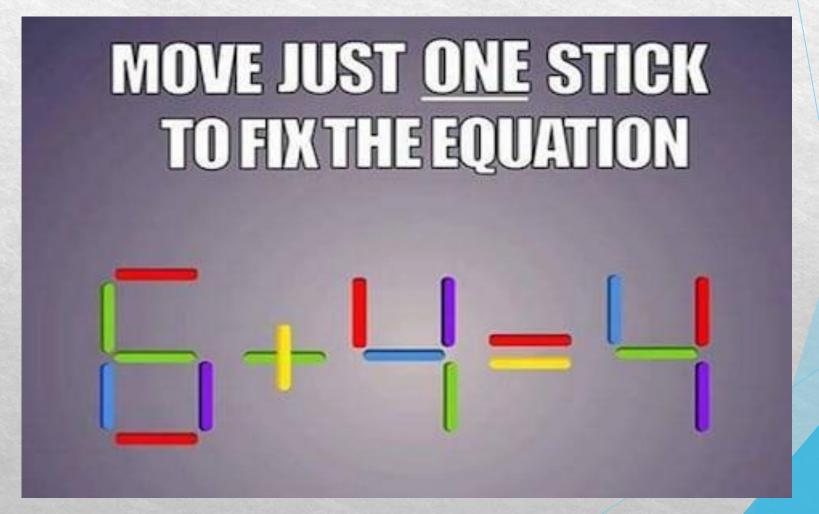
# Maths Mastery Curriculum @ Glasshouses 11.2.20



#### What does it mean to 'master' something?

You know how to do it.

It becomes automatic.

You get really good at it.

You can teach someone else how to do it.

#### Mastery in Mathematics

Mastering maths means acquiring a deep, long-term, secure and adaptable understanding of the subject. At any one point in a pupil's journey through school, achieving mastery is taken to mean acquiring a solid enough understanding of the maths that's been taught to enable him/her move on to more advanced material.

- NCETM

Why 'mastery'?

Mathematics programmes of study state that:

- All pupils should become fluent in the fundamentals of mathematics.
- 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 rich and sophisticated problems before any acceleration through new content.

#### Guided practise table

Some children will need a little additional support along the way.

We all start the journey **together**.

Some children who feel confident, will be let loose. They'll be able to explore deeper into the woods, before returning to the group to continue on with the journey.





We're going on a **Maths Hunt** 

Children will not be racing off ahead on a different journey.

Children will not be left behind alone or isolated.

The belief everyone can achieve

Stem sentences

Variation in representations

Number fluency

Teaching for Mastery

Quick early intervention

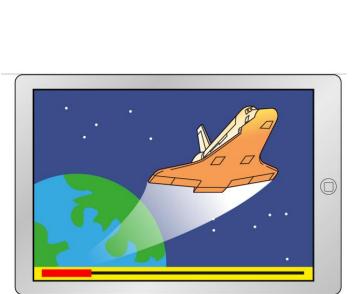
Whole class interactive teaching

#### Context

#### **Huge Discount!**

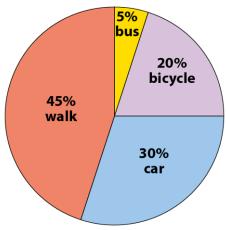
All clothes now 50% off the full price.



