

MATHS IN YEAR 2

JANUARY'24



To be the best I can be..

THE NATIONAL CURRICULUM FOR MATHEMATICS

Aims to ensure that all pupils :

- * Become fluent in the fundamentals of mathematics.
- * Reason mathematically
- * Solve problems by applying their mathematics

BROMLEY HEATH INFANTS

KEY STAGE 1 MATHS CURRICULUM

At Bromley Heath we love to have fun with our Maths learning! Everyday we experience our Maths learning through problem solving, which enables us to apply our Maths knowledge and understanding to real life situations. We have a real focus on Mathematical thinking and reasoning, using models and images to help us.

REQUIREMENTS OF THE YEAR 2 CURRICULUM

Multiplication and Division

- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication table.
- Recognise odd and even numbers
- Solve problems involving multiplication and division.

REQUIREMENTS OF THE YEAR 2 CURRICULUM

Working at greater depth

The pupil can:

- read scales* where not all numbers on the scale are given and estimate points in between
- recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts
- use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. $29 + 17 = 15 + 4 + \square$; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc)
- solve unfamiliar word problems that involve more than one step (e.g. 'which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?')
- read the time on a clock to the nearest 5 minutes
- describe similarities and differences of 2-D and 3-D shapes, using their properties (e.g. that two different 2-D shapes both have only one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices, but different dimensions).

* The scale can be in the form of a number line or a practical measuring situation.

MULTIPLICATION: KEY VOCABULARY

❖ X

❖ repeated addition eg 5×3 is the same as
(equals) $3 + 3 + 3 + 3 + 3$

❖ times

❖ lots of

❖ equal groups of

❖ groups of

❖ multiplied by

❖ multiply

❖ times tables

❖ double



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DIVISION: KEY VOCABULARY



❖ Repeated subtraction

❖ eg $20 \div 5 = 20 - 5 - 5 - 5 - 5$

❖ Divide

❖ Divided by

❖ Share

❖ Share equally

❖ Groups

❖ Lots

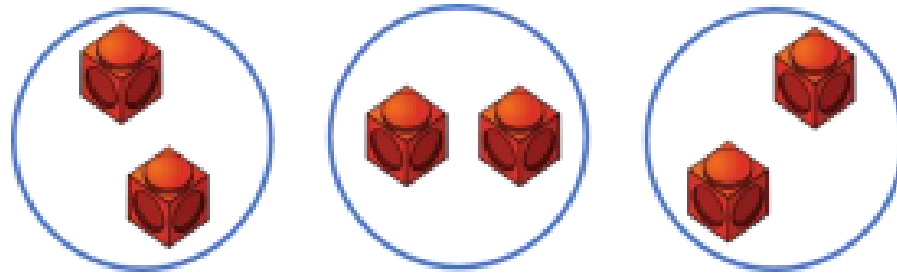
❖ Halve



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MULTIPLICATION: EQUAL GROUPS

Complete the stem sentences.



There are ____ equal groups with ____ in each group.

Complete the sentences.

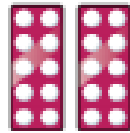


There are ____ equal groups with ____ in each group.

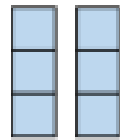
There are _____ baguettes altogether.

MULTIPLICATION: EQUAL GROUPS

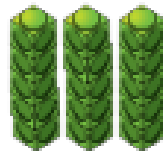
Match the equal groups.



Three 5s



Two 10s



Two 3s

Sweets, squares,
two 3s.

Dice, cubes, three
5s.

Coins, number
pieces, two 10s.

MULTIPLICATION: ARRAYS AND LINKS WITH REPEATED ADDITION



$$3 \times 4 =$$

$$3 \text{ } 4\text{s} =$$

$$4 + 4 + 4 =$$

$$4 \times 3 =$$

$$4 \text{ } 3\text{s} =$$

$$3 + 3 + 3 + 3 =$$

MULTIPLICATION: ARRAYS



Commutativity

$$3 \times 4 = 12$$

$$4 \times 3 = 12$$

COMMUTATIVE OPERATIONS

Addition and multiplication are **commutative** operations. This means that for these operations the numbers can be added or multiplied in any order and the answer will still be the same.

So $8 + 4 = 12$ is the same as $4 + 8 = 12$

And 8×5 gives the same answer as 5×8 .

But subtraction and division are **not** commutative.

