around your home and backyard. Examples include dice (cube), bread (rectangular prism), ball (sphere), toilet roll (cylinder), ice-cream cone (cone)
- making a variety of 3D shapes, such as a cube, rectangular prism, square pyramid, sphere and cylinder from playdough
- creating a 3D snack food plate. Find food that is in the shape of a cube, rectangular prism, sphere or cylinder. Some ideas could include *cheese cubes, caramels, cheese sticks, baby tomatoes, wafer biscuits, pretzel sticks, meatballs, rigatoni pasta, croutons* or an *orange*
- filling different size and shape containers with water, marbles, rice or sand to compare which can hold the most.

Non-spatial measures

Non-spatial measures focuses on:

- measuring recording, comparing and estimating the masses of objects
- describing, comparing and ordering durations of events, and reading half- and quarter-hour time.

You can help your Year 1 and Year 2 child at home by:

- using hefting (holding 2 items in each hand and lifting to test the weight) to order a variety of household items from lightest to heaviest. For example, *a mug*, *a book*, *a metal spoon* and *an apple*. Check this order by using kitchen arm balance scales
- discussing important family dates by using a standard calendar to illustrate when these events will occur. Calculate how long until these events happen, for example, *It's 5 days until your sister's birthday, It's 2 weeks and 3 days until school holidays* or *It's 4 months and 2 days to Christmas*

- using both analog and digital clocks around the house to understand how to read half past the hour, quarter past the hour and quarter to the hour time

- using the time measures of hour, minute and second in everyday life. For example, *It's 1 hour before bedtime*, *The food will go into the microwave for 30 seconds* or *Brush your teeth for 2 minutes – that means counting to 60 twice*.

Statistics and probability

Data

Data focuses on:

- gathering and organising data in tables and picture graphs

- interpreting and describing the results.

You can help your Year 1 and Year 2 child at home by:

- assisting them to interview members of your family about a topic of interest. Some examples could be finding what categories of food or television shows family members enjoy the most. Use tally marks to record the answers

- representing this data as a simple graph using pictures to show the largest to smallest values. For example, *5 people like seafood, 9 people like fast food and 3 people like vegetables*

- describing the information by comparing the data. For example, *4 more people like fast food than seafood*, *6 fewer people like vegetables than fast food.*

Chance

Chance focuses on:

- the element of chance in everyday life.

You can help your Year 1 and Year 2 child at home by:

- using the language of chance such as *certain*, *impossible*, *more likely, equally likely* and *less likely* when describing everyday events. For example, *I have an equally likely chance of tossing heads or tails on a coin flip.*