Mathematics in the 3-6 Classroom

at Parramatta West Public School

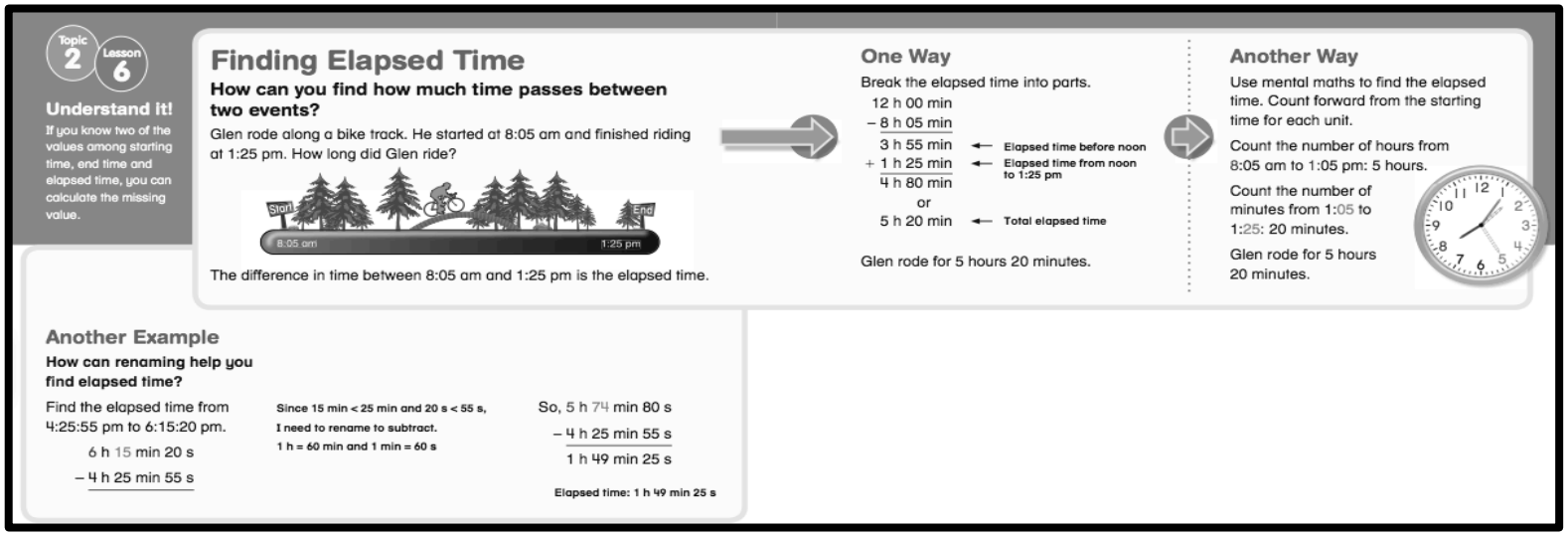
Wednesday 18th May, 2016 – Parent Meeting

EnVision

- Deeper conceptual understanding and higher proficiency in maths.
- Topic-driven teaching and learning program aligned with the Australian Curriculum: *mathematics content and proficiency strands*.
- Print and digital topic-based components.
- Differentiated teaching and learning strategies

Components of EnVision program

- Teacher resources – worksheets, guided questioning
- Visual Learning Bridges
- Videos – Topic openers
- IWB tools
- Game cards
- Quiz cards
- Strategy cards
- Investigation cards
- Digital learning cards



What does maths look like in the classroom?