$8 - 4 (= 4)$ is not the same as $4 - 8. (= -4)$

And $40 \div 5 (= 8)$ is not the same as $5 \div 40 (= 0.125)$



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DIVISION — SHARING INTO EQUAL GROUPS

- Share 12 cubes equally between 4 boxes.

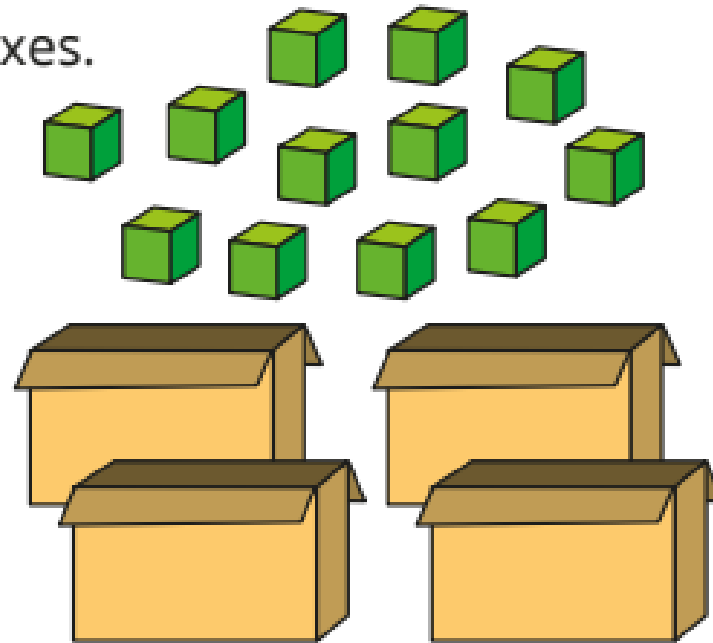
Complete the sentences.

There are _____ cubes altogether.

There are _____ boxes.

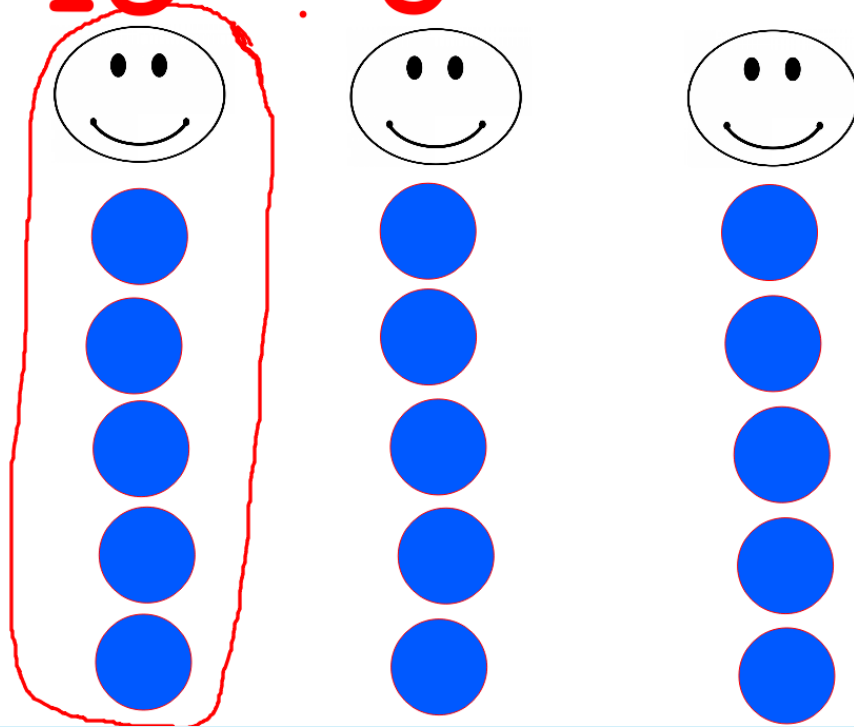
There are _____ cubes in each box.

$$12 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$



DIVISION: ARRAYS

$$15 \div 3 =$$



INVERSE OPERATIONS

Multiplication and division are **inverse** operations.
This means they are the reverse of each other.

Addition and subtraction are also inverse operations.

