

# Friday 4<sup>th</sup> May 2018

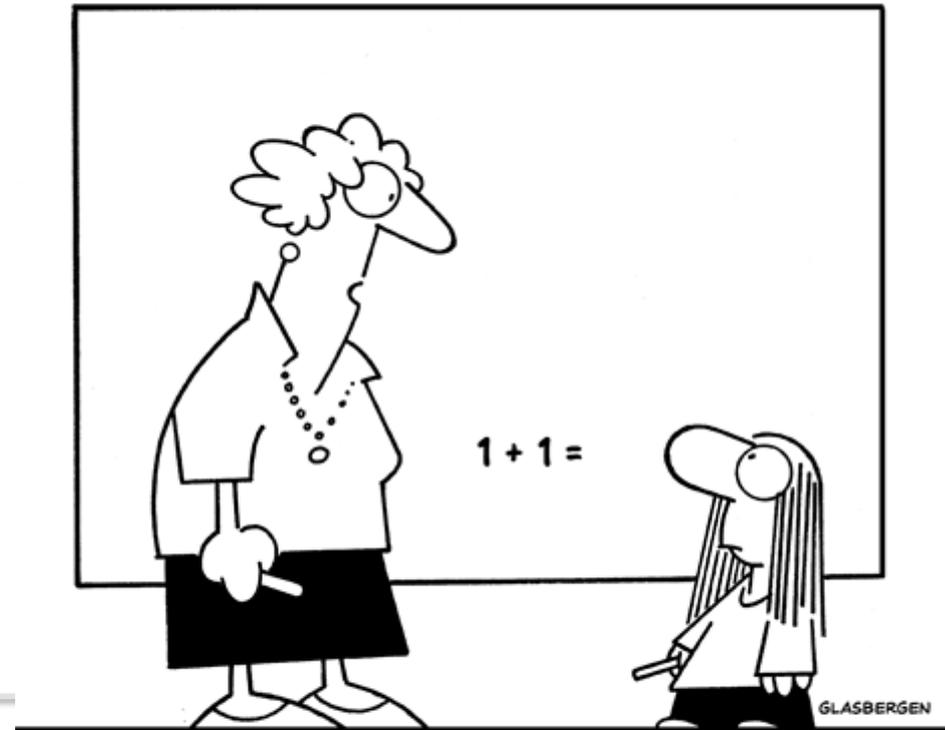
## Year 1 and 2 learning workshop

### Focus: Making Maths Fun (and why that's important)

## Aims

- To develop understanding of maths in everyday contexts
- To develop knowledge and understanding of the curriculum requirements for primary mathematics

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**“Yes, this will be useful to you later in life.”**

# National Maths Curriculum

## Purpose of study

Mathematics is a **creative** and highly **inter-connected** discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for **understanding the world**, the ability to **reason mathematically**, an **appreciation of the beauty and power of mathematics**, and a sense of **enjoyment and curiosity** about the subject.

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# National Maths 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.

# Beliefs about Maths

- Not “You either can or can’t do it” → Growth Mindset
- Making connections
- Mistakes = learning
- Depth not speed
- Reasoning
- Fluency
- Creativity

**“Many parents have asked me: What is the point of my child explaining their work if they can get the answer right? My answer is always the same: Explaining your work is what, in mathematics, we call reasoning, and reasoning is central to the discipline of mathematics.”**

– [Jo Boaler, Mathematical Mindsets: Unleashing Students' Potential through Creative Math, Inspiring Messages and Innovative Teaching](#)

# At home / out and about

- Counting: in steps, people, cars, anything!
- Estimate: how far... how high... how many... how much...  
Discuss reasonable estimates.
- Play 'car cricket'
- In the kitchen
- Shopping
- Time and timetables
- Measuring DIY
- Don't be scared of fractions
- <http://www.familymathstoolkit.org.uk>
- <https://www.oxfordowl.co.uk/for-home/advice-for-parents/maths-at-home/>
- <https://www.bbc.co.uk/cbeebies/grownups/help-your-child-with-maths> (for younger children)
- <https://www.youcubed.org/resource/parent-resources/>

talk about it with a friend

use a **CREATIVE** representation

Mathematical



be curious

Freedom

see it in a different way

solve it with different methods

take it to a deeper level