



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

Topic 2 Lesson 6


Understand It!

If you know two of the values among starting time, end time and elapsed time, you can calculate the missing value.

Finding Elapsed Time

How can you find how much time passes between two events?

Glen rode along a bike track. He started at 8:05 am and finished riding at 1:25 pm. How long did Glen ride?



The difference in time between 8:05 am and 1:25 pm is the elapsed time.

One Way

Break the elapsed time into parts.

12 h 00 min	
– 8 h 05 min	
3 h 55 min	← Elapsed time before noon
+ 1 h 25 min	← Elapsed time from noon to 1:25 pm
4 h 80 min	
or	
5 h 20 min	← Total elapsed time

Glen rode for 5 hours 20 minutes.


Another Way

Use mental maths to find the elapsed time. Count forward from the starting time for each unit.

Count the number of hours from 8:05 am to 1:05 pm: 5 hours.

Count the number of minutes from 1:05 to 1:25: 20 minutes.

Glen rode for 5 hours 20 minutes.



→

Another Example

How can renaming help you find elapsed time?

Find the elapsed time from 4:25:55 pm to 6:15:20 pm.

6 h 15 min 20 s
– 4 h 25 min 55 s
1 h 49 min 25 s

Since 15 min < 25 min and 20 s < 55 s, I need to rename to subtract.
1 h = 60 min and 1 min = 60 s

So, 5 h 74 min 80 s
– 4 h 25 min 55 s
1 h 49 min 25 s

Elapsed time: 1 h 49 min 25 s

What does maths look like in the classroom?

Components of a maths program:

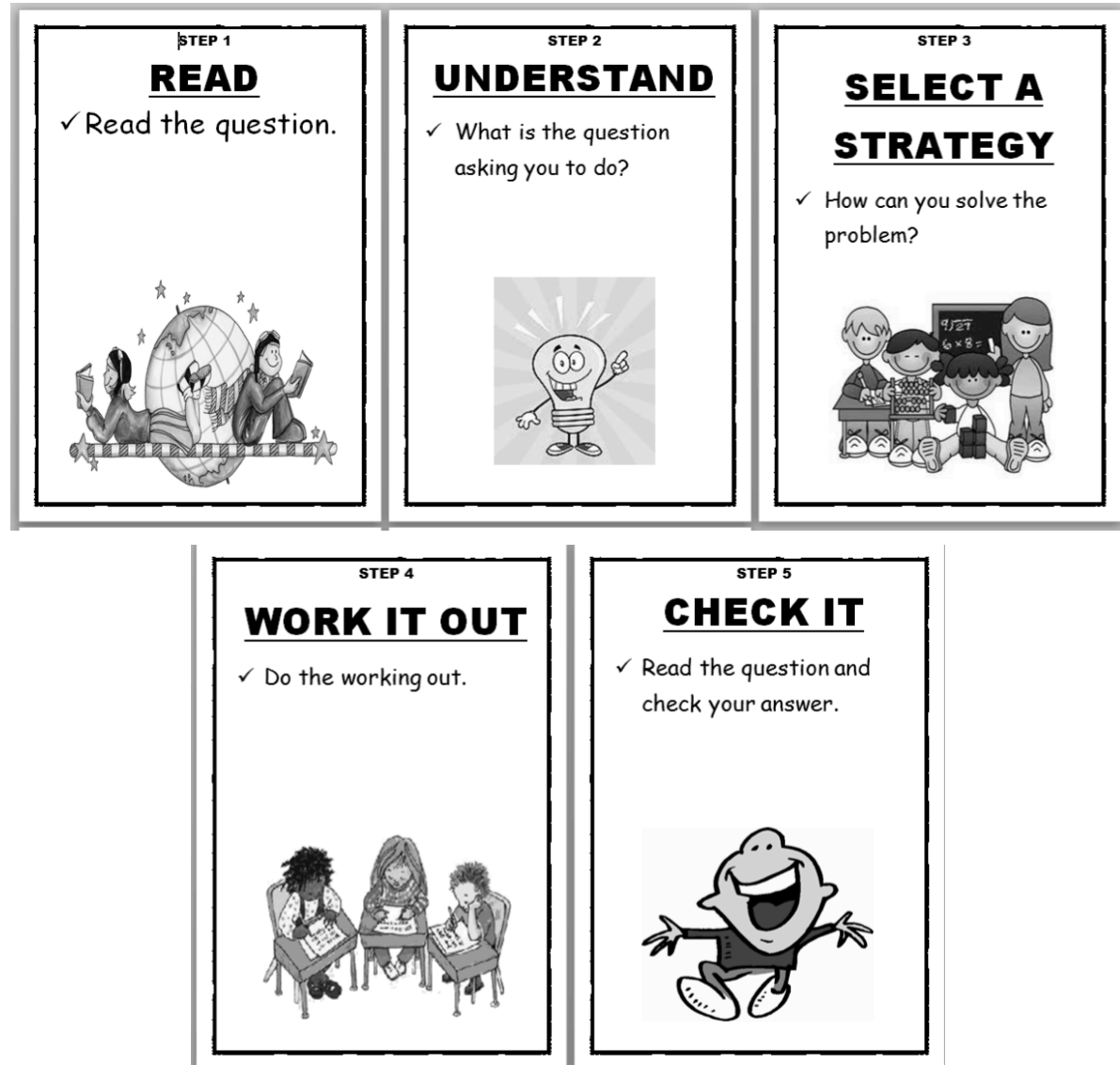
- ◆ Daily problem solving
- ◆ Explicit teaching of maths concepts
- ◆ Differentiated activities
- ◆ Hands-on learning
- ◆ Games-based learning
- ◆ Online learning
- ◆ Manga High



