Times Tables at Christ Church!

Year 2-4 Parent Workshop
March 2023

Our Aim

For all children to be fluent in all times tables by end of Year 4.

What does *fluent* mean?

A deep conceptual understanding.
An ability to recall accurately and rapidly.

I*t is not just repeating back the fact.*
It is about flexibility, efficiency and accuracy.

A deep conceptual understanding

- Understanding the meaning of operations and their relationships to each other.
- For example commutativity, inverse and multiplication as repeated addition
- 4 x 6 = 24 so 6 x 4 =24
- If 4 x 6 = 24 then 24 ÷ 6 =4
- 4 x 6 = 6+6+6+6
- 6 x 4 = 4+4+4+4+4+4

Flexibility and Efficiency

- Knowing facts and how they relate to each other
- If we know this what else do we know?
- 4 x 5 = 20 so I know 4 x 50 = 200
- Molly has 2 baskets with 6 apples in each. How many apples does she have altogether?
- Do I need to know my 6 times tables?

When do we teach times tables?

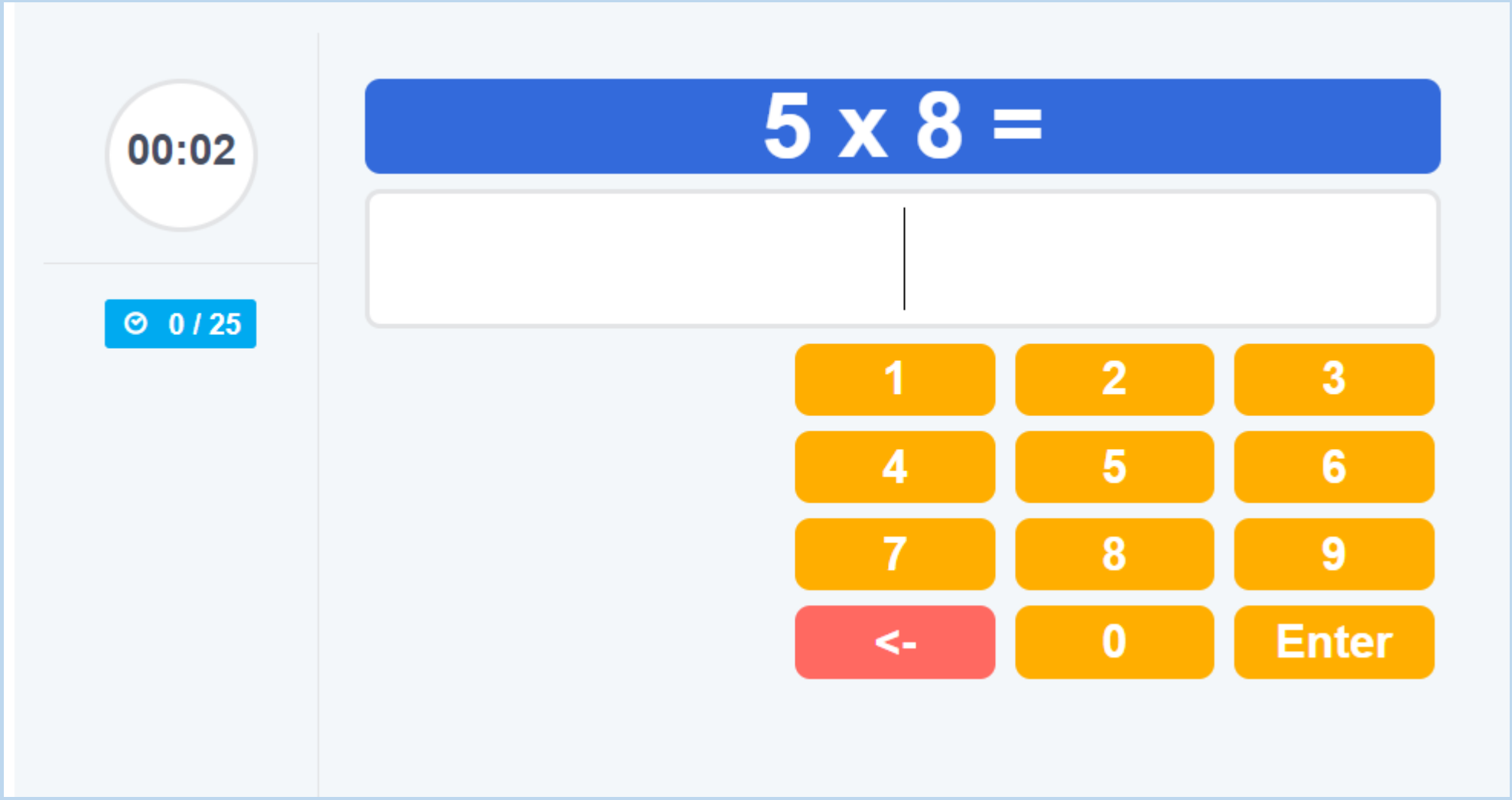
Year Group	Times Tables Explicitly Taught
Year 2	2,5,10 and 3
Year 3	3,4 and 8
Year 4	6,7,9,11 and 12

