

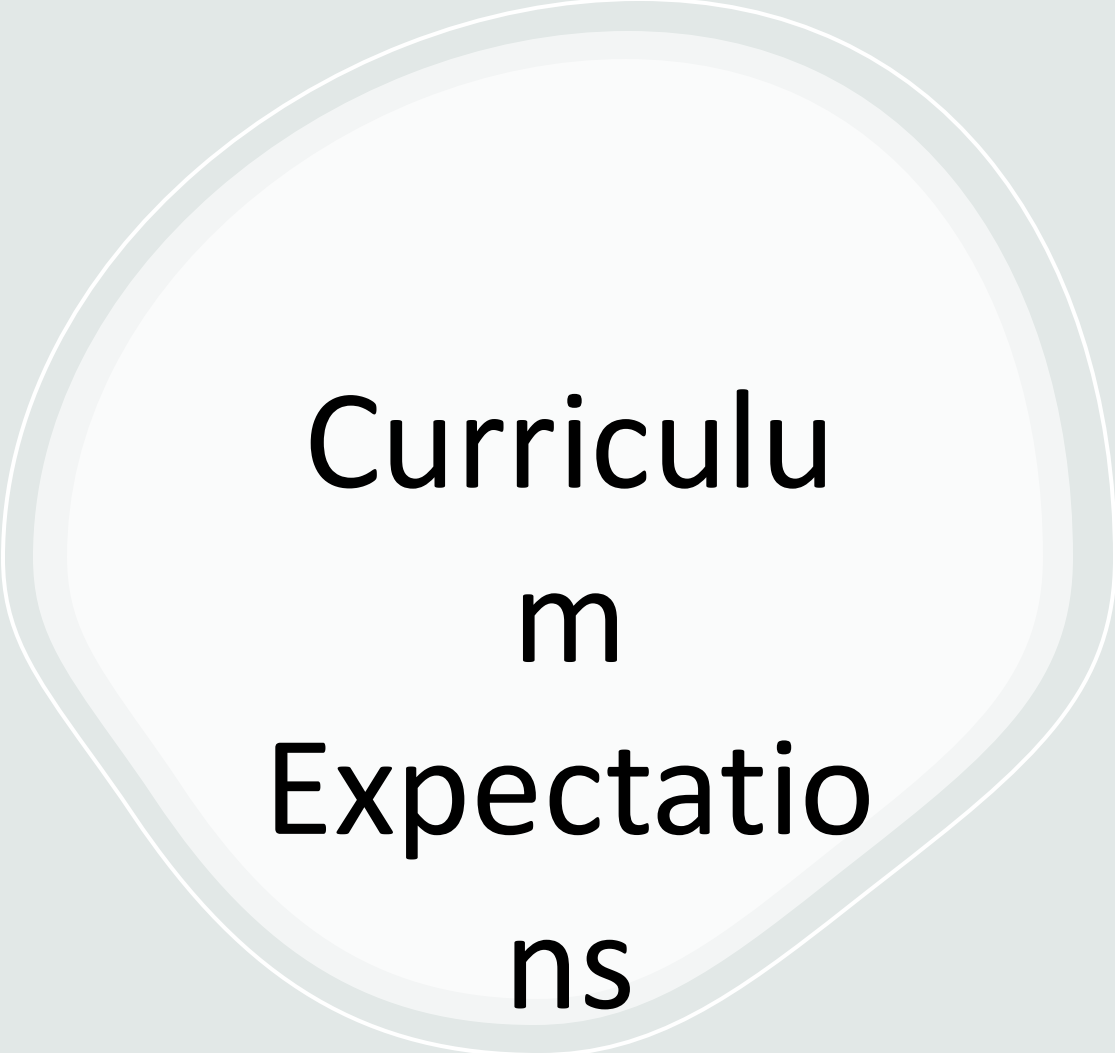
# INSPIRE



# Together



## Rockstar Day



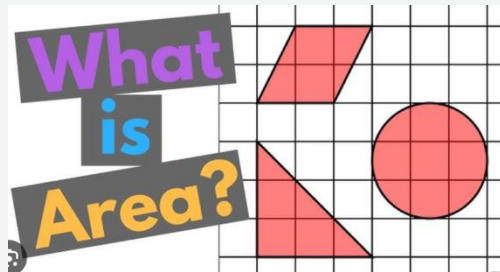
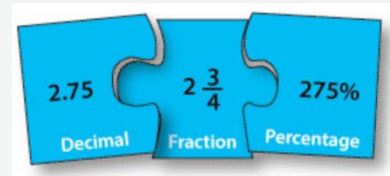
**Curriculum  
Expectations**

