



# PARENT WORKSHOP: TIMES TABLES

Thursday 25th January

# Aims of this morning



Watch part of a year 4 multiplication session



To understand the Horn Park approach to the teaching of multiplication facts



To takeaway ideas of how to support your children at home



Any reflections or  
questions having  
watched a multiplication  
session?

## Focus facts of the week

2 2								
2 3	3 3							
2 4	3 4	4 4						
2 5	3 5	4 5	5 5					
2 6	3 6	4 6	5 6	6 6				
2 7	3 7	4 7	5 7	6 7	7 7			
2 8	3 8	4 8	5 8	6 8	7 8	8 8		
2 9	3 9	4 9	5 9	6 9	7 9	8 9	9 9	

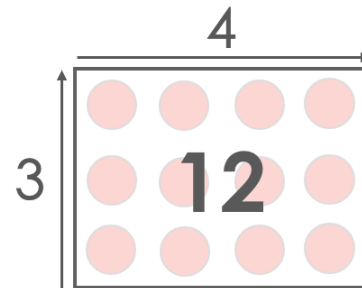
$$3 \times 4 = 12$$

$$5 \times 9 = 45$$

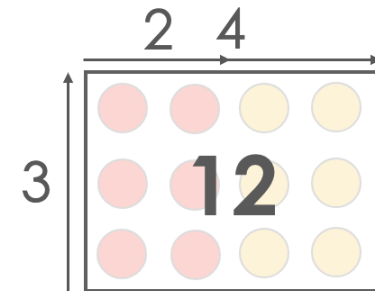
Let's connect this to an image.