Statutory Multiplication Check

- Taken by all children in Year 4 in June.

- The purpose of the check is to determine whether your child can fluently recall their times tables up to 12, which is essential for future success in mathematics.
- It is an on-screen check consisting of 25 times table questions. Your child will be able to answer 3 practice questions before taking the actual check. They will then have 6 seconds to answer each question. On average, the check should take no longer than 5 minutes to complete.

Statutory Multiplication Check



How do we teach times tables?

- We begin by looking at groups of in Year 2 so that children understand what multiplication is before we teach facts.
- Chant with a focus on the full 'one two is two', 'three twos are six'.

Let's have a go!

- Focus on the multiples in order, but can they notice them out of order?
- Look at the multiples, what do you notice?

How do we teach times tables?

- Patterns of odds and even.
- Set challenges. For example, whilst focusing on the 4 times table, only say aloud the multiples that are also multiples of 5.
- Discuss which multiples are 'easy' and why. Use doubling and inverse of known facts.
- Rhymes! 5,6,7,8 56 is 7x8 Wakey wakey rise and shine, seven sevens are 49! I ate and I ate 'til I was sick on the floor, eight eights are 64.

How do we teach times tables?

- Always remind children of the effect of 1x and 0x
- Make the connections between times tables – the 4s are double the 2s and the 8s are double the 4s. This also works with the 3s, 6s and 12s.
- Odd one out. *Can you spot the odd one out below?*
- 'Ask me' stickers
- Weekly quizzes
- Games!

16 24 36 40

Guzinta

Two players – one board – one 1-6 dice.
Counters of your own colour
Roll the dice. If the number you roll ‘guzinta’ one of the numbers on the grid, cover it.
The winner is the first person to get a line of 4 of their own counters.
Let’s play!

How do we teach times tables?

Hints!

Times Table	Hint
2 x table	Answer is always double the given number
3 x table	Answer always adds up to 3, 6 or 9
4 x table	Answer is double, then double again
5 x table	Answer always ends in 5 or 0
9 x table	Answer always adds up to 9*
10 x table	Answer is always sequence number with 0 on the end
11 x table	Answer is always repeat digits**

* Rule doesn't apply to 11 x 9
** Rule doesn't apply to 11 x 11 and 11 x 12

How do we teach times tables?

Rules of Divisibility

10	if	The number ends in a 0.
9	if	When you add all the digits this number can be divided by 9.
8	if	The last 3 digits form a number that can be divided by 8.
7	if	For 3 digit numbers, double the last digit and subtract it from the first two digits. The total can be divided by 7.
6	if	The last number can be divided by 2 and the total of the digits can be divided by 3.
5	if	The last digit is a 5 or a 0.
4	if	The last two digits are a number that is divisible by 4.
3	if	The sum of the digits can be divided by 3.
2	if	The final digit is an even number .

Times Table Challenge

To motivate children to learn their multiplication tables, we have devised an award system involving different levels of challenge and certificates.

There are six different levels of challenge to work through in school:

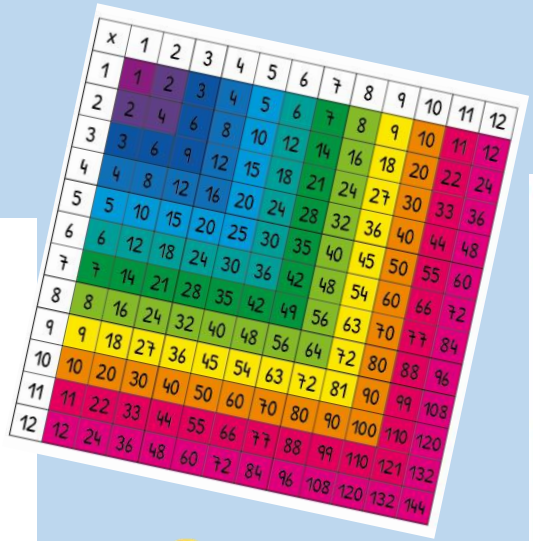
- **Y2 Bronze** – 2, 5, 10 times tables
- **Y2 Silver** – 2, 5 and 10 times tables including division facts and missing number questions
- **Y3 Gold** – 2, 3, 4,5, 8, 10 times tables including division facts and missing number questions
- **Y4 Platinum** – all tables including division facts and missing number questions
- **Y5 Diamond** – all times tables including division facts and missing number questions plus fractions of numbers
- **Y6 Ruby** – all times tables including division facts and missing number questions plus fractions of numbers, decimals and scaling.