Problem Solving

All classes engage in daily problem solving.

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



NAPLAN

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

How can Trent find out the number of boys in Year 4?

- ☐ add 13 to 49
- ☐ subtract 13 from 49
- ☐ multiply 13 by 49
- ☐ divide 49 by 13

Using the graphics and images

Multiple choice

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

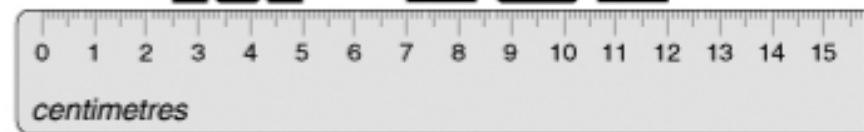
What is the question asking you to do?

small clip

The picture shows the lengths of the small and large clips.

small clip

large clip



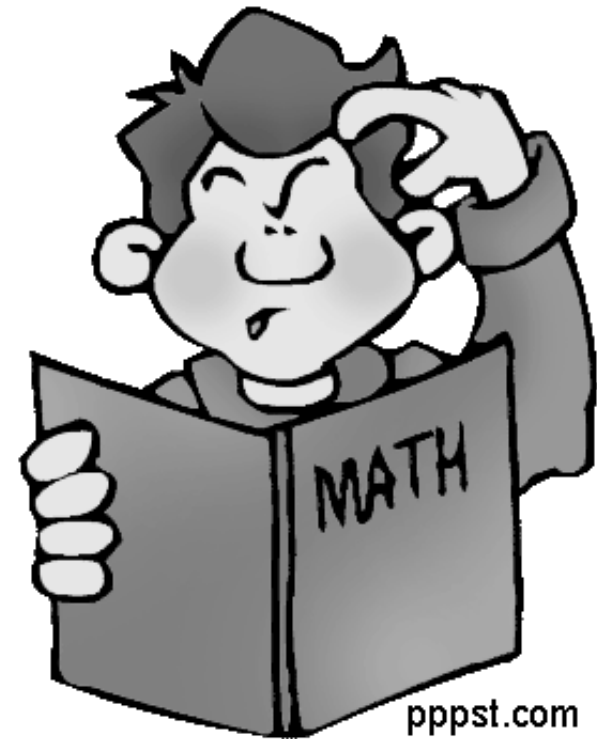
What is the length of the medium clip be?