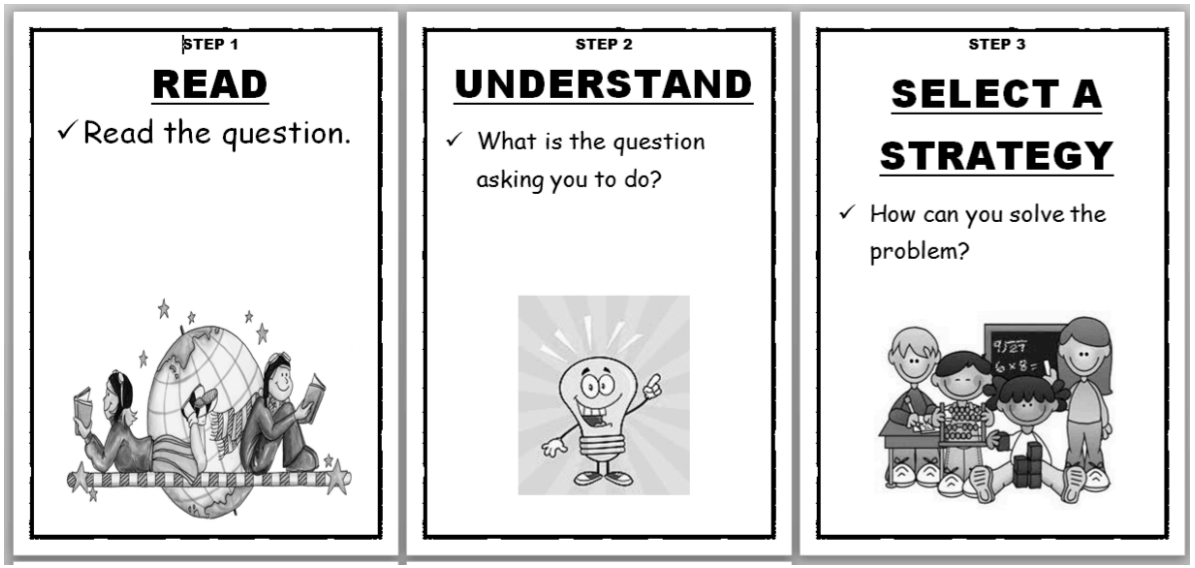
Components of a maths program:

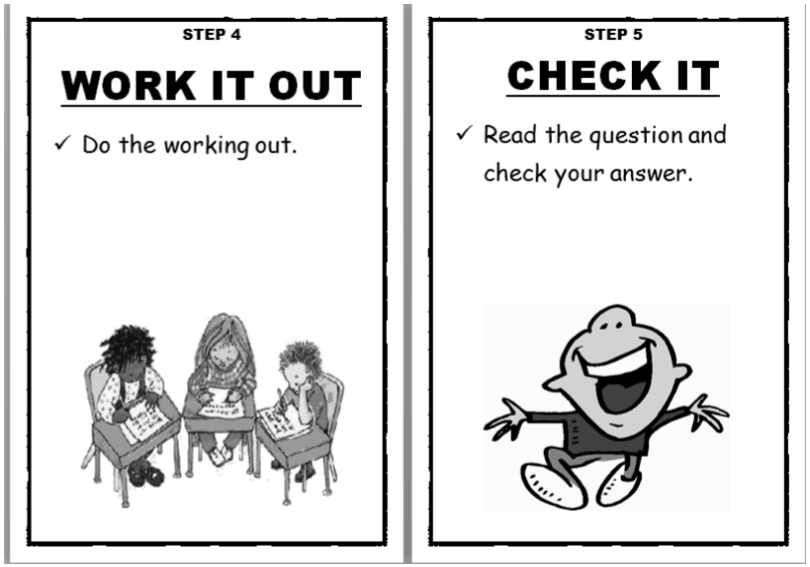
- Daily problem solving
- Explicit teaching of maths concepts
- Differentiated activities
- Hands-on learning
- Games-based learning
- Online learning
- Manga High

Problem Solving

All classes engage in daily problem solving.

- Application of maths skills, strategies and content
- Reading comprehension + mathematical understanding





NAPLAN

The majority of questions in NAPLAN require the skills to read and comprehend the written text.

What is the question asking you to do?

Using the graphics and images

Multiple choice

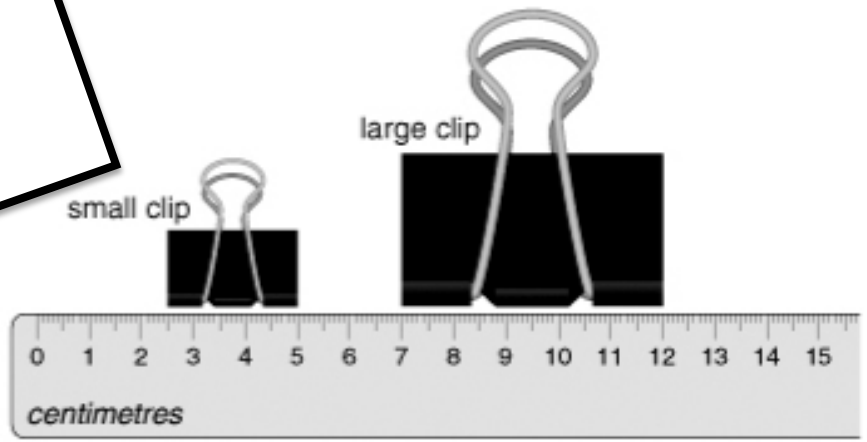
In Year 4 there are 13 more girls than boys.
Trent know there are 49 girls.

