



Maths – Where are we now?

Presented by Katie Rees – Maths Coordinator



Aims of the Session

- Gain insight into New Maths Curriculum
- New developments and ways of teaching and learning maths
- Maths at St John's with focus on Years 3,4 & 5
- Where we are
- What next?



Some Changes...

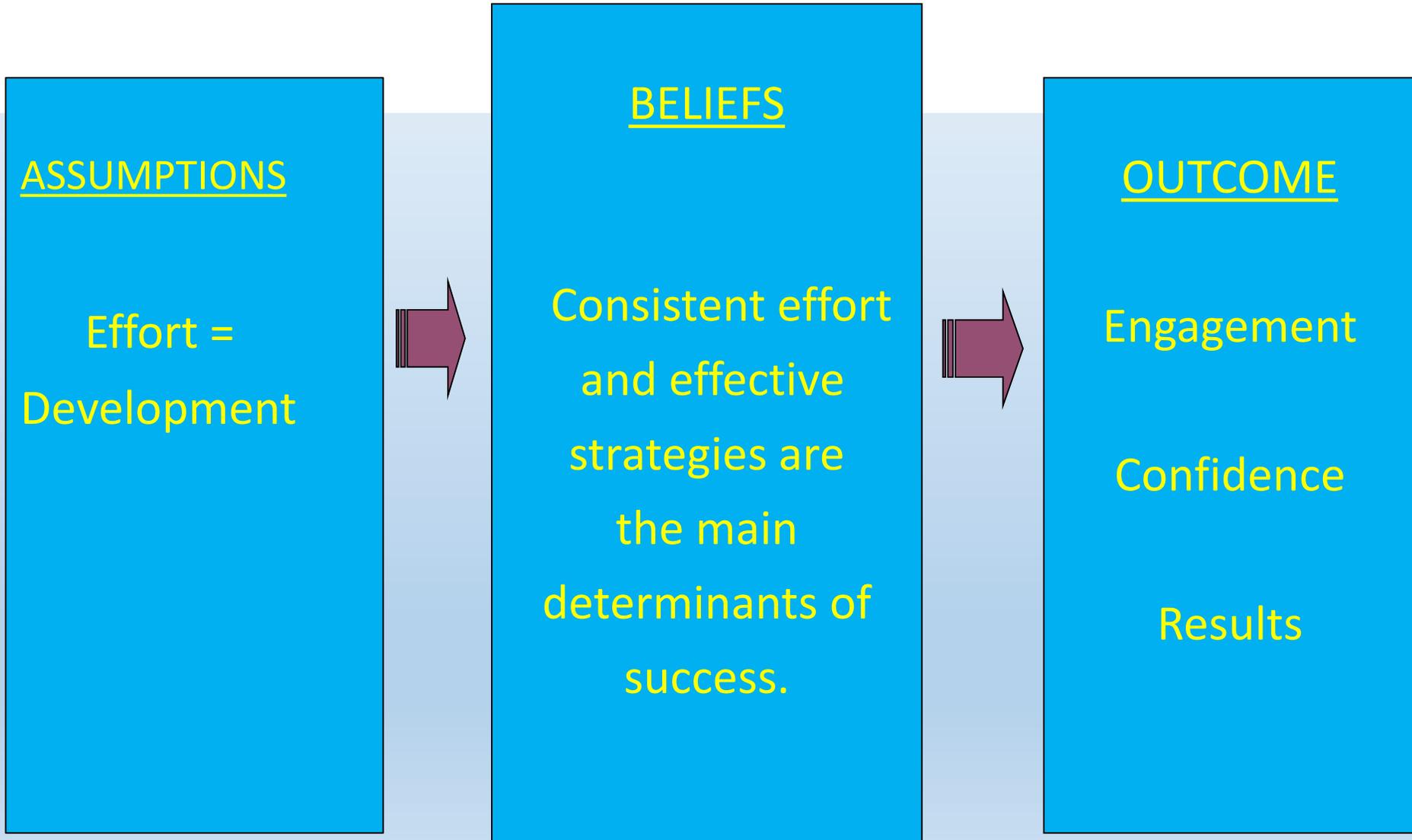
Old Curriculum

V's

New Curriculum



Belief in Effort-Based Ability





Odd one out!

19

331

938



Why the South East Asian Model?

The Organisation for Economic Cooperation and Development (OECD)
(2015)

1. Singapore
2. Hong Kong
3. South Korea
4. Japan (tie)
4. Taiwan (tie)
6. Finland
7. Estonia
8. Switzerland
9. Netherlands
10. Canada
20. United Kingdom



National Curriculum Aims:

The national curriculum for mathematics aims to ensure that all pupils:

- **become fluent in the fundamentals of mathematics**, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- **reason mathematically by following a line of enquiry**, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- **can solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions



National Curriculum

- The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace
- Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content
- The national curriculum for mathematics reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically.



What has St John's
done to implement
change?



St John's

Maths - No Problem!

- Standardisation across the school
- Purchased January 2015 for Year 3,4 & 5
- Written for the English National Curriculum
- Adapted from the mastery approaches used in Singapore
- Uses the Concrete, Pictorial, Abstract (CPA)
- Higher order thinking tasks are used for enrichment
- Review and revision



Converting Units of Length

Lesson
4

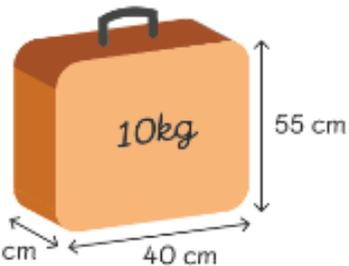
In Focus

Singapore Airlines

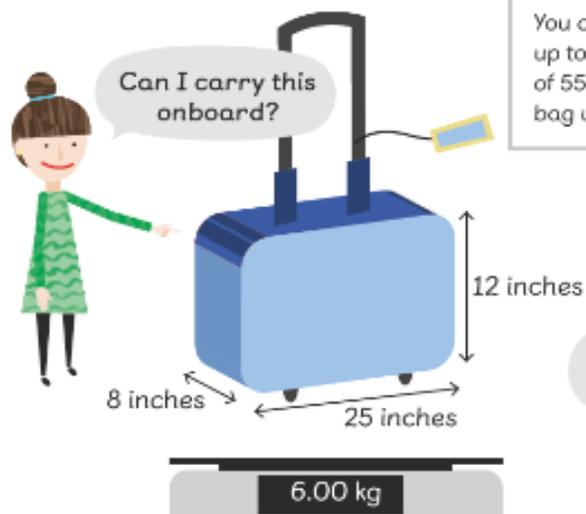
1 piece
not exceeding
7 kg

sum of length,
width and height
does not exceed
115 cm

Ryanair



You can carry one cabin bag weighing up to 10 kg with maximum dimensions of 55 cm × 40 cm × 20 cm, plus 1 small bag up to 35 cm × 20 cm × 20 cm.



1 inch is
approximately
2.54 cm.



Mastery

- Breadth not depth ($5 + 7 = 12$; $50 + ? = 120$; $120 - ? = 50$)
- Interpreting, applying and evaluating
- Explaining the abstract with pictorial or concrete
- Fluency
- Secure knowledge that can be used/recalled when needed
- Critical thinking and analysis
- Reasoning and arguing
- Technical vocabulary
- Confidence



What Next...



Thank you for coming