So an answer can always be checked by carrying out the calculation the other way round.

$$8 \times 10 = 80$$

$$80 \div 10 = 8 \quad \text{or} \quad 80 \div 8 = 10$$

MULTIPLICATION AND DIVISION: ARRAYS



Inverse Operations

$$3 \times 4 = 12$$

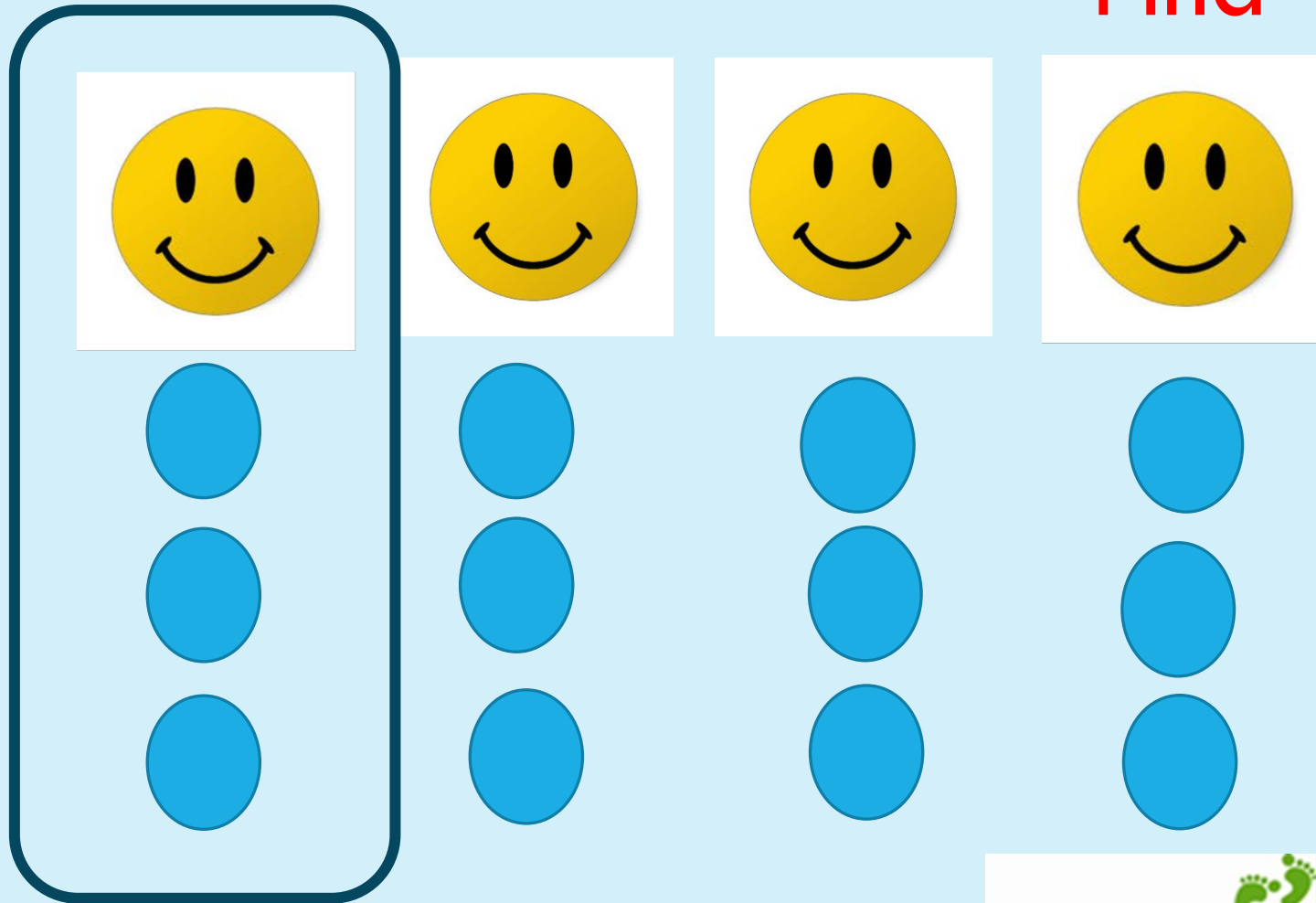
$$4 \times 3 = 12$$

