## **Quick Curriculum Guide for Parents and Teachers (Foundation Year)**

These Quick Curriculum Guides have been designed to take a look at the Australian Mathematics Curriculum, explain the terminology and provide a few interpretations. This tool has been designed as a document to assist both parents and teachers. The activity ideas only use a minimum of materials, most of which can be found at home and can easily be adapted to the classroom. In places where there is ambiguity, Linda and I have used our professional judgement to put forward what we feel is **appropriate for students at this year level.** 

## **About Foundation:**

 Unfortunately, most States and Territories use slightly different names to describe the year before Year One at school. We have aimed to be brief and create an document that may be used in different places within Australia. For detailed information see consult the Early Years Learning Framework for the general Principles of Early Years Education

https://www.acecqa.gov.au/sites/default/files/2018-02/beloning\_being\_and\_becoming\_the\_early\_years\_learning\_framework\_for\_australia.pdf

## For Teachers:

- You are welcome to send home these cards and activities to parents. A great way of organising your term might be cutting up the cards and adding to the activities ideas.
- Please note, some states and territories do not 100%
   match the national Curriculum in their state curriculums.

## **For Parents:**

- 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 even between children within the same year level.
- For the listed activities, we think these are all worth trying / could be managed in a home setting even for those inexperienced with teaching at home.
   We have tried to avoid specialty equipment.
- Even if you're not too sure about teaching, just introducing the idea and some related vocabulary can be a great help.
- 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. It is better to pick one or two activities and repeat them than it is to try them all once!

## #1 Foundation Year

#### The Australian National Curriculum Says:

Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point.

#### 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.

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

## A sample card

#### Note the features of these cards:

- The text from the Australian Curriculum
- 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 concepts in later years.
  - 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 vast majority of these activity ideas can be done at home.

**Note:** Although we have put the entries of the Australian Curriculum in one box each, they are not equal in terms of their importance or the amount of time needed to provide an understanding. Some entries will only need one of two learning sessions. Others will benefit from more, and need re-visiting a number of times throughout the year.

More activities can be found in Early Mathematical Experiences

More help on mathematical definitions can be found in the Junior Illustrated Maths Dictionary

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

Acknowledgement to Linda Marshall for her assistance developing these notes.



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MATHS DICTIONARY

## **#1** Foundation Year



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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

#### The Australian National Curriculum Says:

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond.

#### 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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# **Foundation Year**



#### **The Australian National 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



#### The Australian National Curriculum Says:

Compare, order and make correspondences between collections, initially to 20, and explain reasoning

#### What this means

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





### Activity Idea

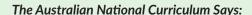
Play a game at home comparing collections of buttons, chocolate chips, etc.

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# **Foundation Year**



Represent practical situations to model addition and sharing

#### What this means

Use collections of objects (toy cars, buttons, toothpicks, pegs, etc.). Combine sets for addition (3 blue pegs and 4 yellow pegs give us 7 pegs altogether).

### **Activity Idea**

Share out sets for early concept of division (6 buttons; that's 3 for me and 3 for you).

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# #6 Foundation Year

#### The Australian National Curriculum Says:

Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings.

#### What this means

Create patterns using materials, e.g.:



## Activity Ideas

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

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

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# #7 Foundation Year

#### **Curriculum Says:**

Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain the reasoning in everyday language.

#### What this means

Decide whether items are longer, shorter, taller, holds more/less. No formal measuring tools like rulers, tapes or scales are needed. Comparison is 2 items only. Direct: e.g. student height by measuring back-to-back. *Indirect*: using a go-between (e.g. wall mark or string)

### Activity Idea

Compare some household items, e.g. which jar holds more, which pencil is longer?

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## **Foundation Year**

#### **Curriculum Says:**

Compare and order duration of events using everyday language of time

#### 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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# **Foundation Year**

#### **Curriculum Says:**

Connect days of the week to familiar events and actions

#### What this means

Informal discussions on days of the weeks; e.g. on Tuesday my favourite show is on TV, we get take-aways on Fridays, etc.

Children are not expected to know the order of days, (e.g. that Tuesday comes after Monday) at this stage.

## Activity Idea

• Ask simple, informal questions and link the days of the week to events.

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## **#10** Foundation Year

#### **Curriculum Says:**

Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment

#### What this means

Can identify circles, squares, rectangles and triangles (2D) and objects like balls (spheres) and boxes (3D Objects)

## Activity Ideas

- Find two examples of these shapes/objects.
- 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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## #11 Foundation Year

#### The Australian National Curriculum Says:

Describe position and movement

#### What this means

Informal discussion using language such as 'next to', 'between', 'beside', 'forward', 'backwards', etc.

### Activity Idea

Play a game using a doll (or teddy) and a chair, moving the doll around. Ask the child to describe the position of the doll in relationship to another object. "The doll is under(neath) the chair."



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## #12 Foundation Year

#### The Australian National Curriculum Says:

Answer yes/no questions to collect information and make simple inferences

#### What this means

Inference: based on the data gathered making a reasonable conclusion.

Use familiar situations; e.g. collect information about family eye colours (do they have blue eyes?); preferences (do they like bananas?), etc.

## **Activity Ideas**

The child can poll friends/family/classmates "do you like chocolate?" Make an inference on that group.

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