How can ut the number of boys i

- add
- subtract 13
- multiply 13 by 49
- divide 49 by 13

small

The picture s
lengths of th
and large clips.



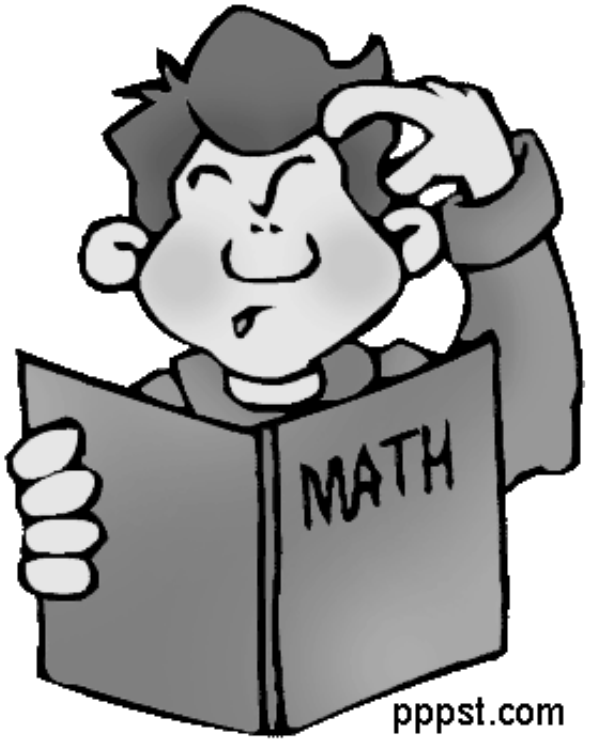
length of the medium clip be?

- es
- 4 centimetres
- 6 centimetres
- 8 centimetres

Assessment

Assessment occurs daily in the maths classroom, in many different ways.

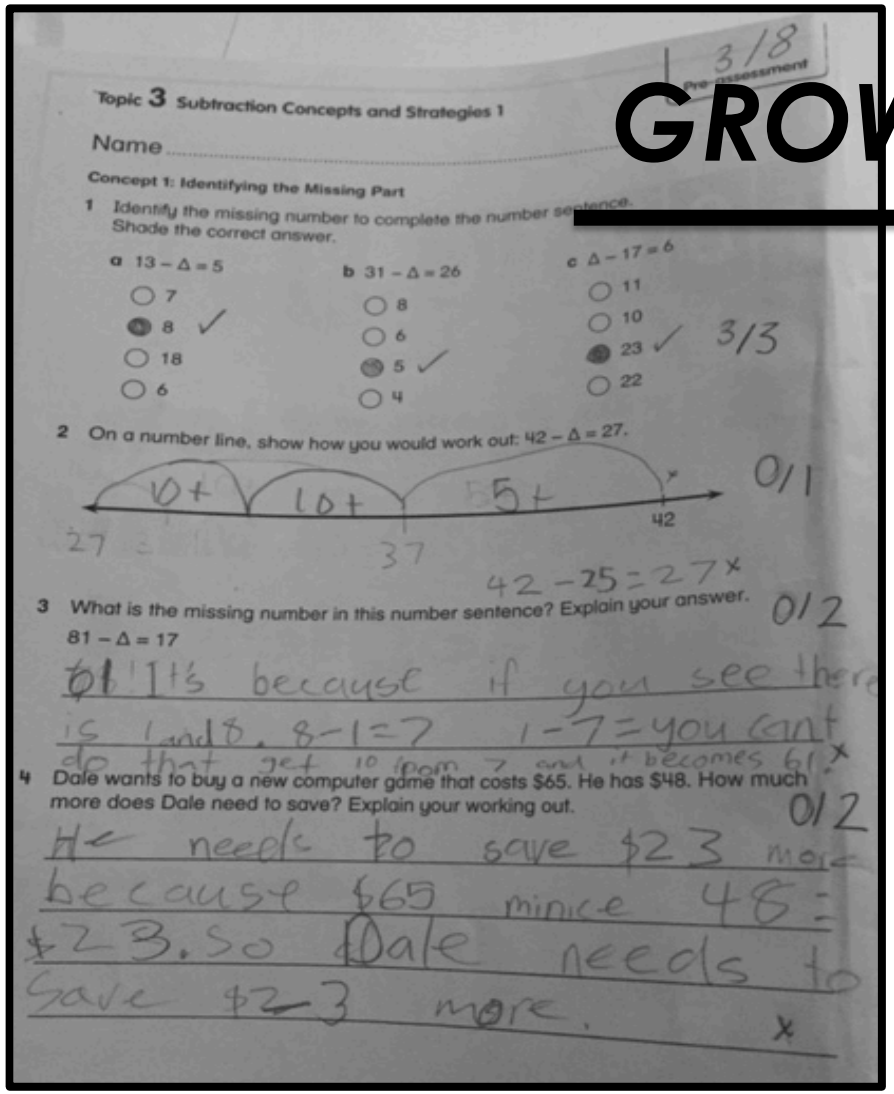
- Formative assessment
- Pre and post assessments on topics / concepts
- Daily observations
- Summative assessments



