

<https://www.topmarks.co.uk/maths-games/hit-the-button>



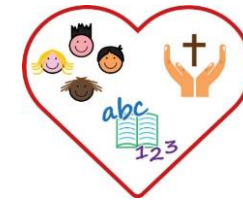
www.mathszone.co.uk



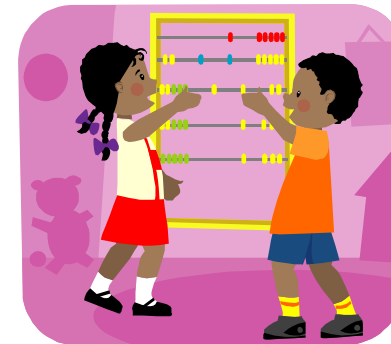
<https://www.ictgames.com/mobilePage/archeryDoubles/index.html>



St Matthew's C.E. School and Nursery



Help your child to learn maths
facts
Year 2



Parent's and carer's guide to support
children with the 'Learning by Heart'
programme
Spring 2021

'Learning by Heart'

Developing children's knowledge of mathematical facts so that they know them 'by heart' is a valuable tool to support calculation strategies, and also helps to build confidence. Regular practice is needed to secure knowledge and help children instantly recall facts.

We encourage children to think 'Can I do this in my head?' Having a range of number facts at their fingertips really empowers the children and enables them to approach tasks with confidence.

Young children need to work practically using apparatus like toys, small objects, coins, etc, this will help children to check their mental work with real materials.

Spring Term 1: Know multiplication and division facts for the 10x table

| | | | |
|----------------------|----------------------|--------------------|--------------------|
| $0 \times 10 = 0$ | $10 \times 0 = 0$ | | |
| $1 \times 10 = 10$ | $10 \times 1 = 10$ | $10 \div 10 = 1$ | $10 \div 1 = 10$ |
| $2 \times 10 = 20$ | $10 \times 2 = 20$ | $20 \div 10 = 2$ | $20 \div 2 = 10$ |
| $3 \times 10 = 30$ | $10 \times 3 = 30$ | $30 \div 10 = 3$ | $30 \div 3 = 10$ |
| $4 \times 10 = 40$ | $10 \times 4 = 40$ | $40 \div 10 = 4$ | $40 \div 4 = 10$ |
| $5 \times 10 = 50$ | $10 \times 5 = 50$ | $50 \div 10 = 5$ | $50 \div 5 = 10$ |
| $6 \times 10 = 60$ | $10 \times 6 = 60$ | $60 \div 10 = 6$ | $60 \div 6 = 10$ |
| $7 \times 10 = 70$ | $10 \times 7 = 70$ | $70 \div 10 = 7$ | $70 \div 7 = 10$ |
| $8 \times 10 = 80$ | $10 \times 8 = 80$ | $80 \div 10 = 8$ | $80 \div 8 = 10$ |
| $9 \times 10 = 90$ | $10 \times 9 = 90$ | $90 \div 10 = 9$ | $90 \div 9 = 10$ |
| $10 \times 10 = 100$ | $10 \times 10 = 100$ | $100 \div 10 = 10$ | $100 \div 10 = 10$ |
| $11 \times 10 = 110$ | $10 \times 11 = 110$ | $110 \div 10 = 11$ | $110 \div 11 = 10$ |
| $12 \times 10 = 120$ | $10 \times 12 = 120$ | $120 \div 10 = 12$ | $120 \div 12 = 10$ |

Great computer program:

<https://www.topmarks.co.uk/maths-games/hit-the-button>

Use Times Table Rock Stars on the school website.

Practical ideas to help your child

Chanting is still an effective way to learn multiplication tables. Musical times tables CDs are also quite useful – children often learn the 'rhythm and rhyme' of a song quite quickly and therefore learn to recite and recall the facts.

It is really important that children are as confident with division facts as they are with multiplication facts.

- Practice the idea of 'Family of facts' e.g. if I know that $10 \times 2 = 20$ I also know $2 \times 10 = 20$, that $20 \div 2 = 10$ and that $20 \div 10 = 2$

Vocabulary

| | | | |
|---------|-----------|-------------|--------|
| times | multiply | multiple of | |
| lots of | groups of | divided by | shared |

Spring Term 2: Know all doubles to 15 and halves of all numbers to 30

| Halves | Number | Doubles |
|----------------|--------|---------|
| $\frac{1}{2}$ | 1 | 2 |
| 1 | 2 | 4 |
| $1\frac{1}{2}$ | 3 | 6 |
| 2 | 4 | 8 |
| $2\frac{1}{2}$ | 5 | 10 |
| 3 | 6 | 12 |
| $3\frac{1}{2}$ | 7 | 14 |
| 4 | 8 | 16 |
| $4\frac{1}{2}$ | 9 | 18 |
| 5 | 10 | 20 |
| $5\frac{1}{2}$ | 11 | 22 |
| 6 | 12 | 24 |
| $6\frac{1}{2}$ | 13 | 26 |
| 7 | 14 | 28 |
| $7\frac{1}{2}$ | 15 | 30 |

Practical ideas to help your child

- Encourage children to make links:
Doubling \rightarrow multiplying by 2
Halving \rightarrow dividing by 2
- Regular 5 / 10 minutes practice, quick-fire questions. 'Speed challenge': how many doubles and halves can you get right in 3 minutes? (using kitchen timer). Progress to 'Beat your record': can you get 5 more right than yesterday?

Vocabulary

| | | | |
|----------|---------------|------------|------------|
| double | multiply by 2 | times by 2 | $\times 2$ |
| half | divide by 2 | $\div 2$ | partition |
| hundreds | tens | ones | derive |