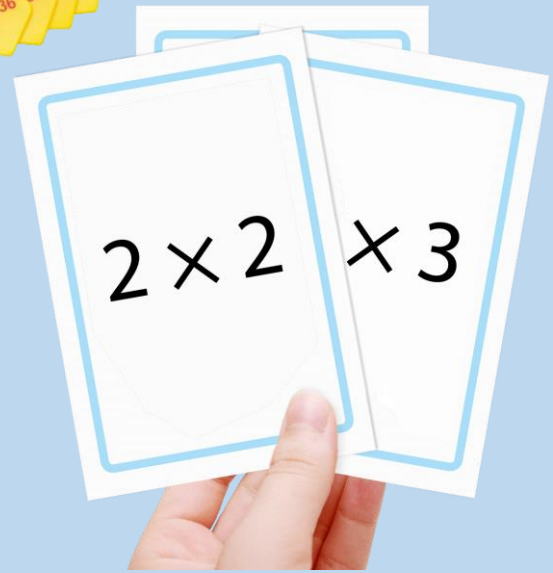
How can parents support learning at home?

- Help children to learn the facts!
- Begin in order 'one three is three', 'two threes are six'
- Move onto mixed order.
- Practise chanting **AND** writing them out.
- Try the inverse 12 x 12 = 144 so 144 ÷ 12 = 12
- Missing boxes! 6 x ? = 24
- The answer is … what is the question
  - 24
- Quick fire questions
- Play games
- Practise under timed conditions for the times table challenge
- IT'S OK TO TEACH AHEAD! 🙂

Importance of Visuals

Multiplication grids
Wall posters
Multiplication wraps
Flash cards





Be careful not to reinforce any misconception that multiples stop at 12x!
How could they work out 20x4?