$$12 \div 4 = 3$$

$$12 \div 3 = 4$$

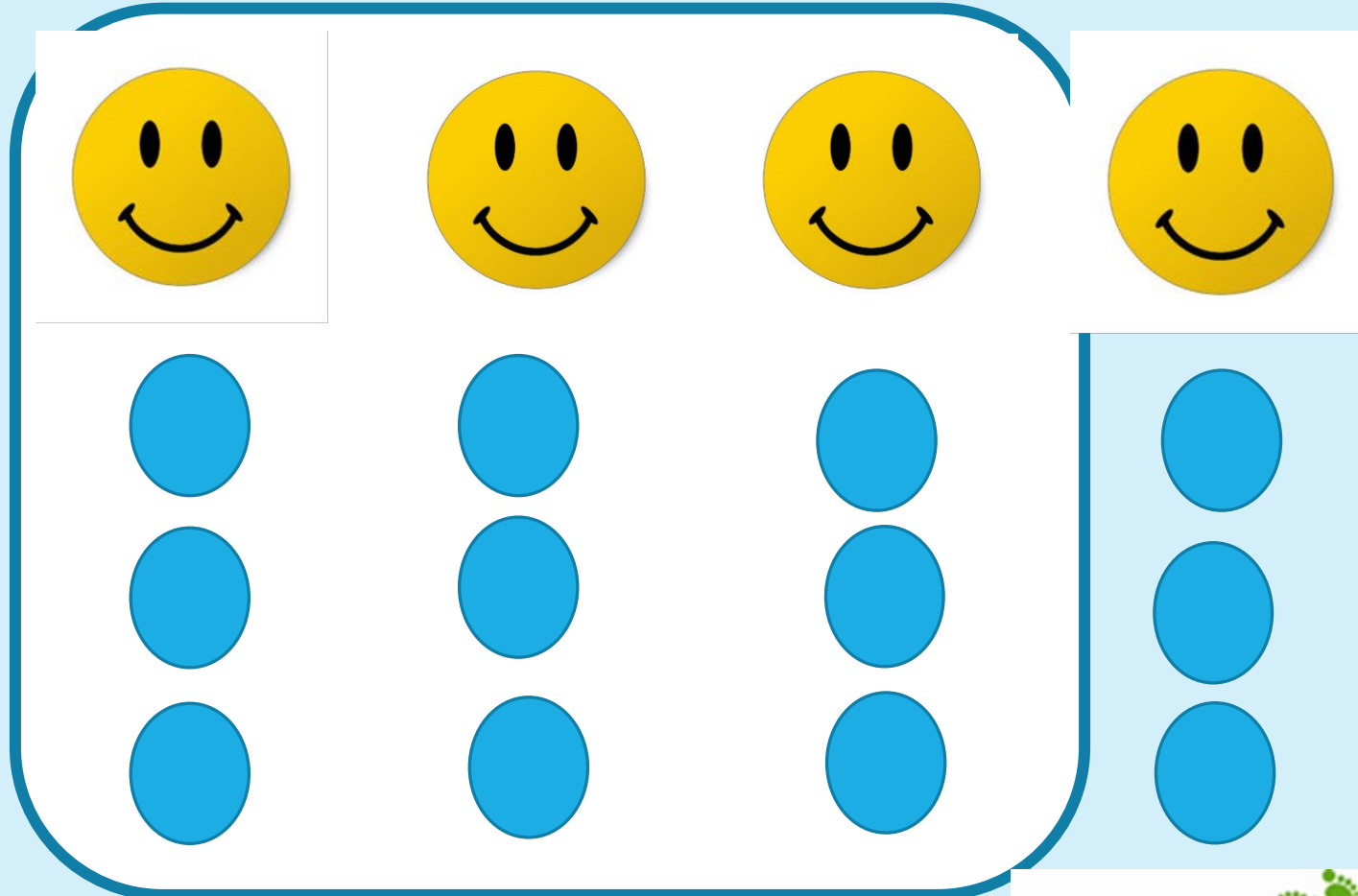
FRACTIONS: ARRAYS

Find $\frac{1}{4}$ of 12



FRACTIONS: ARRAYS

Find $\frac{3}{4}$ of 12



YEAR 2 HELPING AT HOME

- Make sure your child is confident counting in 2s, 10s and 5s.
- Practise counting real coins can make it fun.