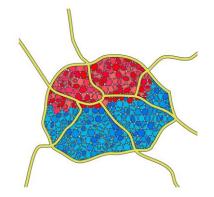








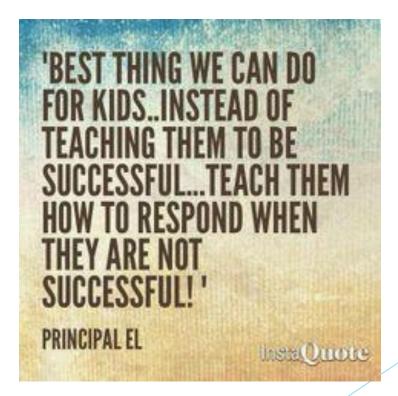






# Everyone can achieve - positive mindset for Maths!

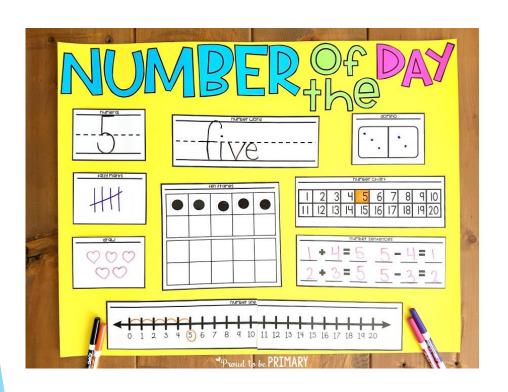






## Number Fluency

#### **Automaticity**



Χ	1	2	3	4	5	6	7	8	9	10	11	12
4												
11												
3												
1												
9												
6												
2												
8												
7												
10												
5												
12												

Variation - Show me 1 thing 5 ways not 5 things 1 way.

#### Variety versus Variation

Variety









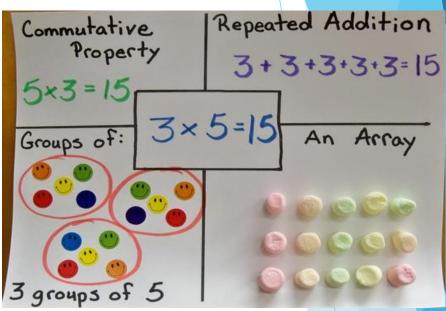
Variation



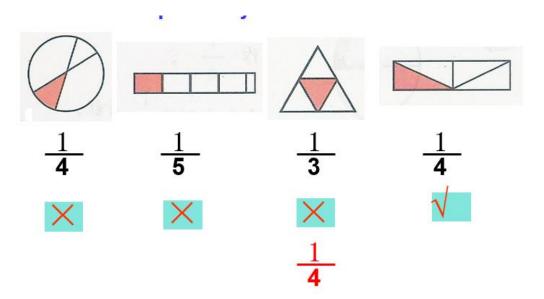




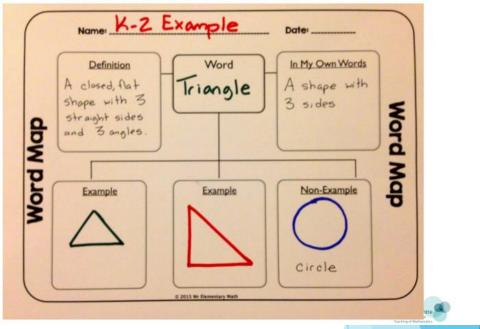


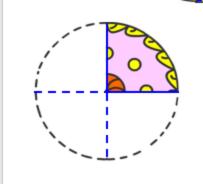


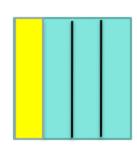
### **Variation**

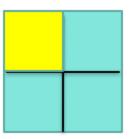




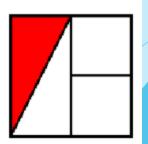












# What does a typical Maths Lesson look like?

- 4 STEPS
- 1.Review/recap a hook into learning.
- 2.Exercise/task/question to reveal the learning.
- 3. Teach for misconceptions, including variation.
- 4. Work on a non-standard/challenge example to review and summarise.

These steps are applied in the 30 minute lesson Which is then followed by independent practice (also 30 minutes)

### What can you do to help?

#### **BE POSITIVE ABOUT MATHS!**

Talk about maths. Maths Vocabulary can be very difficult!

https://www.youtube.com/watch?v=0QVPUIRGthl

**Multiplication Facts** 

Ask children to teach you - this develop their reasoning allowing them to deepen their knowledge.

Story - Telling

Spotting numbers in the real world: shopping, sharing sweets, working out pocket money.

#### Resources

- ► Hit the Button
- Ks2 Prodigy Maths
- Parent Calculation Guide
- Multiplication Strategies

# Questions?