How to look at pre and post assessments at home

- Sit with your child to talk about the assessment and discuss their learning.
- Ask questions.

Pre and Post Assessments



Topic 3 Subtraction Concepts and Strategies 1

3/8 Pre-assessment

Name

Concept 1: Identifying the Missing Part

1 Identify the missing number to complete the number sentence. Shade the correct answer.

a 13 − Δ = 5
○ 7
● 8 ✓
○ 18
○ 6

b 31 − Δ = 26
○ 8
○ 6
● 5 ✓
○ 4

c Δ − 17 = 6
○ 11
○ 10
● 23 ✓
○ 22

3/3

2 On a number line, show how you would work out: 42 − Δ = 27.

10+ 10+ 5+ 42 37 27

0/1

42 − 25 = 27 ×

3 What is the missing number in this number sentence? Explain your answer.

81 − Δ = 17

0/2

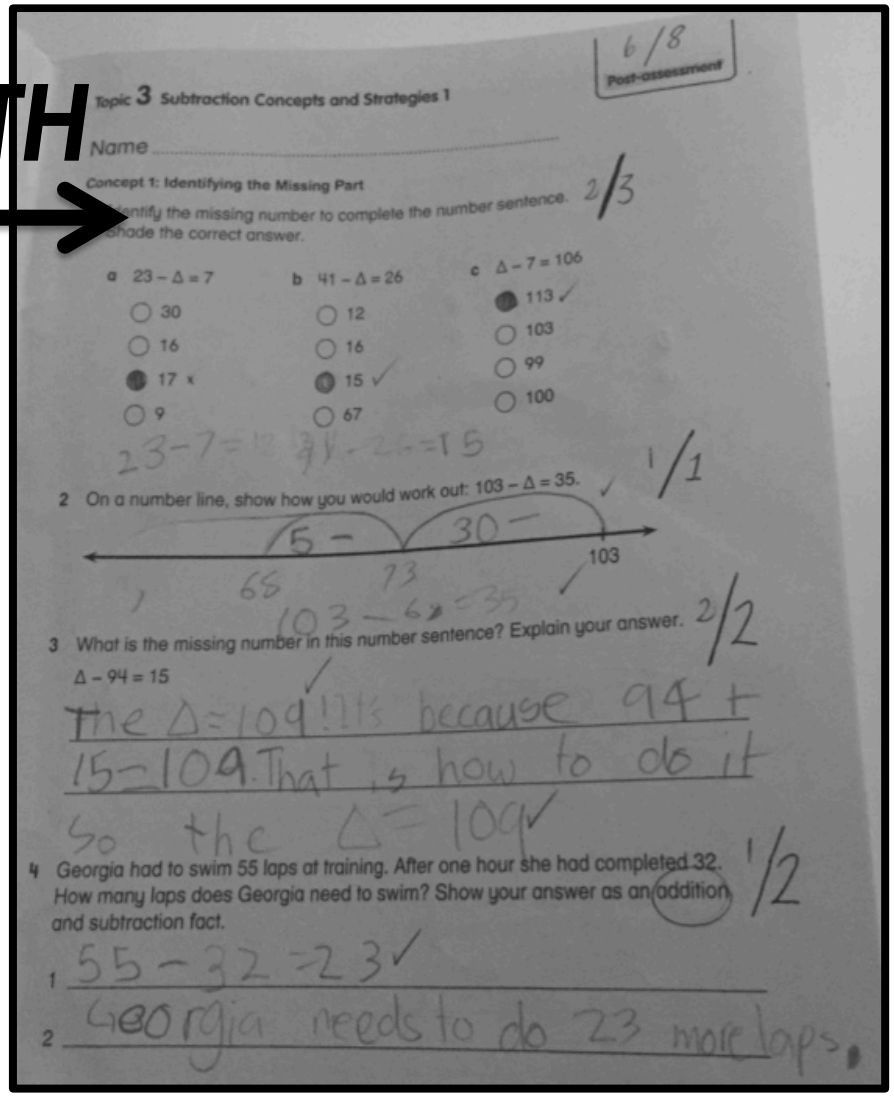
It's because if you see there is 1 and 8. 8−1=7 1−7=you can't do that get 10 from 7 and it becomes 61 ×