$$4 \times 5p = 20p$$

- Use fingers to help work out $4 \times 5 =$
- Count each finger in 5s



- Then for $20 \div 5 =$, count on fingers in 5s to see how many lots of 5

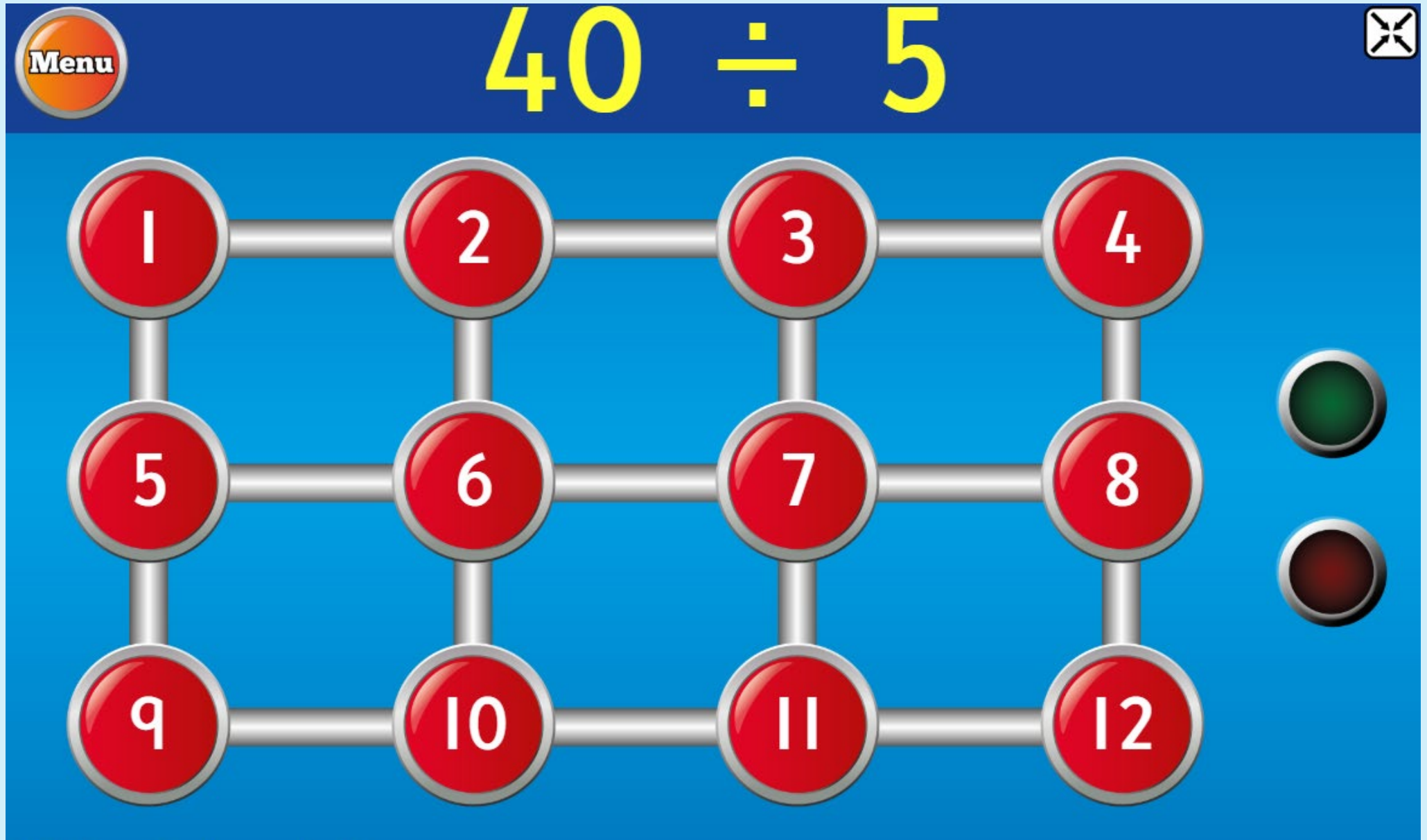
YEAR 2 HELPING AT HOME

- Continue to support your child to learn an individual fact –
- $3 \times 5 = 15$ so they also know $5 \times 3 = 15$ and the division facts $15 \div 5 = 3$ and $15 \div 3 = 5$
- Try 4 / 5 a week- keep recapping the ones they know.
- Look at the results of the Super Maths Facts each week and select from those that are unknown.
- **Hit The Button** great for multiplication and then inverse