- ☐ 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

GROWTH

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 $13 - \Delta = 5$ b $31 - \Delta = 26$ c $\Delta - 17 = 6$

☐ 7 ☐ 8 ☐ 11
☒ 8 ✓ ☐ 6 ☐ 10
☐ 18 ☒ 5 ✓ ☒ 23 ✓ 3/3
☐ 6 ☐ 4 ☐ 22

2 On a number line, show how you would work out: $42 - \Delta = 27$.

0/1

27 37 42

$42 - 25 = 27$ ✓

3 What is the missing number in this number sentence? Explain your answer. 0/2

$81 - \Delta = 17$

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 minus 48 = \$23. So Dale needs to save \$23 more.

Topic 3 Subtraction Concepts and Strategies 1

6/8
Post-assessment

Name _____

Concept 1: Identifying the Missing Part

2/3

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

a $23 - \Delta = 7$ b $41 - \Delta = 26$ c $\Delta - 7 = 106$

☐ 30 ☐ 12 ☒ 113 ✓
☐ 16 ☐ 16 ☐ 103
☒ 17 x ☒ 15 ✓ ☐ 99
☐ 9 ☐ 67 ☐ 100

2 On a number line, show how you would work out: $103 - \Delta = 35$. 1/1

103

$103 - 68 = 35$ ✓

3 What is the missing number in this number sentence? Explain your answer. 2/2

$\Delta - 94 = 15$

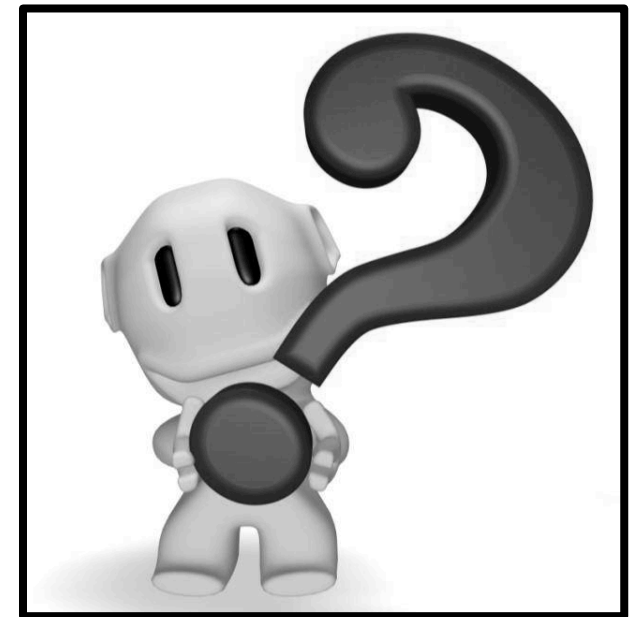
The $\Delta = 109$! It's because $94 + 15 = 109$. That is how to do it so the $\Delta = 109$ ✓

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

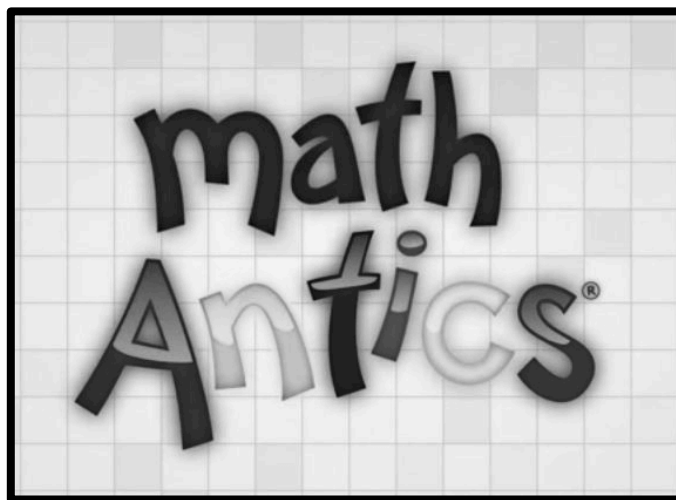
1 $55 - 32 = 23$ ✓
 2 Georgia needs to do 23 more laps.