4 Dale wants to buy a new computer game that costs $65. He has $48. How much more does Dale need to save? Explain your working out.

0/2

He needs to save $23 more because $65 minice 48 = $23. So Dale needs to save $23 more. ×

GROWTH



Topic 3 Subtraction Concepts and Strategies 1

6/8 Post-assessment

Name

Concept 1: Identifying the Missing Part

Identify the missing number to complete the number sentence. Shade the correct answer.

2/3

a 23 − Δ = 7
○ 30
○ 16
● 17 ×
○ 9

b 41 − Δ = 26
○ 12
○ 16
● 15 ✓
○ 67

c Δ − 7 = 106
● 113 ✓
○ 103
○ 99
○ 100

23−7=12 41−26=15

2 On a number line, show how you would work out: 103 − Δ = 35.

5− 30− 65 73 103

1/1

103 − 68 = 35

3 What is the missing number in this number sentence? Explain your answer.

Δ − 94 = 15

2/2

The Δ=109 !! It's because 94 + 15=109. That is how to do it so the Δ=109 ✓

4 Georgia had to swim 55 laps at training. After one hour she had completed 32. How many laps does Georgia need to swim? Show your answer as an addition and subtraction fact.

1/2

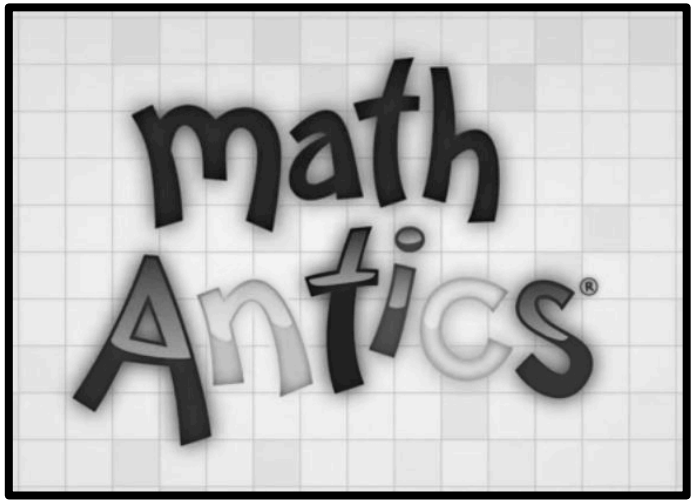
1 55 − 32 = 23 ✓

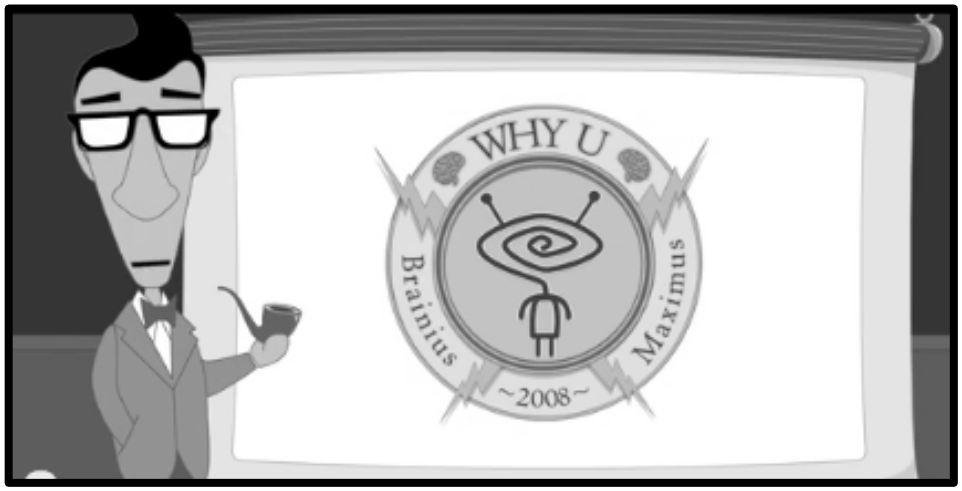
2 Georgia needs to do 23 more laps.

