Key concepts and questions

What is multiplication?

- Multiplication is repeated addition.
- This is where you add the same number over and over again.

- This numberline shows 5+5+5+5+5+5=30
- It also shows 5 added 6 times, there are 6 equal groups of 5. We can write this as 6 x 5= 30 or 5 x 6=30
- Multiplication is commutative it can be done in any order
- There are 4 equal groups of 2 apples.

2 + 2 + 2 + 2 = 8
2 x 4 = 8
4 x 2 = 8

Key Vocabulary

Multiply	Lots of or groups of.
Repeated addition	Adding the same number over and over.
Equal groups	Each group has the same number of objects.
Skip counting	Counting by skipping numbers.
Times	To multiply.
Array	Objects or pictures arranged in rows and columns.
Times	To multiply.
Double	To add a number to itself, it is the same as multiplying by 2.

Representations
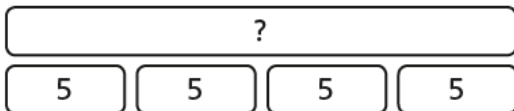
Arrays

4 x 10 = 40
10 x 4 =40

Equal Groups

5 x 3 = 15
3 x 5 = 15

Bar models

4 x 5 = 20
5 x 4 =20

Making connections

When we use the 2 and 10 times tables, the multiples are always even numbers.

1 × 2 = 2	1 × 10 = 10
2 × 2 = 4	2 × 10 = 20
3 × 2 = 6	3 × 10 = 30
4 × 2 = 8	4 × 10 = 40
5 × 2 = 10	5 × 10 = 50
6 × 2 = 12	6 × 10 = 60
7 × 2 = 14	7 × 10 = 70
8 × 2 = 16	8 × 10 = 80
9 × 2 = 18	9 × 10 = 90
10 × 2 = 20	10 × 10 = 100
11 × 2 = 22	11 × 10 = 110
12 × 2 = 24	12 × 10 = 120

In the 5 times tables, the multiples end only in 5 or 0