Gorsey Bank
Wilmslow
Learning for Life

Multiplication Workshop

Practical activities for learning and supporting multiplication at home

Four in a row

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

Code Mathematics

Four in a row wins

Throw

1 or 2 – cover an answer 20 or less

3, 4 or 5 – cover an answer greater than 20 and 50 or less

6 – cover an answer greater than 50

Ready, Set, Go!

18	**6**	**42**	**30**	**48**	**12**	**0**	**36**	**24**	**54**

Possible questions to ask to deepen your child's thinking.

- Are there any dice numbers thrown only once? How do you know?
- What number(s) have been thrown the most? How do you know?
- Are there any numbers that have not been thrown? How do you know?
- How many times has the number 7 been thrown?

Why are they important?

- National Curriculum Fluency, Reasoning and Problem Solving (FRP)
- Use facts to help solve problems – they are not the Maths
- Applied across all areas of maths

- How many situations can you think of that need multiplication facts to be used?

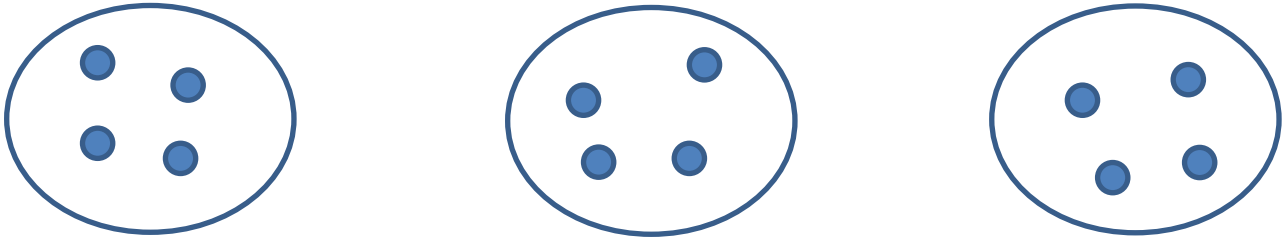
BIG IDEAS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
2x 5x 10x Solve simple problems using objects, pictures or arrays	**2x 5x 10x 3x** Understand commutative laws Solve problems using a range of methods	**3x 4x 8x** Multiply and divide mentally and derive facts for 2 digit numbers Use formal written methods for multiplying and dividing 2 digit numbers Solve missing number problems	**12x** Multiply and divide mentally using factor pairs and derive facts for 3 digit numbers Use formal written methods for multiplying and dividing 3 digit numbers Solve two step problems in context -Calculate with money, including solving problems	**12x** Recognise and use multiples, factors, square, cube and prime numbers up to 100 Use formal written methods for dividing and multiplying 4 digits numbers by 1 (or 2 digits) Multiply and divide numbers and decimals by up to 1000 Solve problems by combining all four operations	**12x** Perform mental calculations combining operations Identify common factors, multiples and primes Use knowledge of order of operations Divide 4 digit numbers by 2 digits and interpret remainders Multiply one-digit numbers with up to 2 dp by whole numbers -Multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places