Questions to ask …

- *What have you been learning?*
- *What strategy have you learnt? How does this help you?*
- *What questions did you find easy?*
- *Did you make any silly mistakes? What should you have done?*
- *What do you still find difficult?*
- *How have you improved?*
- *What's the next step for you?*

Useful websites and YouTube channels

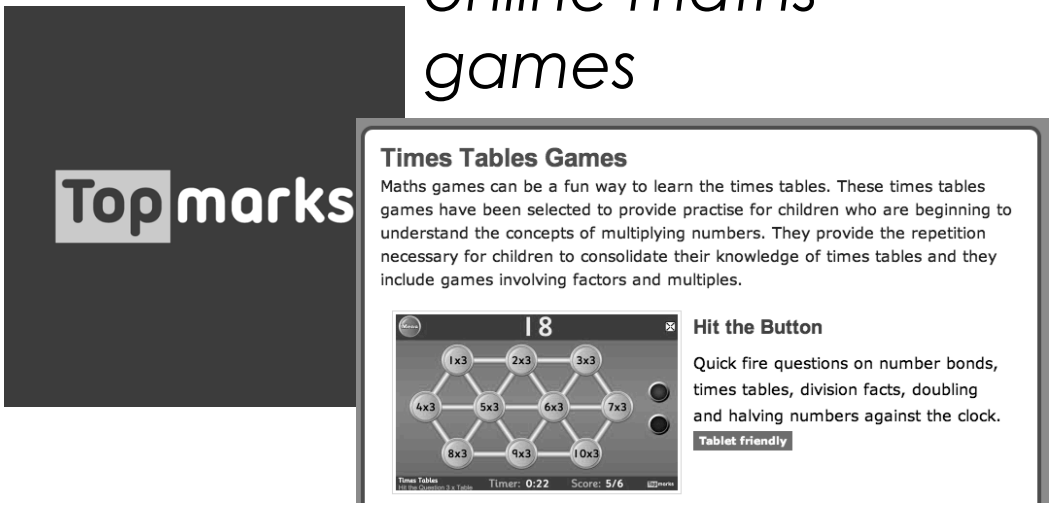




Useful tools for learning times tables

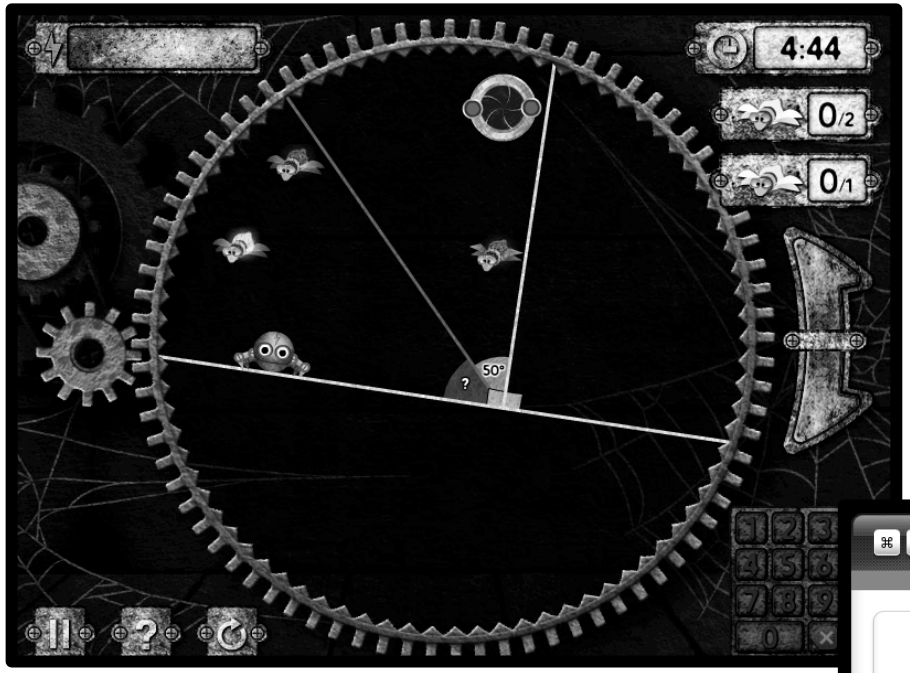
Laugh Along and Learn YouTube channel – *Kool Kidz Times Tables Songs*