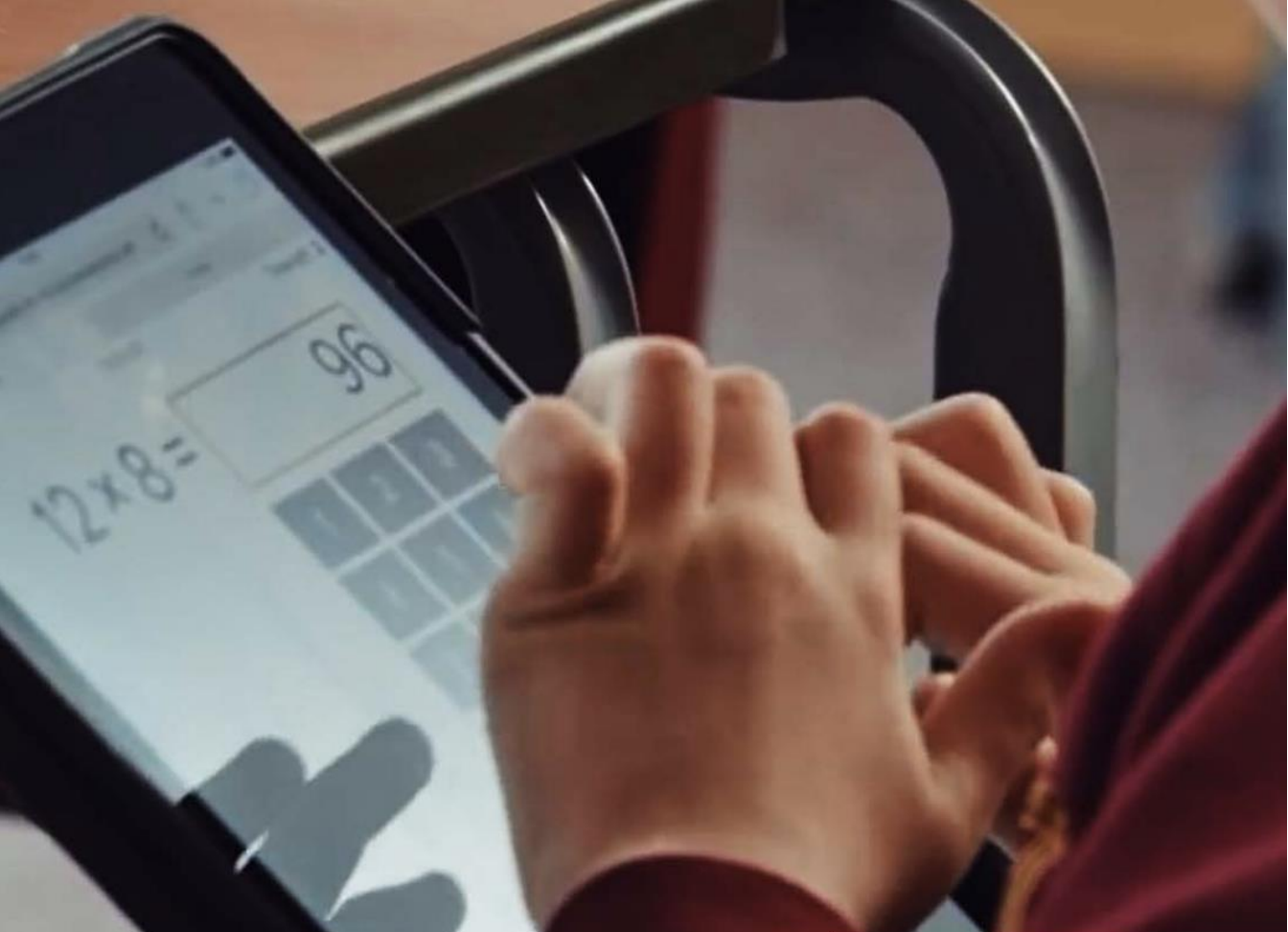


I can imagine  $3 \times 4$  as an array.



I can see this part of the array as  $3 \times 2$ , which is 6, so it must be 6, doubled.





Standards  
& Testing  
Agency

# MTC check

- The multiplication tables check (MTC) is statutory for all year 4 pupils
- The purpose of the MTC is to determine whether pupils can recall their times tables fluently, which is essential for future success in mathematics.
- Schools must administer the MTC to all eligible year 4 pupils between Monday 3rd June and Friday 14th June 2024
- Your child's score is shared with you as part of their end of year report