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



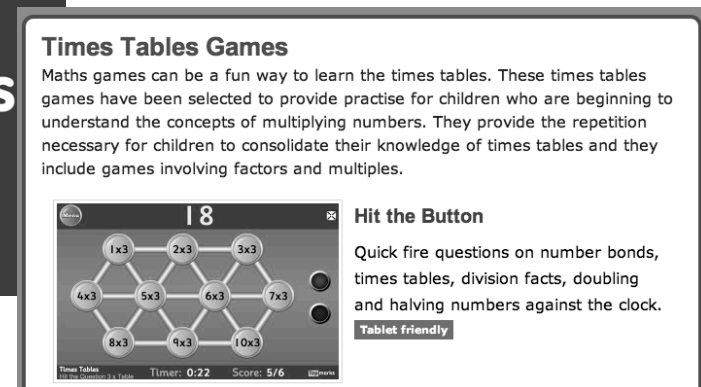
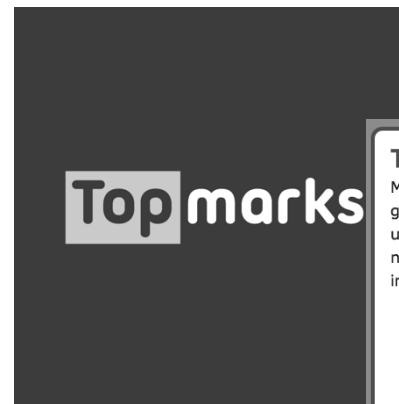
Useful tools for learning times tables

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

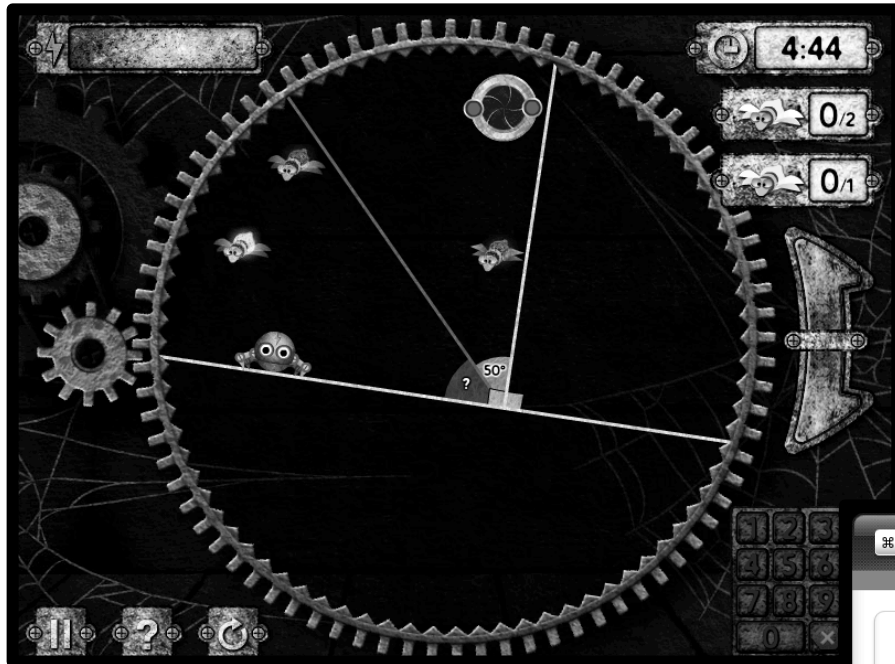


*Mathletics
Times Tables
app*

*Topmarks website -
online maths
games*



Manga High



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

Question 2 of 10 EASY 2 more correct to go up! Score: 129

The square below is rotated anticlockwise by a quarter of a turn.

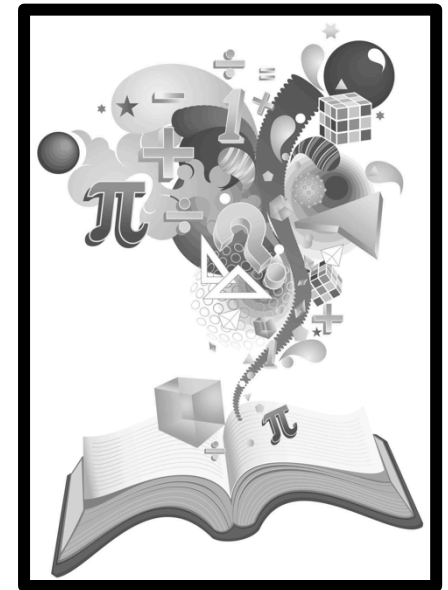
Which diagram shows the correct position of the corners A, B, C and D?