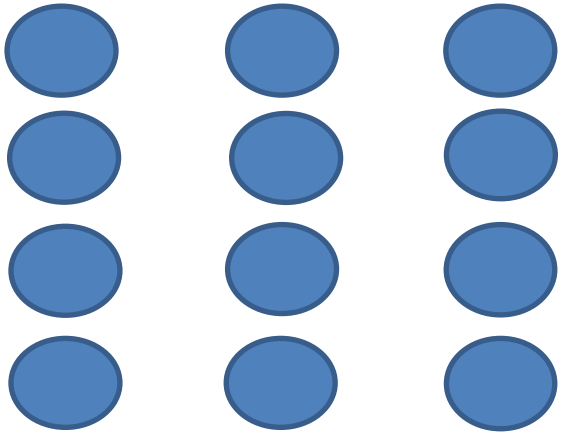
3 X 4

Let’s look more closely

Groups of



Array

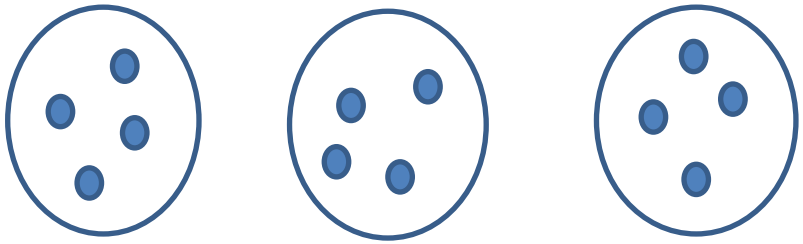


Repeated Addition

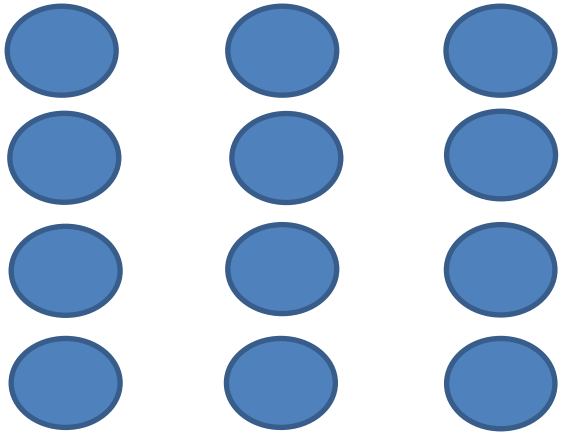
4 + 4 + 4 = 12

Commutative Law

Groups of