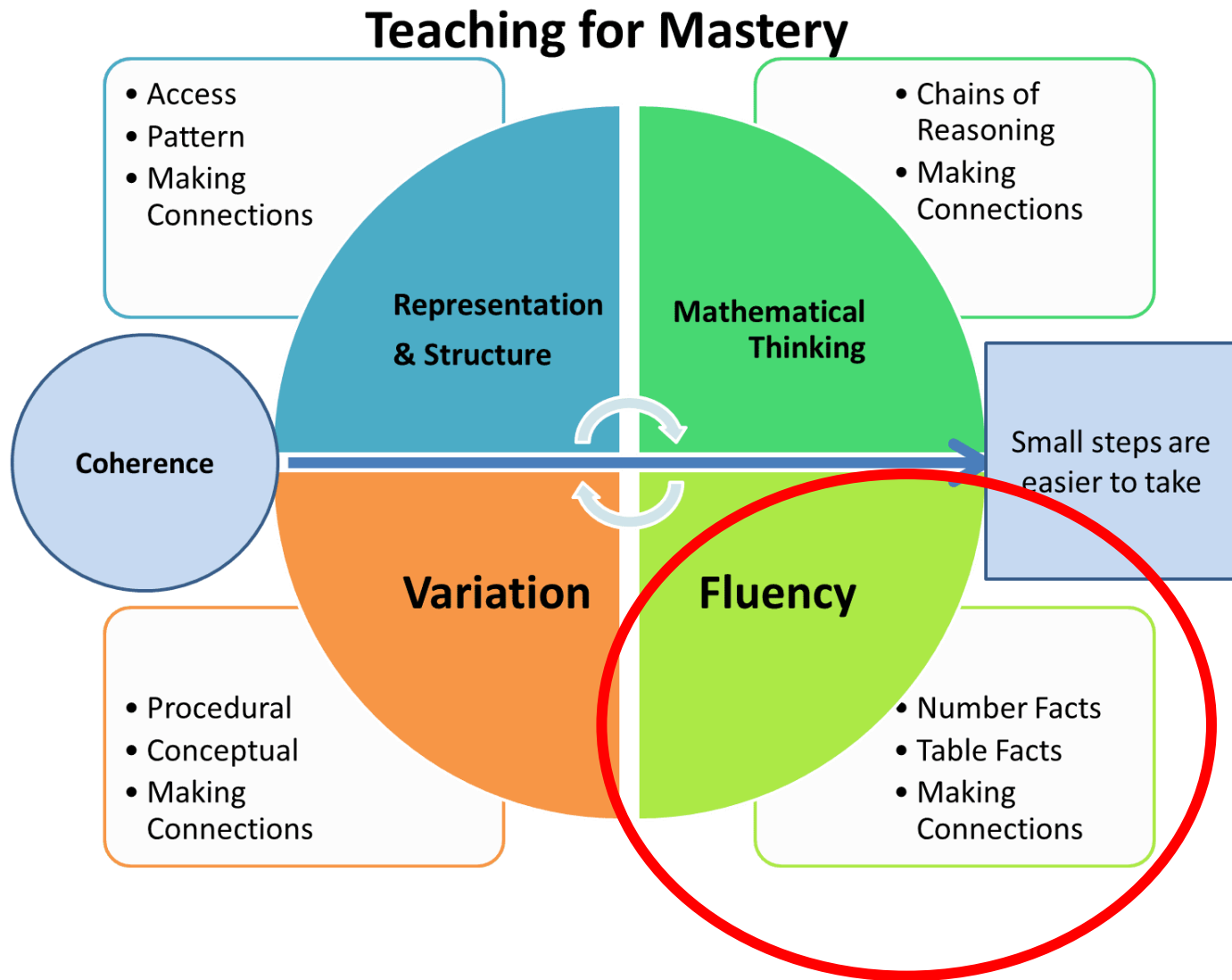
# Horn Park approach

YEAR	First half term	Second half term	Third half term	Fourth half term	Fifth half term	Sixth half term
Year 1	Experience of counting in 1s, 2s, 5, 10s					
Year 2	1×	(1×) 2×	5×	(5×) 10×	0× and revision	revision
Year 3	(2×) 4 ×	(4×) 8 ×	3×	(3×) 6×	(6×) 12×	revision
Year 4	9×	7×	11×	Squares	revision	Test: June

## Why a focus one TT per half term?

Plasticity of the brain; neuroscientists tell us it takes approximately **8 weeks of repetition to make a new neural pathway** - making this 'go to' automated thinking!

Then continued practice makes this stronger



# Maths Mastery

**Achievable for all**  
 Deep and sustainable learning

**The ability to build on something that has already been sufficiently mastered**  
 The ability to reason about a concept and make connections

# 'Being fluent'

Quick and accurate recall of all multiplication facts up to  $12 \times 12$  is important in order to free working memory, being able to make decisions about when to use this knowledge to solve certain problems.

However, if a child only knows these facts as an unconnected collection of memorised phrases and does not know:

- That  $8 \times 6$  is the same as  $6 \times 8$  or twice  $4 \times 6$  or 12 less than  $10 \times 8$ ; or
- Does not know the connection between  $6 \times 8$  and  $16 \times 8$  or  $6 \times 80$  or  $0.6 \times 8$ ; or
- When faced with a problem of finding how many books are in a bookcase with 8 shelves and 6 books on each shelf, does not know what mathematics to use

... then they have not obtained fluency of mastery



Approaches that can  
be replicated at  
home

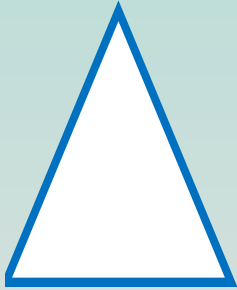
making clear  
conceptual links to the  
real world

what comes in .....?

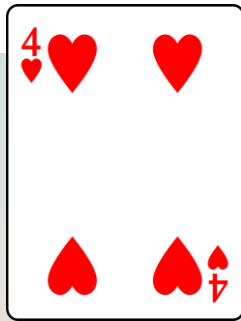
# What comes in 2s?





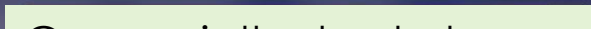
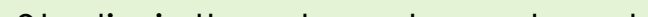
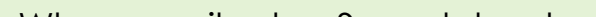
What comes in 3s?



# What comes in 4s?



# Times Table rockstars

 Jamming gives players the choice over the tables they practise and whether to include multiplication, division or both. It's perfect for building up confidence on the tables of your choice, at your own pace Gigs give pupils and their teachers a way to check overall performance each month. Once played, it becomes unavailable until the 1st of the next month. Garage is the best place for mastering individual tables as it carefully personalises the questions for each player in every game. Their algorithm adapts the questions every game for every player Studio is the place to go to set a Studio Speed and get a Rock Status. The Studio Speed is the average of their most recent 10 Studio games (so until they've played 10 times there will be no Studio Speed). All tables up to  $12 \times 12$  When pupils play Soundcheck, they are asked 25 questions, each with a 6-second time limit. The questions are multiplication only and evenly weighted in terms of difficulty each time they play - exactly the same as the UK government's 'Multiplication Tables Check'. All tables up to  $12 \times 12$