Topmarks website - *online maths games*

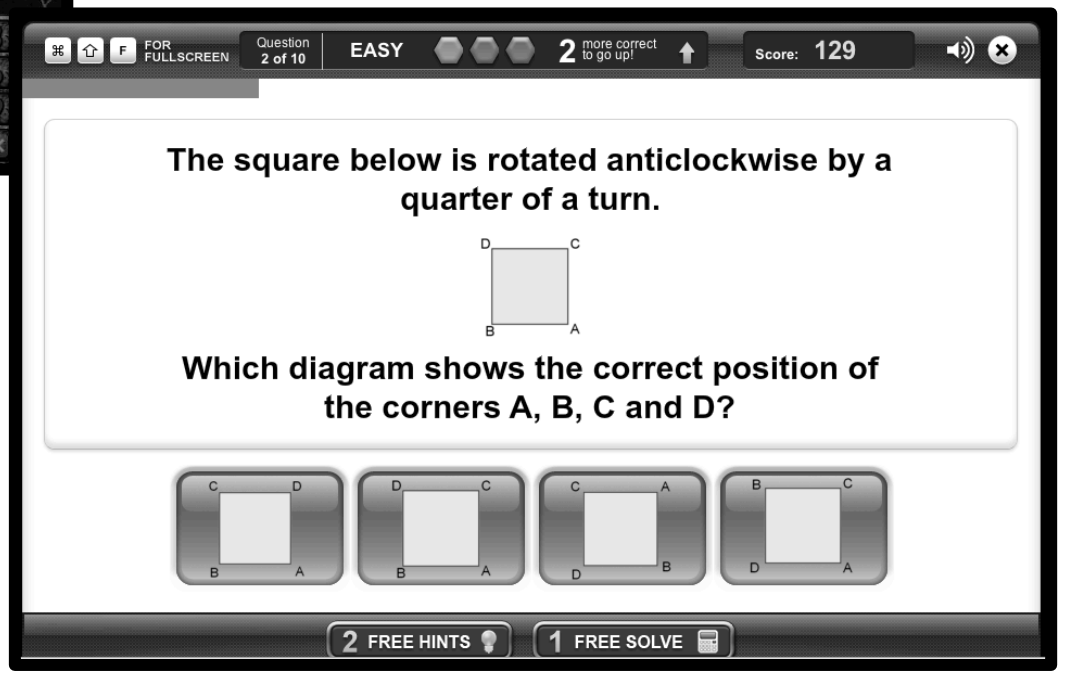


Mathletics Times Tables app

Manga High



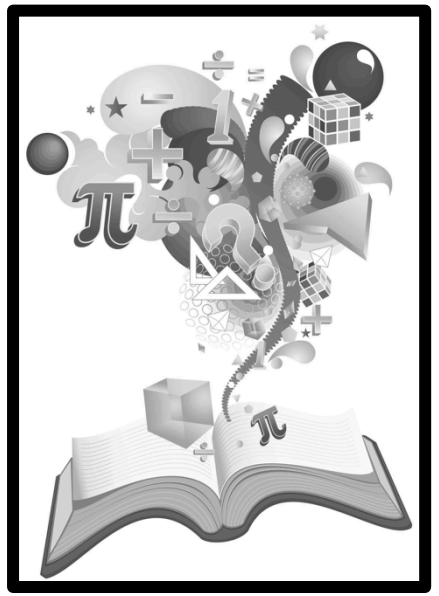
Manga High has a wealth of activities and games for students to practise their maths skills, across all content areas.



