



Learn about Maths K-2

PARRAMATTA WEST PUBLIC SCHOOL

What's Important?

- Deeper understanding of concepts
- Number skills
- The language of mathematics
- Problem solving
- Application of maths concepts to every day situations



Maths in the Classroom

EnVision

- A consistent school wide program
- Videos, learning bridges, games, pre and post topic assessments



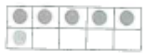

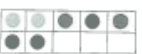
EnVision Pre and Post Assessments

Pre-assessment

3/11


Concept 1: Adding to 6 and 7

1 What is shown?

a  b  c 

5 and 1 2 and 4 6 and 1
 4 and 1 4 and 4 2 and 5
 6 and 1 3 and 4 4 and 2

2 Draw a picture to show 5 and 1 more.



3 How many ways can you make 6?

Five	and	one
	and	
	and	
	and	
	and	
	and	
	and	




Copyright © Pearson Australia, 2012. In collaboration with Pearson Australia Group Pty Ltd. ISBN 978 1 4202 3011 3

Post-assessment

0/13


Concept 1: Adding to 6 and 7

1 What is this number?

a  b  c 

5 and 2 3 and 3 3 and 2
 4 and 3 5 and 2 2 and 5
 3 and 3 3 and 4 3 and 4

2 What is 2 and 5? Draw a picture to show.



3 How many ways can you make 7?

5	and	2	✓
4	and	3	✓
6	and	1	✓
3	and	3	✓
2	and	5	✓
4	and	3	✓
3	and	4	✓
3	and	2	✓

Copyright © Pearson Australia, 2012. In collaboration with Pearson Australia Group Pty Ltd. ISBN 978 1 4202 3011 3

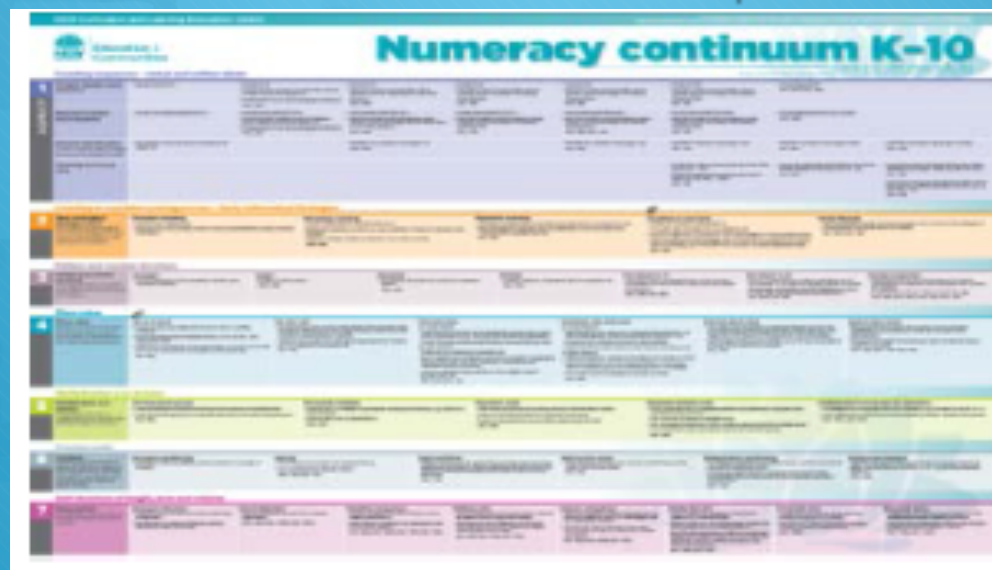
Maths in the Classroom

- TEN – Targeted Early Numeracy
 - Running since 2010
 - K-2 maths program that target early number skills.
 - The activities are:
 - Hands on, daily, levelled, engaging



The Numeracy Continuum

- o It describes how students progress from using simple to increasingly sophisticated strategies to solve number measurement problems.



The image shows a document titled "Numeracy continuum K-10" from the Australian Curriculum Framework. It is a table with multiple rows and columns, likely representing different numeracy skills and their progression across grade levels from Kindergarten to Year 10. The table is partially obscured by a white border and is somewhat blurry.



The Numeracy Continuum

- It has seven aspects of numeracy development
 - Counting sequences
 - **Early Arithmetical strategies (problem solving)**
 - Pattern & Number structure
 - Place value
 - Multiplication & Division
 - Fraction Units
 - Unit structure of length, area and volume





Problem solving

Emergent counting

- Cannot count visible items.
- Does not know the number words or cannot coordinate the number words to count items.

Perceptual counting

- Counts visible items to find the total count.
- Builds and subtracts numbers by using materials or fingers to represent each number.
- Objects or fingers remain constantly in view while counting.

Figurative counting

- Visualises concealed items and determines the total by counting from one.
- May use fingers to represent the concealed items when the total of two screened parts is greater than ten.

Problem solving

Counting-on-and-back

- Counts on or back to solve problems.
- A number takes the place of a completed count.
- Counts on rather than counting from one to solve addition or missing addends tasks.
- Uses a count-down-from strategy, e.g. $17-3$ as 16, 15, 14, answer 14, or a count-down-to strategy, e.g. $17-14$ as 16, 15, 14, answer 3, to solve subtraction tasks.

Facile (flexible)

- Uses known facts, number structure and other non-count-by-one strategies to solve problems (involving one or two digits).