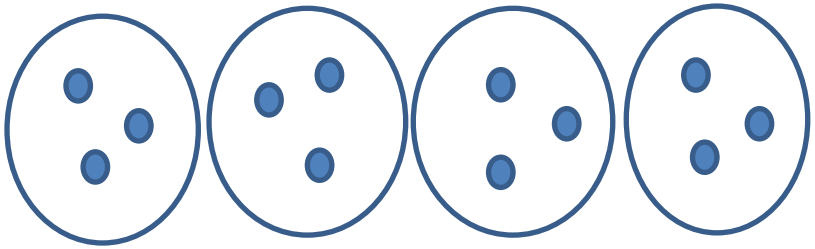
Array



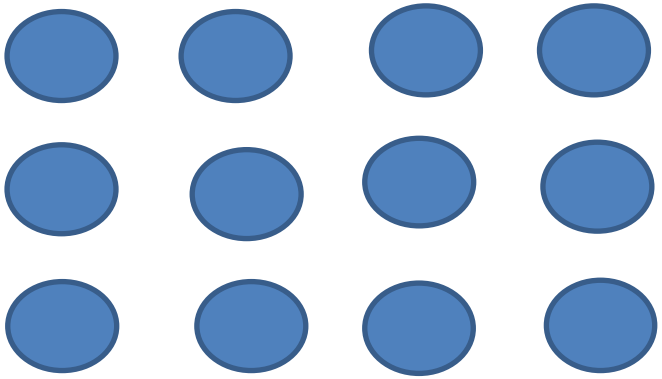
Repeated Addition

4 + 4 + 4 = 12

Groups of



Array



Repeated Addition

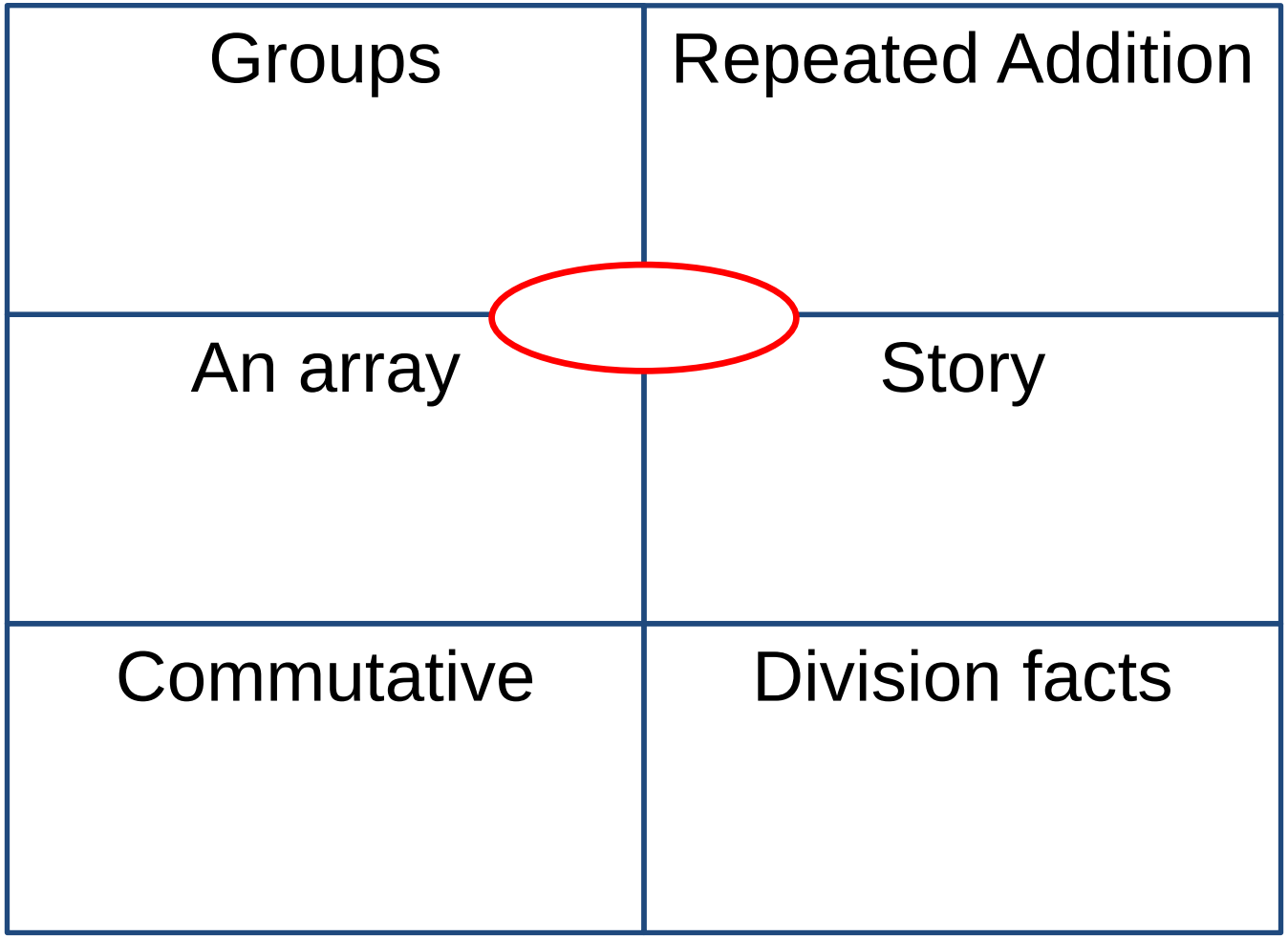
3 + 3 + 3 + 3 = 12

Your turn….