# Times Table rockstars



## **FESTIVAL**

Race the world



## **ARENA**

Race your class



## **ROCKSLAM**

Challenge someone

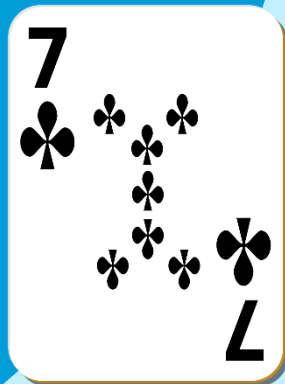
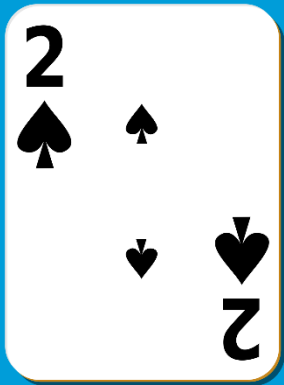
10	10 × 10	10 × 2	10 × 5	10 × 3	10 × 4	10 × 8	10 × 6	10 × 7	10 × 9	10 × 11	10 × 12
2	2 × 10	2 × 2	2 × 5	2 × 3	2 × 4	2 × 8	2 × 6	2 × 7	2 × 9	2 × 11	2 × 12
5	5 × 10	5 × 2	5 × 5	5 × 3	5 × 4	5 × 8	5 × 6	5 × 7	5 × 9	5 × 11	5 × 12
3	3 × 10	3 × 2	3 × 5	3 × 3	3 × 4	3 × 8	3 × 6	3 × 7	3 × 9	3 × 11	3 × 12
4	4 × 10	4 × 2	4 × 5	4 × 3	4 × 4	4 × 8	4 × 6	4 × 7	4 × 9	4 × 11	4 × 12
8	8 × 10	8 × 2	8 × 5	8 × 3	8 × 4	8 × 8	8 × 6	8 × 7	8 × 9	8 × 11	8 × 12
6	6 × 10	6 × 2	6 × 5	6 × 3	6 × 4	6 × 8	6 × 6	6 × 7	6 × 9	6 × 11	6 × 12
7	7 × 10	7 × 2	7 × 5	7 × 3	7 × 4	7 × 8	7 × 6	7 × 7	7 × 9	7 × 11	7 × 12
9	9 × 10	9 × 2	9 × 5	9 × 3	9 × 4	9 × 8	9 × 6	9 × 7	9 × 9	9 × 11	9 × 12
11	11 × 10	11 × 2	11 × 5	11 × 3	11 × 4	11 × 8	11 × 6	11 × 7	11 × 9	11 × 11	11 × 12
12	12 × 10	12 × 2	12 × 5	12 × 3	12 × 4	12 × 8	12 × 6	12 × 7	12 × 9	12 × 11	12 × 12

# Make it fun!

Times table rockstars is part of weekly homework,  
but there are so many other ways to develop  
fluency

# Card game

Who can win the most cards?



In pairs.

Split cards in half, each person hold their cards face down.

Take turns to turn your top card over.

Once 2 cards are on the table you need to times them together.

Whoever says the answer fastest wins both cards

Ace = 1

All pictures cards = 10

$$2 \times 7 = 14$$



Danger number!

Take it in turns to chant -  
You can say 1, 2 or 3 numbers  
Whoever says the **danger number** is out!

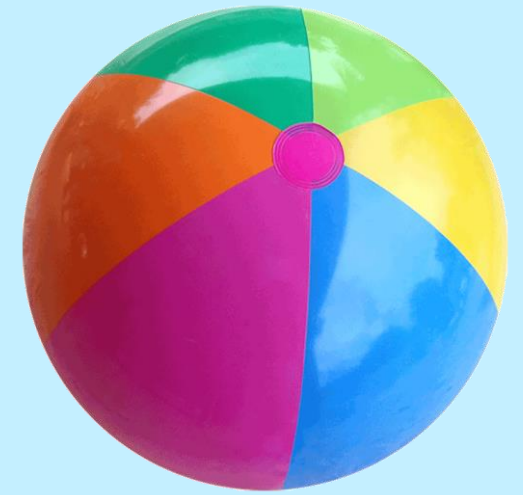
0	
4	28
8	32
12	36
16	40
20	44
<b>24</b>	48



# Beach ball

## Game 1

- Catch the ball
- Say the next times table
- Throw the ball to someone else



## Game 2

- Catch the ball
- Ask a question... what is \_\_\_ x 2?
- Throw the ball to someone else to answer

## Game 3

- Knock the ball between you
- Every time someone touches the ball, they say the next number in the sequence



Any  
questions?