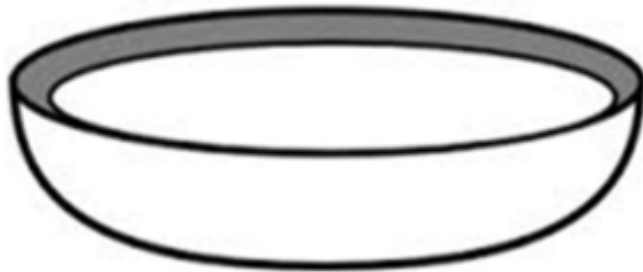
What are the stages of counting?

- Emergent counters
- Perceptual counters
- Figurative stage
- Counting-on-and-back stage
- Flexible (or facile) stage



Problem solving

There are 8 apples in the bowl.
I ate 3 apples. How many are left? _____



There are 2 (two) fruit bowls. One fruit bowl has 5 apples and the other has 6 apples.

How many apples are there altogether? _____

Grandma ate 3 apples. How many are left? _____

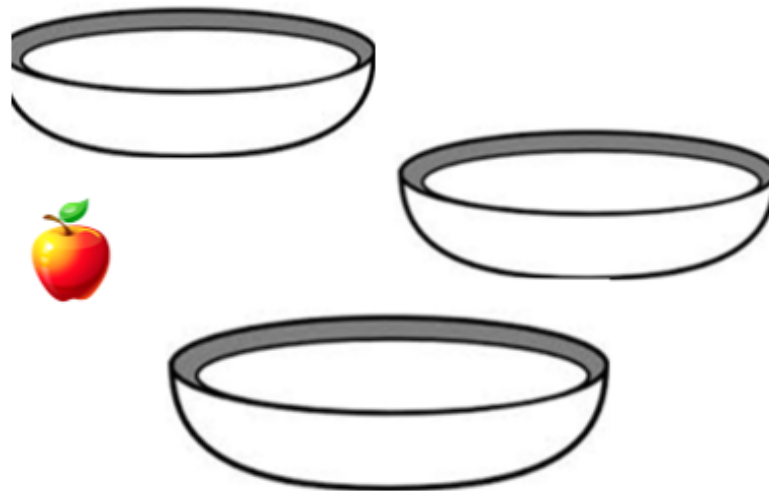


Problem solving

There are 3 (three) fruit bowls with 5 apples in each.

How many apples are there altogether? _____

**Dad ate 7 apples and mum ate 4 apples.
How many are left? _____**



Problem solving

STEP 1

READ

- ✓ Read the question.



STEP 2

UNDERSTAND

- ✓ What is the question asking you to do?



STEP 3

SELECT A STRATEGY

- ✓ How can you solve the problem?



STEP 4

WORK IT OUT

- ✓ Do the working out.



STEP 5

CHECK IT

- ✓ Read the question and check your answer.



NAPLAN Questions

Tara's book has 96 pages.

She has already read 58 pages.

How many pages have **not** been read by Tara?

38

42

48

154



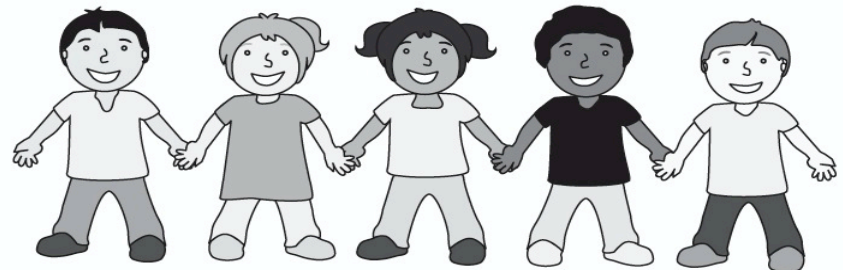
NAPLAN Questions

A Year 3 class has 14 boys.

There are 5 more boys than girls in this class.

How many students are in this class?

These five students are holding hands.



Alex

Lily

Chloe

Matt

Ethan

Who is holding Chloe's right hand?

Alex

Lily

Matt

Ethan



Maths at home

- Online apps and websites such as Mangahigh
- Use mathematical language in everyday conversations
- Take opportunities to find maths around us
- For example: Telling the time, paying at the shops, sharing with siblings, comparing things, cooking recipes



Mangahigh

F11 FOR FULLSCREEN PRODIGI®

YOUR SCORE: **2,289** **NEW BEST!**

SORRY, YOU DID NOT WIN A MEDAL

REVIEW MY QUESTIONS

4,200 POINTS 9,000 POINTS 14,000 POINTS

CLICK ON THE SQUARES TO REVIEW QUESTIONS

EXTREME
HARD
MEDIUM
EASY

PLAY AGAIN

74 ? 4 + 6 = ? ? ?

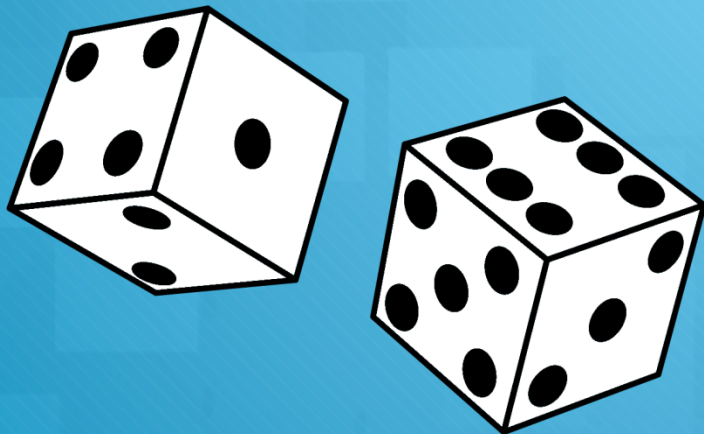
TOBARI MANGARIGH 4

MRS GATT PARRAMATTA WEST

NAOMI MANGARIGH 1



Let's have a go!



Any questions?

