The New Mathematics Curriculum KS1.

Charlie Harber
TLA Primary Mathematics
Herts for Learning

How are you feeling?

Maths Anxiety

- As young as 5 years old (Ramirez et al 2013)
- About one third of students suffer maths anxiety (Boaler, 2014)
- Working memory becomes blocked and students cannot access the facts they know (Beilock, 2011; Ramirez et al 2013)
- Occurs most amongst girls and high achievers
- Creates a negative spiral
- Children turn away from maths

Nice or nasty…

Aims of the mathematics curriculum

- become **fluent …** through varied and frequent practice with increasingly complex problems [to] ***develop conceptual understanding***
- **reason mathematically**
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication

New curriculum New expectations

EYFS	Year 1	Year 2
40 – 60:Finds the total number of items in two groups by counting all of them. In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting	Represent and use number bonds and related subtraction facts within 20	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Add and subtract numbers mentally, including: -a two-digit number and ones -a two-digit number and tens -two two-digit numbers -adding three one-digit numbers
EYG 11 using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.	Add and subtract one-digit and two-digit numbers to 20, including zero	Add and subtract numbers using concrete objects and pictorial representations, including: -a two-digit number and ones -a two-digit number and tens -two two-digit numbers -adding three one-digit numbers

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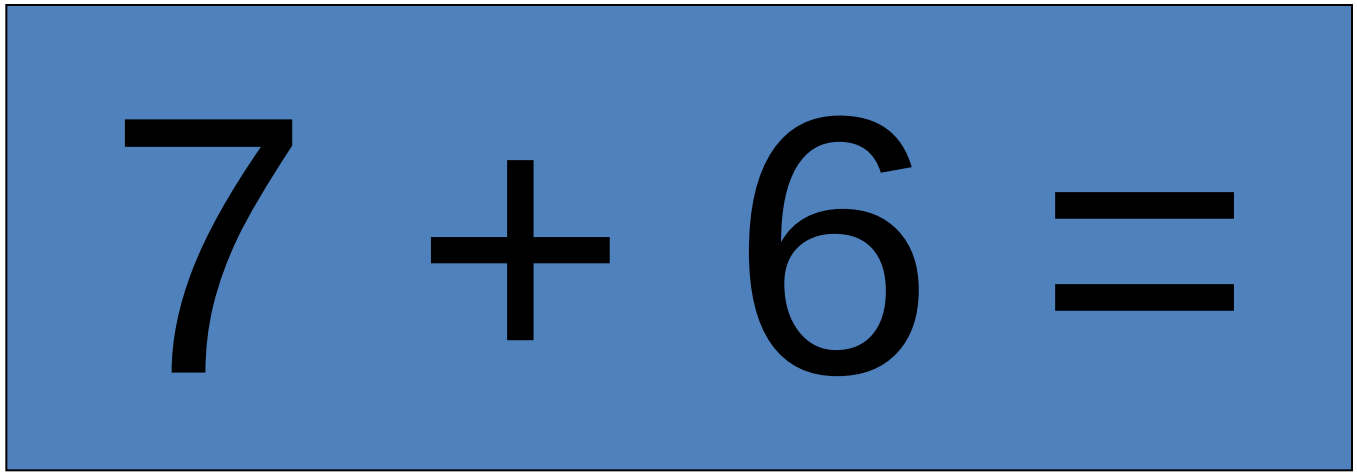
●	●	●		

Beadstrings

- Get to know your beadstring.

Discussion of strategies is VITAL!



Sharing strategies gives children opportunities to hear new ideas and compare them to their own

Bridging through 10's
Beadstrings

$$7 + 6 =$$

Share with your friend:

8 + 8 =

16 + 5 =

28 + 14 =

Can you visualise it?

Subtraction with bridging

13 - 6 =

Share with your friend:

16 - 7 =

23 - 5 =

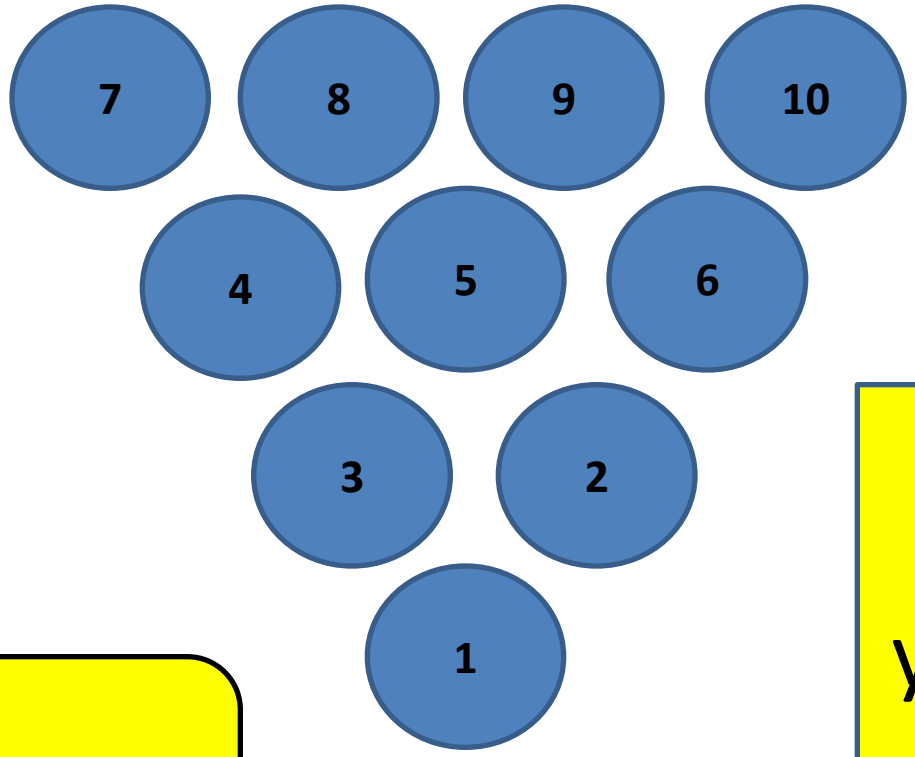
45 - 17 =

Can you visualise it?

Other things you can do with a beadstring

- More than, less than
- Using known facts
- Partitioning
- Reading scales
- Negative number calculations
- Shift place value
- Halving/doubling
- Rounding
- Adding/subtracting 9 and 11

Game: Bowl It!



Fluency Feeder

How did you do it? Adaptive fluency

Questions to extend thinking

Ask children who are getting started with a piece of work:

- **How are you going to tackle this?**
- **What method are you going to use? Why?**
- **How are you going to record what you are doing?**
- **What do you think the answer will be?**
- **Can you estimate or predict the answer?**
- **Will you do it mentally, with pencil and paper, using a number line, with a calculator…? Why?**
- **What operations are you going to use?**

Ask children who are stuck…

- **Can you talk me through what you have done so far?**
- **Is there something you already know that might help?**
- **What about putting things in order?**
- **Would a table/ diagram / graph help?**
- **What did you do last time? What is different this time?**

Important things to know

- Problems can be solved in different ways.
- Great mistake!
- Doing maths in your head is important.
- Its okay to use a calculator
- Hots not Mots

Thank you for your time and your engagement!