2 FREE HINTS 1 FREE SOLVE

Change in maths teaching since we were at school

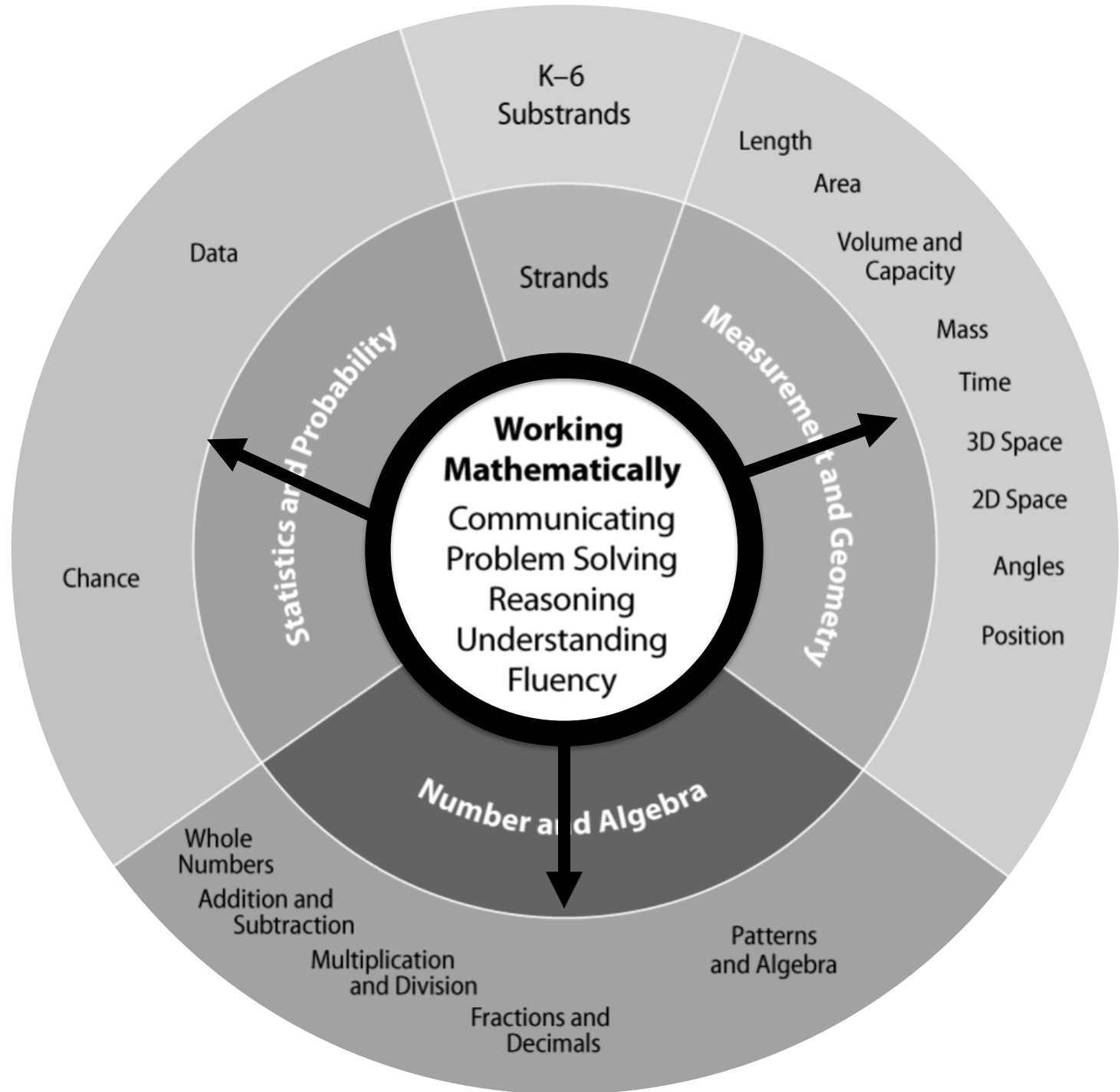
It is no longer just about rote learning ...

- ◆ 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?