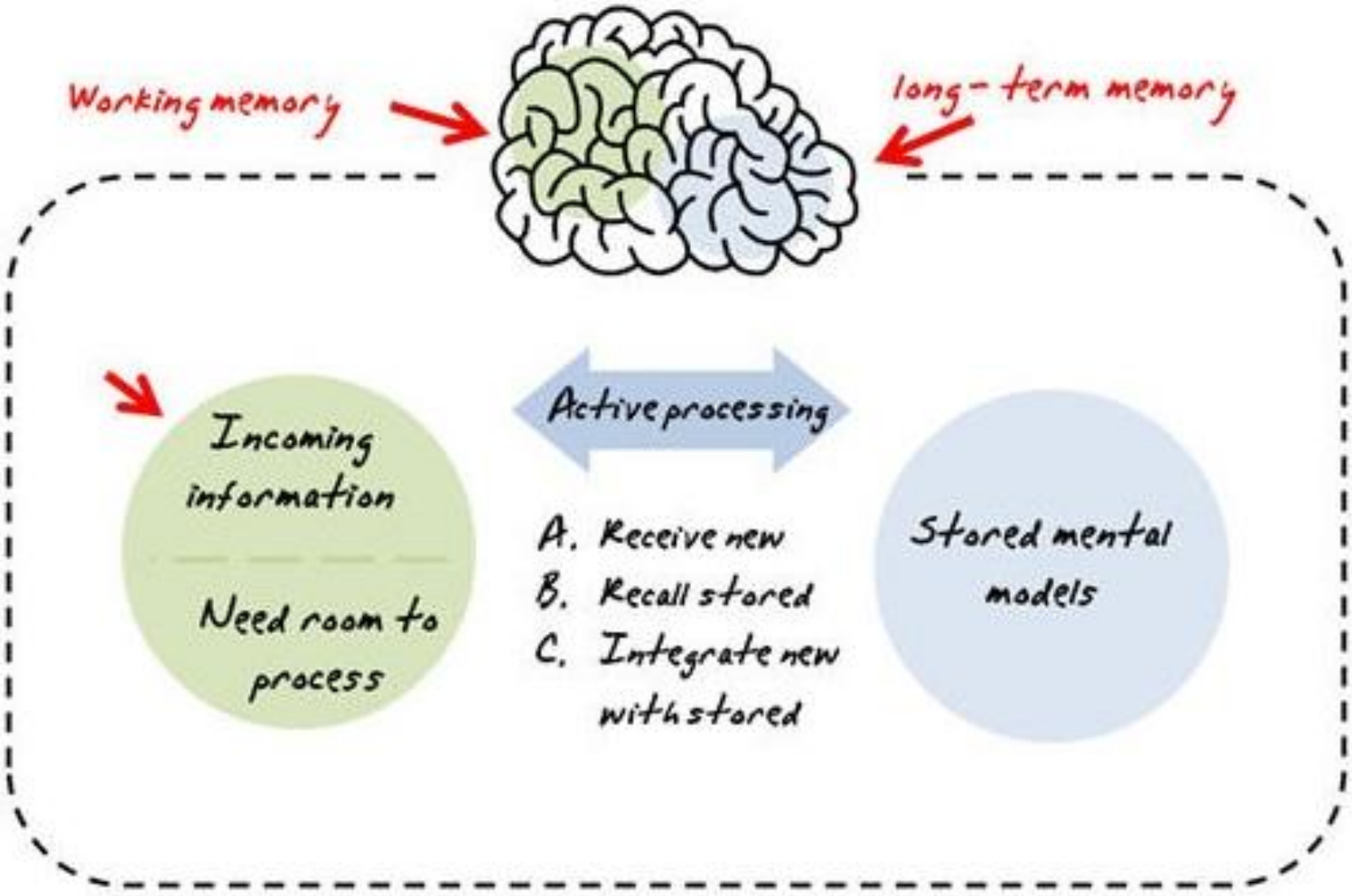
Using the white boards on your table show me 3 x 5 using,

- Groups of
- Array
- Repeated Addition

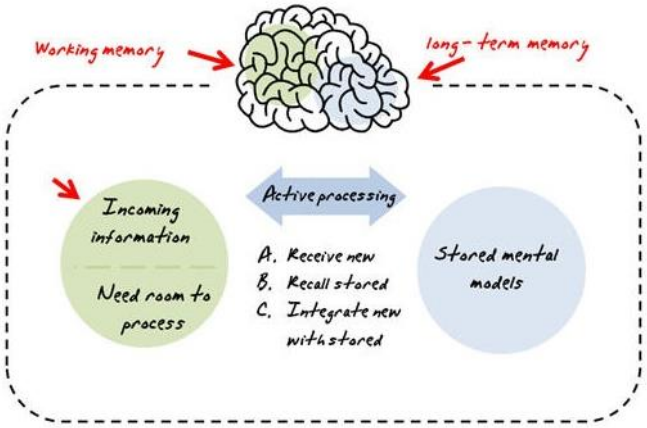
Show it me differently



Does memory still matter?



Multiplication and working memory

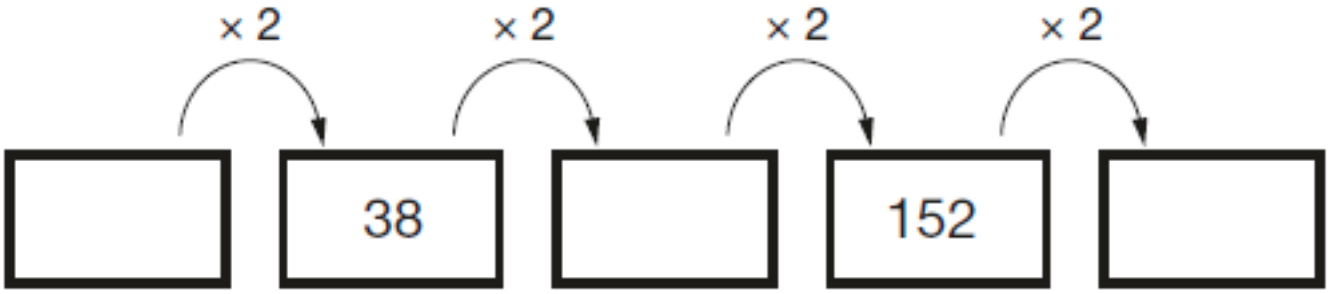


A pack of paper has 150 sheets.

