

## Supporting Numeracy Development

### 1. What can I do to support my child in developing their numeracy?

As a parent you play a significant role in your child's learning by setting expectations, nurturing curiosity, and encouraging a love of learning. As a starting point, you can help build your child's numeracy through:

- ❖ being positive about their numeracy experiences and praising effort and perseverance
- ❖ letting your child know that everyone can be successful
- ❖ seizing everyday opportunities to capitalise on numeracy development
- ❖ involving your child in numeracy-related activities
- ❖ describing what you are doing in situations that involve numeracy
- ❖ explaining why you make certain numeracy choices
- ❖ exploring numeracy with your child
- ❖ learning alongside your child and encourage a sharing of numeracy ideas and thoughts.

Helping your child to become numerate does not need a high level of mathematics. It means:

- ❖ encouraging them to try, then keep trying
- ❖ encouraging them to think (reason)
- ❖ supporting them while they do homework (which means encouraging them and taking an interest, but not doing the thinking for them)
- ❖ modelling numeracy with them (including interpreting data, charts and diagrams)
- ❖ talking aloud when solving problems (every day or mathematical)
- ❖ getting them to check their answers (Does this answer make sense?)
- ❖ encouraging them to help with
  - ✓ cooking (especially measuring out ingredients)
  - ✓ paying bills
  - ✓ scheduling events in the day
  - ✓ reading maps and giving directions
  - ✓ shopping
  - ✓ measuring — and thanking them for their support
- ❖ not saying “Maths is hard” or “I was never good at maths”. Numeracy capability is not inherited but attitudes are contagious!

To help your child when undertaking reasoning or problem-solving:

- ❖ Ask questions and give instructions such as:
  - ✓ “What do you already know about this problem/question?”

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- ✓ “How might you work it out?”
- ✓ “Explain why you think that is the answer?”
- ❖ Do not focus only on the correct response, the process/approach is important
- ❖ Allow your child to experience some confusion. It is an essential aspect of the learning process.

### 2. How can I help my child with numeracy homework?

Your child will be developing numeracy skills by applying and connecting the five mathematical proficiencies – Conceptual understanding, Communication using symbols, Fluency, Logical reasoning and Strategic competence.

You can model these proficiencies to support your child’s numeracy development by:

- ❖ recognising your own skills, capabilities and knowledge
- ❖ taking opportunities to share how you navigate different experiences
- ❖ describing your thinking, the choices you make, and your decision making

You may help develop your child’s numeracy by:

- ❖ discussing how to use previous experiences to tackle new situations, the tools, processes and methods you rely on and why
- ❖ explaining when an estimate is appropriate rather than an exact response
- ❖ being prepared to look beyond an immediate response
- ❖ exploring unexpected discoveries and learning

### 3. What everyday numeracy activities can I share with my child?

First and foremost, practise multiplication tables with your child; it is the key to everything! Here are some ideas of ways in which you can help your child develop confidence in numeracy in the home and in the world around them:

#### Cooking

- ❖ Discuss the units of measurement for items in the cupboards or refrigerator: “What is the weight of a can of beans? What is the capacity of a bottle of milk?”
- ❖ Cut the sandwich in half: “Can you cut the sandwich in half creating a different shape?”
- ❖ Mix a drink for the family: “Measuring our cordial, fruit and water, what proportions have you used?”
- ❖ Estimate how much food quantities weigh, then check how close the estimates are using a weighing scale

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- ❖ Discuss managing meal preparation: “What time do we start cooking the rice so that our food is ready to be served at the same time?”
- ❖ Change a recipe that serves 6 for say 4 people: “How much of each ingredient will we need?”
- ❖ Be a junior Masterchef: e.g. measure and weigh ingredients, apply ratio, consider cooking time, and serve portion sizes

### Are we there yet?

- ❖ Collect important dates and mark them on a calendar
- ❖ Enter dates into a digital calendar: e.g., identify the day of the week, the time between dates and set reminders
- ❖ Time how long does it take to travel to school
- ❖ Estimate how far you’ve travelled, the distance to your destination, and how long it is going to take
- ❖ Find the arrival time: “If it is 4:38 pm now and it will take us 15 minutes to get there, what time will we arrive?”
- ❖ Buying petrol: “How big is the tank? How many litres can it hold? What do you estimate the fuel is going to cost? How much did it actually cost? Was your estimate close?”
- ❖ Make a travel plan using timetables
- ❖ Read public transport maps to follow along with each stop on a journey
- ❖ Time; if you go to bed at 9pm and sleep until 7.15am, how long have you slept?

### Shopping

- ❖ Shopping at the supermarket: “How much do you think the shopping is going to cost? Was our estimate close to what we paid? What was the difference? “
- ❖ Estimate and weigh the fruit and vegetables; Compare two items for the best value for money
- ❖ Find specific items (e.g., medium-sized tin of red beans, 2 litres of milk, 250g of mince)
- ❖ Find how many apples/bananas will weigh a kilogram
- ❖ Look for the best buy between different brands of the same item then different sizes of the same item
- ❖ Cut items from shopping brochures that add to different values
- ❖ Estimate how many bags you will need to carry your grocery shop
- ❖ Disassemble a package to create a two-dimensional net
- ❖ Compare packaging sizes for a litre and a kilogram

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- ❖ Shopping in the sales; How much will this cost with 15% off?

### Reading

- ❖ Describe the location of an object in an illustration. Find the most common letter or word on a particular page
- ❖ Create a map or timeline based on a story you are reading
- ❖ Explore non-fiction books focusing on the different ways information is presented.
- ❖ Explore infographics and how data is displayed
- ❖ Discuss statistics in the news. This will develop your child's understanding of current affairs and help them to put numbers into context.

### Out and About

- ❖ Go on a walk, look out for numbers or shapes, count objects, compare sizes of objects; and look for patterns in the environment
- ❖ Pack for a trip or help loading the car boot. What will fit?
- ❖ Measure everything! "How far can you jump?" "How long is the desk?" "How tall are you?" "How tall is the dog?"
- ❖ Compare steps, paces and hand spans with metric units of length
- ❖ Find and read large numbers in the local environment
- ❖ Explore online maps, sat navigational directions for planning a trip
- ❖ Look at architecture and buildings: shapes, symmetry, patterns, size and proportion
- ❖ Read car and house prices in car forecourts and estate agents' windows

### Games and sports

During games and sports:

- ❖ Discuss scoring in different sports, and identify any patterns
- ❖ Complete jigsaw puzzles and discuss different strategies: shape, colour matching, etc.
- ❖ Play different variations of games, such as darts, cricket, and dominoes
- ❖ Record results as lists, tables, graphs or other forms of records
- ❖ Copy a team logo, then scale it to twice the size
- ❖ Explore orienteering
- ❖ Identify the strategies that underpin different games, such as, chess, noughts and crosses, and Yahtzee
- ❖ Investigate your Fitbit dashboard information
- ❖ Explore Geocaching
- ❖ Explore how percentages are calculated in a sporting table