|               |   |
|---------------|---|
| <b>Year 1</b> | Count in multiples of 2, 5 and 10. Recall and use all doubles to 10 and corresponding halves.                                 |
| <b>Year 2</b> | Recall and use multiplication and division facts for the 2, 5 and 10 times tables including recognizing odd and even numbers. |
| <b>Year 3</b> | Recall and use multiplication and division facts for the 3, 4 and 8 times tables.   |
| <b>Year 4</b> | Recall and use multiplication and division facts for tables up to 12 x 12   |
| <b>Year 5</b> | Revision of all times tables and division facts up to 12 x 12   |
| <b>Year 6</b> | Revision of all times tables and division facts up to 12 x 12   |

# Why are times tables so important?

- Times Tables knowledge underpins much of the primary mathematics curriculum.
- Mastering times tables and having the ability to quickly recall known facts is a necessary step to approaching more

| a | b  |
|---|----|
| 1 | 4  |
| 2 | 8  |
| 3 | 12 |
| 6 | 24 |
| 9 | 36 |



# Key Stage 2 topics which require times tables.

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|         |        |              |          |        |
|---------|--------|--------------|----------|--------|
| Cube    |        | Factors      |          |        |
| Number  |        | Multiplicati | Fraction | Prime  |
| s       | Ratio  | on           | s        | Number |
|         |        | Division     | Decimal  | s      |
| Commo   |        |              | s        | Place  |
| n       | Square |              | Area     | Value  |
| Multipl | Number |              |          |        |

# How do we teach times tables at Bishop Martin?

- Explicit teaching through the White Rose (Our curriculum)
  - Regular reviews
- Multiplication lessons weekly
  - Regular practice
  - Times Tables Rockstars



# The Number Sense Approach

Pupils who find times tables difficult, tend to choose inefficient methods to retrieve facts. This increases cognitive load and slows the pace of learning.

e.g.  $8 \times 6$  (Unable to recall the fact)

Begins to skip count from zero using fingers (0, 8, 16...)



# The Number Sense Approach

- By teaching patterns and exploring the relationships between different times tables and by learning all the associated division facts, we aim to equip pupils with the most efficient methods.
- The order in which we teach times tables allows pupils to see the links between each times

|    |    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 2  | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 3  | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30  |
| 4  | 4  | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40  |
| 5  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 6  | 6  | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60  |
| 7  | 7  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70  |
| 8  | 8  | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80  |
| 9  | 9  | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90  |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

# Bridging Steps

- By using known facts as bridging steps, we can make connections in learning.
- Square numbers and the 10 times table are excellent bridging step.
- These strategies help speed up pupils recall and avoids

|    |    |    |    |    |    |     |     |     |     |
|----|----|----|----|----|----|-----|-----|-----|-----|
|    | 4  | 5  | 6  | 7  | 8  | 9   | 10  | 11  |     |
| 3  | 4  | 5  | 6  | 7  | 8  | 9   | 10  | 11  |     |
| 6  | 9  | 12 | 15 | 18 | 21 | 24  | 27  | 30  | 33  |
| 8  | 12 | 16 | 20 | 24 | 28 | 32  | 36  | 40  | 44  |
| 10 | 15 | 20 | 25 | 30 | 35 | 40  | 45  | 50  | 55  |
| 12 | 18 | 24 | 30 | 36 | 42 | 48  | 54  | 60  | 66  |
| 14 | 21 | 28 | 35 | 42 | 49 | 56  | 63  | 70  | 77  |
| 16 | 24 | 32 | 40 | 48 | 56 | 64  | 72  | 80  | 88  |
| 18 | 27 | 36 | 45 | 54 | 63 | 72  | 81  | 90  | 99  |
| 20 | 40 | 50 | 60 | 70 | 80 | 90  | 100 | 110 | 120 |
| 22 | 44 | 55 | 66 | 77 | 88 | 99  | 110 | 121 | 132 |
| 24 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |



# There are not 144 facts to

learn.

| X  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 2  | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 3  | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30  |
| 4  | 4  | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40  |
| 5  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 6  | 6  | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60  |
| 7  | 7  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70  |
| 8  | 8  | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80  |
| 9  | 9  | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90  |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

| X  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 2  | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 3  | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30  |
| 4  | 4  | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40  |
| 5  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 6  | 6  | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60  |
| 7  | 7  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70  |
| 8  | 8  | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80  |
| 9  | 9  | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90  |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

| X  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 2  | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 3  | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30  |
| 4  | 4  | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40  |
| 5  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 6  | 6  | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60  |
| 7  | 7  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70  |
| 8  | 8  | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80  |
| 9  | 9  | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90  |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

Children start with their multiples  
of 1, 2, 5 and 10.

Next are the multiplies of 3 and 6  
then 4 and 8.

|   |    |    |    |    |
|---|----|----|----|----|
|   |    |    |    |    |
| 2 | 49 | 56 | 63 | 70 |
| 8 | 56 | 64 | 72 | 80 |
| 4 | 63 | 72 | 81 | 90 |
|   |    |    |    |    |

This leaves a small number of facts that require explicit focus.

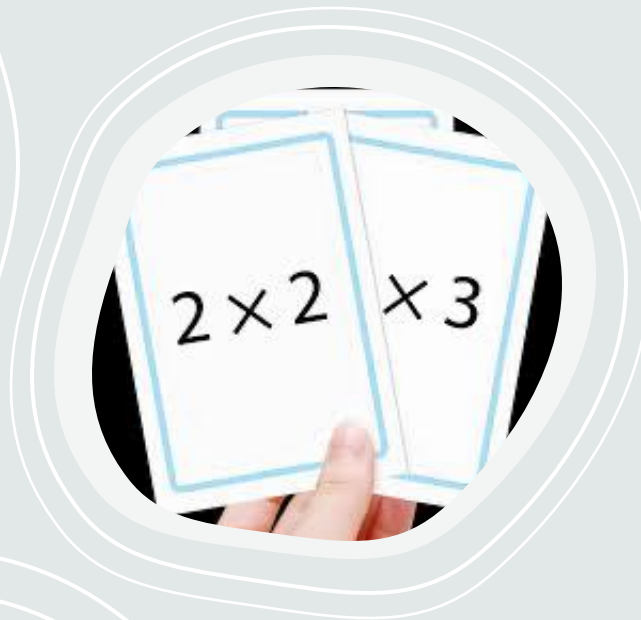


# How can you help at home?

- Regular practice using different resources – little and often. **TTRS, MyMaths, Maths Frame, Hit the Button, BBC Maths Games.**
- Make it part of your family's day or have a family competition.
- Engage with TTRS Battles



|             |             |
|-------------|-------------|
| $8 \div 8$  | $16 \div 8$ |
| $32 \div 8$ | $40 \div 8$ |
| $56 \div 8$ | $64 \div 8$ |
| $80 \div 8$ | $88 \div 8$ |



## How can you help at home?

- Practice skip counting forwards and backwards.
- Start at different points when recalling times tables.
- Mix in some division facts.
- Flash cards.
- Display facts around the house.
- Look for ways to remember the tricky ones.  $56 = 7 \times 8$



# Where to practice when on Times Tables

## Rockstar

- Gig: Assessment
- Garage: Practice Personalised tables based on knowledge
- Jamming: Timer free game with choice of tables
- Studio: 1 minute game across all tables – improves recall and gives rock status
- Festival: Take on pupils from around the world (12x12)
- Rock slam: 1 minute game allowing pupils to challenge other children in school
- Soundcheck: Similar to multiplication check
- Arena: Live classroom game adapted to each child's level