4 children each take 7 sheets.

How many sheets of paper are left in the packet?

BIG IDEA 3:
Multiplication **AND division!**



BIG IDEA 3:
Multiplication **AND division!**

I'm thinking of a number…

BIG IDEA 3:
Multiplication **AND division!**

From this years Year 6 SAT Paper…

3 Write the missing numbers to make this **multiplication** grid correct.

×	□	□
9	63	54
□	56	48

Missing Number

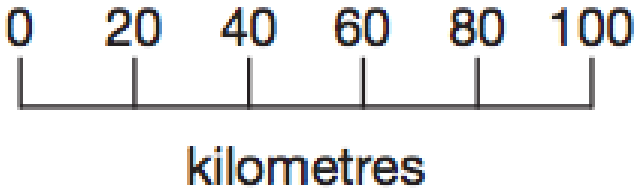
$28 = \_\_\_\_ \times 4$

$5 = \_\_\_\_ \div 4$

Can you see the relationship between multiplication and division?

From this years Year 6 SAT Paper…

21 On a map, 1cm represents 20km.



The distance between two cities is **250km**.

On the map, what is the distance between the two cities?

How multiplication interlinks with other areas of maths

In a survey of children's favourite fruit juices, these were the results.

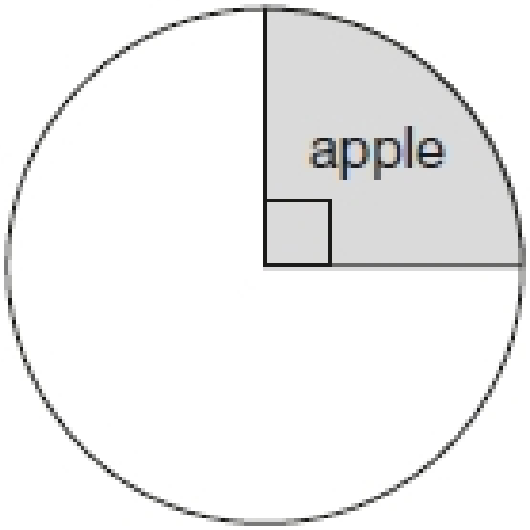
Juice	Apple	Orange	Grape	Mango
Percentage of children	25%	14%	30%	31%

(a) **20 more** children chose grape than chose apple.

How many children took part in the survey?

(b) Chen makes a pie chart to show the results.

What **angle** should he use for the children who chose **mango**?



Supporting your child

Home | Year Groups | About us | Key information | Curriculum | Community | Contact us

Maths at Gorsey Bank

'high-quality mathematics provides a foundation for understanding the world'

(Primary National Curriculum, 2014)

Gorsey Bank Primary has a passion and a dedication to enable its learners to be confident mathematicians. We want our young mathematicians to be able to solve problems, reason about mathematical concepts and apply their mathematical skills fluently in a variety of contexts.

In order to do this we teach 7 Big Ideas, which provide the foundation for mathematical knowledge and future application in real life contexts. These big ideas are:

Knowing and using number

Adding and Subtracting

Multiplying and Dividing

Using fractions

Using measures

Using geometry

Using statistics

Teaching of these Big Ideas is constantly re-visited and with each visit the children's knowledge is deepened and allows the children to take one step closer to achieving maths mastery.

Calculation Guidance

Our Calculation Guidance document is attached below and is available for download. This contains details and examples of the progression in written calculation methods for each of the four operations.

- Curriculum Maps
- Curriculum Drivers
- Curriculum Overviews
- Assessment
- English at Gorsey Bank
- Maths at Gorsey Bank
- Teaching and Learning Policy
- Extra-curricular
- Home Learning Guidance
- KiVa Anti-Bullying
- Computing and E-Safety