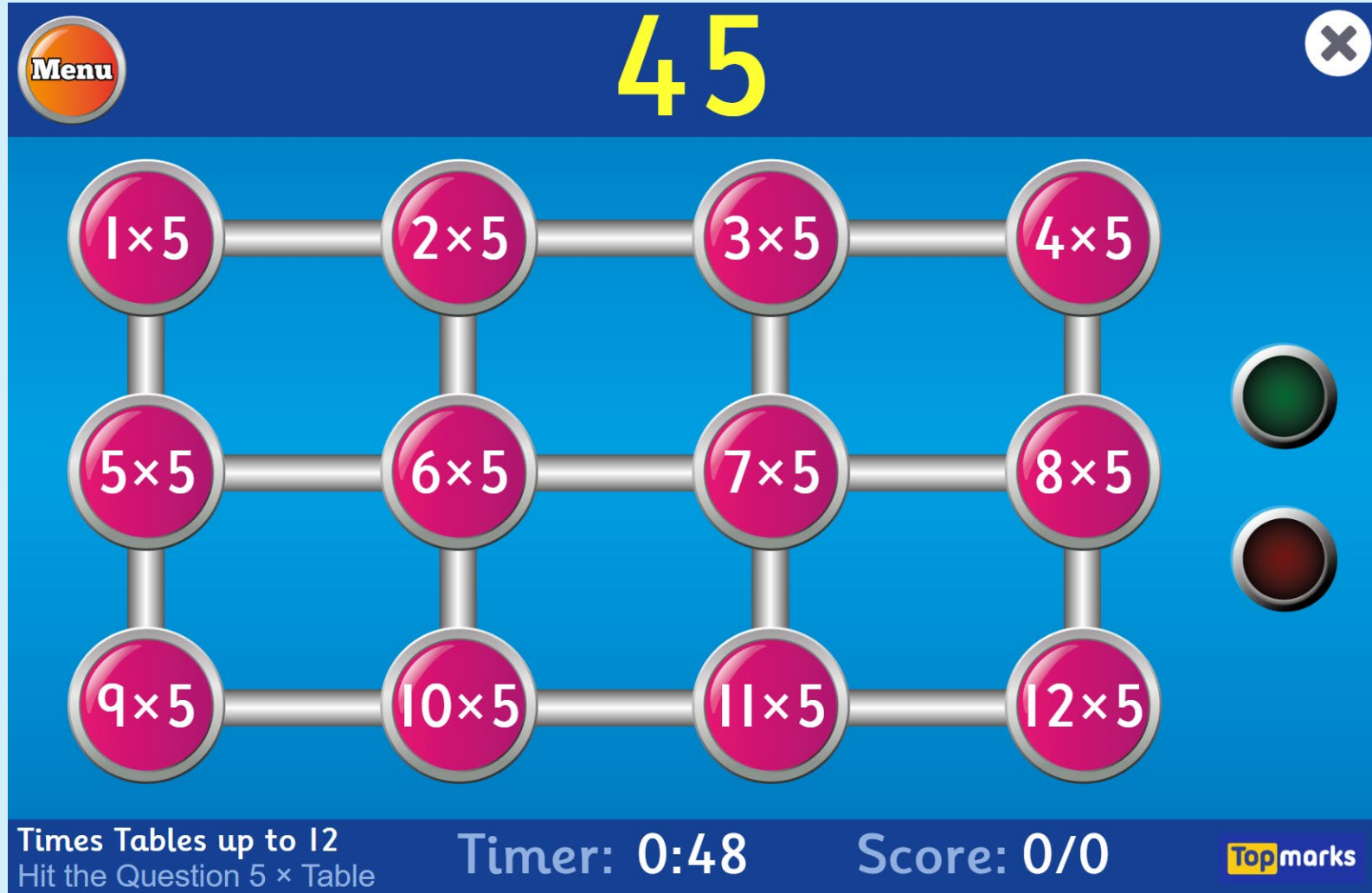
Hit the Button



HIT THE BUTTON



HIT THE BUTTON



The image shows the 'Hit the Button' game interface. At the top, a blue header bar contains a 'Menu' button on the left, the number '45' in large yellow font in the center, and a close button (X) on the right. Below the header is a 3x4 grid of 12 pink circular buttons with silver borders, each containing a multiplication problem. The buttons are arranged in three rows and four columns: Row 1: 1×5 , 2×5 , 3×5 , 4×5 ; Row 2: 5×5 , 6×5 , 7×5 , 8×5 ; Row 3: 9×5 , 10×5 , 11×5 , 12×5 . To the right of the grid are two circular buttons, one green and one red. At the bottom, a dark blue footer bar contains the text 'Times Tables up to 12' and 'Hit the Question 5 x Table' on the left, 'Timer: 0:48' and 'Score: 0/0' in the center, and the 'Topmarks' logo on the right.

Menu

45

1×5 2×5 3×5 4×5

5×5 6×5 7×5 8×5

9×5 10×5 11×5 12×5

Times Tables up to 12
Hit the Question 5 x Table

Timer: 0:48

Score: 0/0

Topmarks