How can parents support learning at home?
- Ways to extend

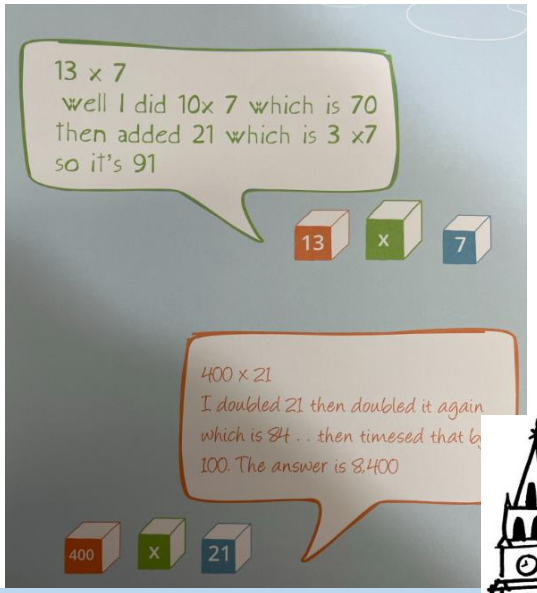
Scaling

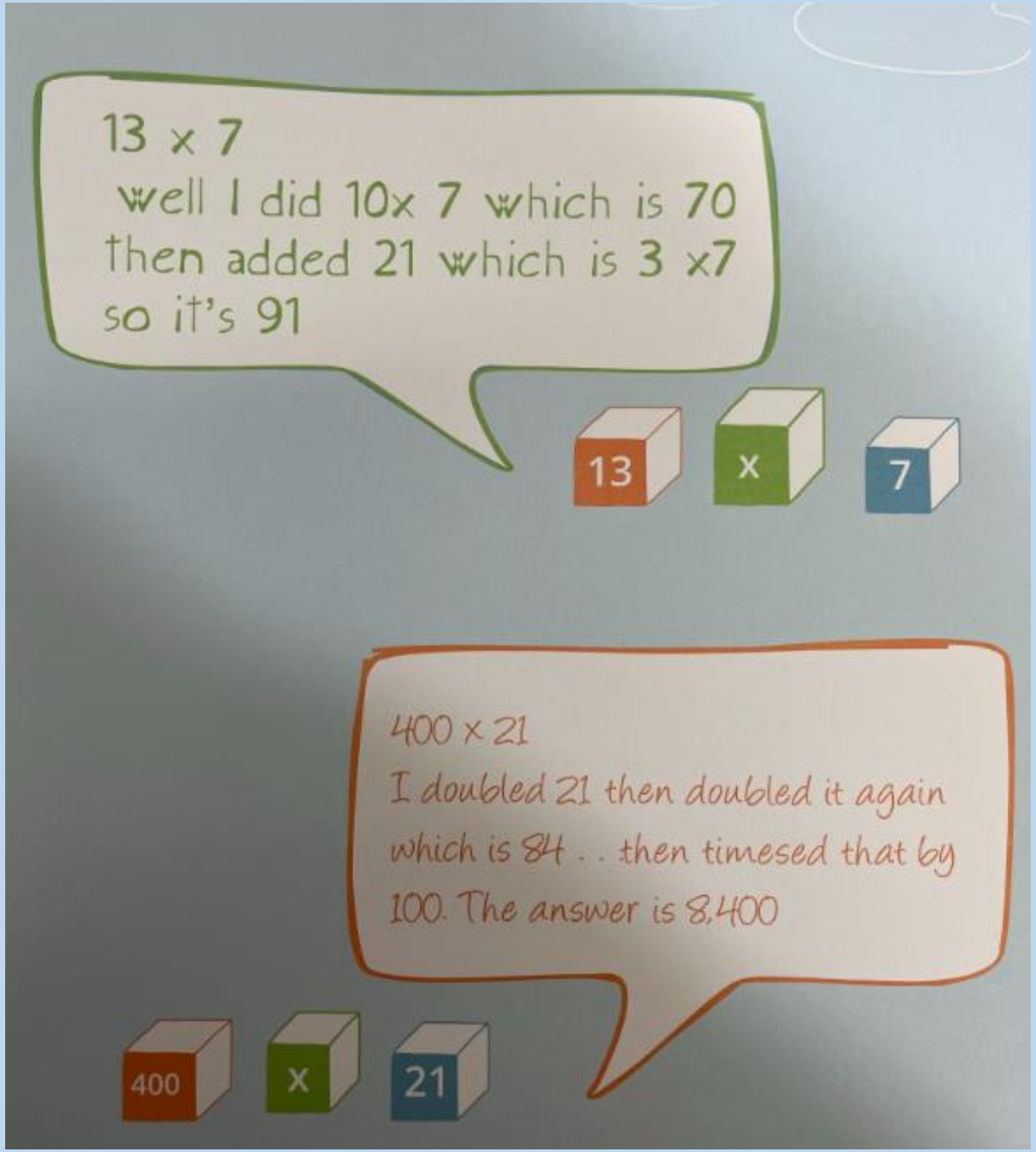
40 x 6= 400 x 6 = 0.4 x 6 =

Move on to multiplication past 12x, but only using mental strategies

Give me a silly answer

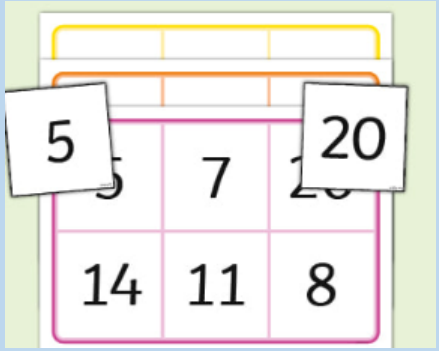
If we know this, what else do we know?




13 x 7
well I did 10x 7 which is 70
then added 21 which is 3 x7
so it's 91
13
x
7
400 x 21
I doubled 21 then doubled it again
which is 84 . . then timesed that by
100. The answer is 8,400
400
x
21

Games!

Times Table Bingo. Let's play!
Guzinta
Playing Cards
Rock, Paper, Times Tables



Websites and Apps

www.interactive-resources.co.uk
www.timestables.co.uk
www.mathsframe.co.uk
www.topmarks.co.uk/maths-games/hit-the-button

Apps

Times Tables and Friends
Hit the Button Maths
Squeebles Times Tables 2
2 x 2 Simulator

Thank you for coming to the session today!

Any questions?