

Quick Curriculum Guide for Parents (Ages 4/5)

We understand that parents and children may be feeling a bit stressed at the current time. Our aim is to try to make mathematics a little more accessible for you. We have put together a simple overview of some of the Australian Mathematics Curriculum, for each year level from Foundation to Year 6.

Please note, most States and territories have made some adjustments to the Curriculum.


We have listed the key ideas that we think could be managed in a home setting.

Keep in mind this is what children learn over the whole year, not just in one term.

All children are different, so expectations will vary between children within the same year level.

Regular routines are beneficial for children. Many of these activities can be repeated, which will help the children retain what they learn. You can do the activity the same way or make slight changes to keep it interesting.

#1 Foundation Year (Age 4/5)




Curriculum Says:
Learning to count up to 20, firstly in ones from zero; and then count from any number, later count back in ones.

What this means

- Count to 20; 0, 1, 2... 20
- Start at a different number: 7, 8, 9... 20
- Count back from any number: 11, 10, 9 ... 0

Activity Idea
Use a Number Board* and have your child write in the numbers 0 to 20, checking as they go.



A sample card

Note the features of these cards:

- The cards show **only** the pieces of the curriculum that in the opinion of Linda and myself are possible to try at home.
- The star in the top right.
 - Filled in: this means this is a topic that in our opinion is vital, perhaps as a building block to future years' content.
 - Not filled in: while still important, we consider this secondary.
- A simplified explanation of what the curriculum is describing
- A single activity or game idea. Some will reference free games and downloadables that you can find on www.drpaulswan.com.au

The Curriculum is broken up into three main content areas:

- Number and Algebra
- Geometry and Measurement
- Statistics and Probability

It is further broken up into four proficiency strands, which is really the action part of the curriculum:

- Understanding
- Fluency
- Problem Solving
- Reasoning

When children first learn a new concept, they need to develop a good understanding of the topic. This is where skilful teachers make a difference and it is hard to replicate that in a home environment. Parents probably won't have the equipment that is required. However, concepts are 'talked into being' so improving your child's mathematical vocabulary will help.

You can find a book of maths words called My Word Book on our website along with a Junior Illustrated Dictionary and another dictionary for older students called Maths Terms and Tables.

Fluency, as the name implies, is about practising and can be done at home in short bursts by playing focused games. Developing Fluency in Number would include learning the number names and being able to count.

Problem Solving and Reasoning often go together and involve a child thinking about a problem, applying their skills and then explaining how they did the problem. A child's mathematical vocabulary will make a difference. We have placed some free Problems of the Week (POTW) and some Perplexing Puzzles onto our website. We have provided answers and grouped them into rough Year levels.

The full Australian Curriculum: Mathematics can be found at www.australiancurriculum.edu.au/f-10-curriculum/mathematics/



#1 Foundation Year (Age 4/5)



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What this means

- Count to 20; 0, 1, 2... 20
- Start at a different number: 7, 8, 9... 20
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Activity Idea

Use a Number Board* and have your child write in the numbers 0 to 20, checking as they go.

*(paper version can be downloaded at drpaulswan.com.au)



#2 Foundation Year (Age 4/5)



Curriculum Says:

Link number names, numerals and words to 10 then to 20.

What this means

Show that 'Seven' is the same as '7' and seven items



Activity Idea

"Show one, match two": e.g. Show the numeral **7**, match to **word** and **quantity** (of a physical item).

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www.drpaulswan.com.au



#3 Foundation Year (Age 4/5)



Curriculum Says:

Subitise small collections of objects

What this means

See dot patterns on things like dice and dominoes and **not have to count the dots**, just know how many there are. Examples:



Activity Idea

Play dominoes. Play a board game using a dot-dice instead of a numeral dice.

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#4 Foundation Year (Age 4/5)



Curriculum Says:

Compare and order collections

What this means

See that a set of 2 paperclips is less than a set of 5 paperclips.



Activity Idea

Play a game at home comparing collections of buttons, chocolate chips, etc.

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www.drpaulswan.com.au



#5 Foundation Year (Age 4/5)



Curriculum Says:

Sort and classify familiar objects

What this means

Use a set of small toys or buttons. Child sorts them into two groups. Let the child decide how to sort them, and then ask them to explain what they did.

Activity Idea

Sort any collection. E.g. sort buttons by colour, shape or size.

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#6 Foundation Year (Age 4/5)



Curriculum Says:

Compare and order collections

What this means

Copy, continue and create patterns



Activity Idea

Do physical patterns clap, clap, stamp, clap, clap, stamp, ...

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#7 Foundation Year (Age 4/5)



Curriculum Says:

Decide whether items are longer, shorter, taller, holds more or less. No formal measuring tools like rulers, tapes or scales are needed.

What this means

- Length: which of these two pencils is longer?
- Capacity: which jar holds more water?

Activity Idea

Compare some household items with significant differences (e.g. bucket and cup)

*(paper version can be downloaded at drpaulswan.com.au)



#8 Foundation Year (Age 4/5)



Curriculum Says:

Time: compare and order duration of events

What this means

It takes longer to walk to the fence than to run to the fence.

Activity Idea

Ask your child which takes longer between two different activities, one which takes a short time and one which takes a longer time, e.g. brushing teeth or watching their favorite show.

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#9 Foundation Year (Age 4/5)



Curriculum Says:

Sort, name and describe simple 2D shapes

What this means

Can identify circles, squares, rectangles and triangles

Activity Idea

- Find two examples of these shapes at home.
- Watch PV Storytime on Youtube on these books:
[TRIANGLE by Mac Barnett and Jon Klassen](#)
[SQUARE by Mac Barnett and Jon Klassen](#)

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#10 Foundation Year (Age 4/5)



Curriculum Says:

Sort, name and describe simple 3D objects

What this means

Can identify objects like balls (spheres) and boxes (prisms)



Activity Idea

Find and name some of these objects - e.g. Cereal box, tennis balls etc.

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Further Information

We've only listed things we think you can do at home. At school the teacher would cover more material that we've omitted here, like statistics and probability.

Acknowledgement to Linda Marshall for her help developing these notes.

Further Support

Some further activities can be found in :