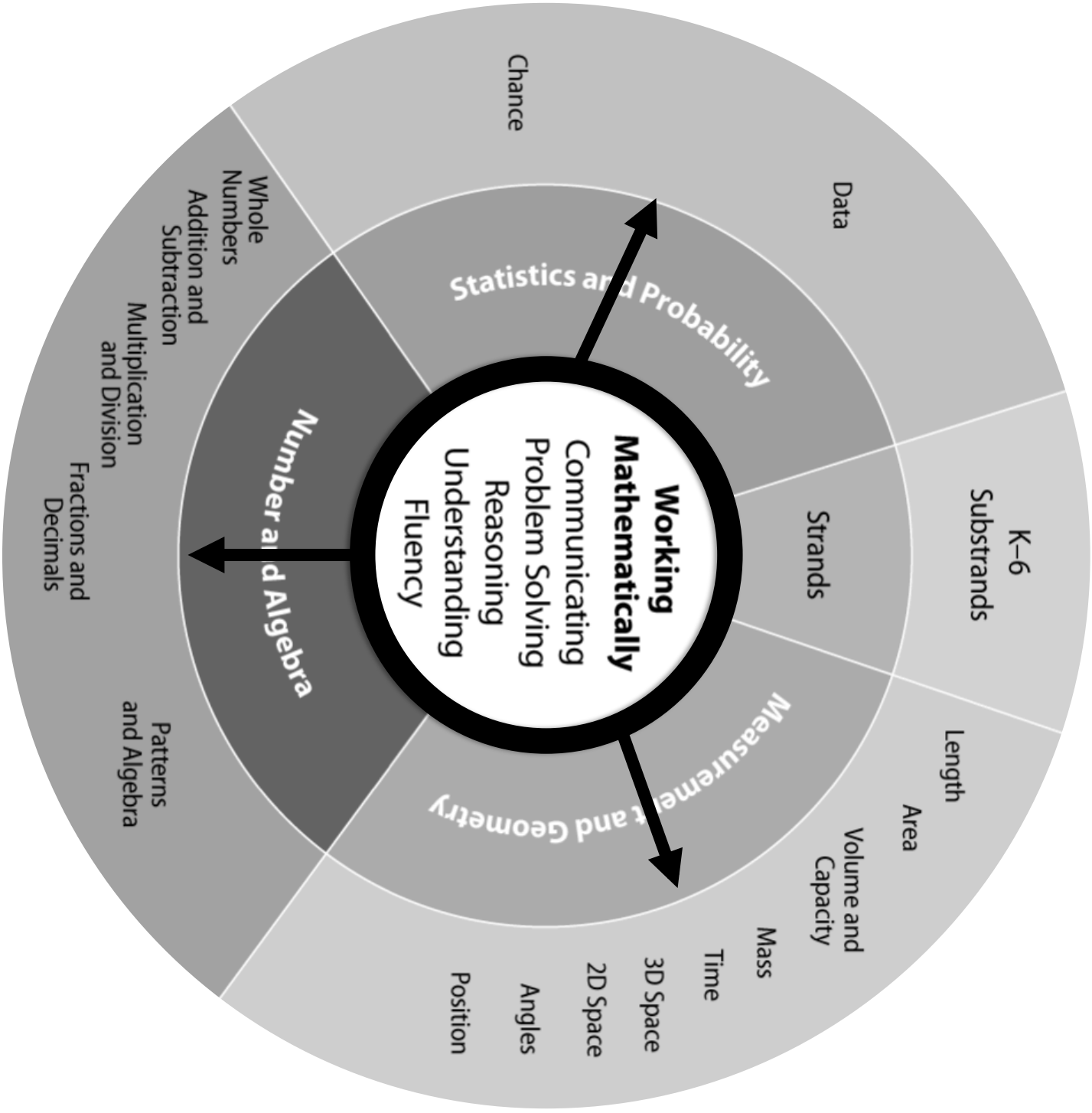
Change in maths teaching since we were at school

It is no longer just about rote learning …

- Developing more complex mental maths strategies along with automaticity of facts (e.g. times tables)
- Process of maths
- Strategies – flexibility and fluidity
- Explanation and reasoning
- Applying maths into problems
- Real-world mathematics



Mathematics Syllabus - *Content*



It's over to you!

Questions for our parents to answer …

- What do your kids tell you about maths at school?
- What do you know about your child's strengths in maths?
- What do you worry about most when it comes to your child and maths?
- How capable do you feel in helping your child with maths?