

# Multiplication – Year 3

## Selected National Curriculum Programme of Study Statements Pupils should be taught to:

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods.

## The Big Ideas (NCTEM)

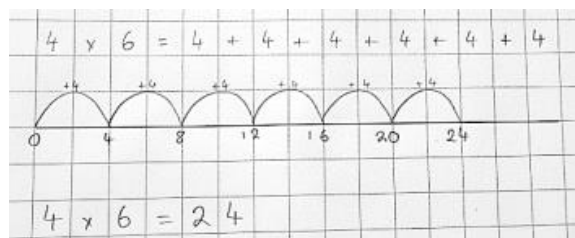
It is important for children not just to be able to chant their multiplication tables but also to understand what the facts in them mean, to be able to use these facts to figure out others and to use in problems. It is also important for children to be able to link facts within the tables (e.g.  $5 \times$  is half of  $10 \times$ ). They understand what multiplication means, see division as both grouping and sharing, and see division as the inverse of multiplication

### Stage 1

Recall and use multiplication facts for the 3, 4 and 8 multiplication table.

Unstructured number line, e.g:

$$4 \times 6 = \square$$

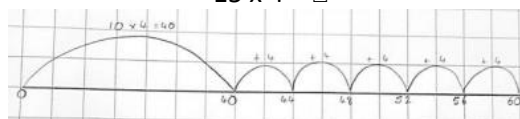


### Stage 2

Recall and use multiplication facts for the 3, 4 and 8 multiplication tables.

Using efficient jumps on a number line when working with larger calculations, e.g:

$$15 \times 4 = \square$$

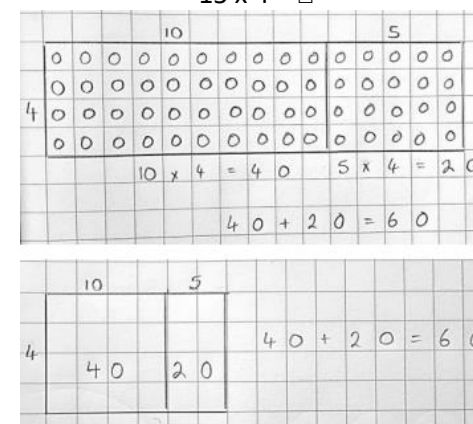


### End of year expectation

Recall and use multiplication facts for the 3, 4 and 8 multiplication tables.

Box array, e.g:

$$15 \times 4 = \square$$



# Division – Year 3

**Selected National Curriculum Programme of Study Statements Pupils should be taught to:**

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know

**The Big Ideas (NCETM)**

It is important for children not just to be able to chant their multiplication tables but also to understand what the facts in them mean, to be able to use these facts to figure out others and to use in problems. It is also important for children to be able to link facts within the tables (e.g.  $5 \times$  is half of  $10 \times$ ). They understand what multiplication means, see division as both grouping and sharing, and see division as the inverse of multiplication

## Stage 1

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication.

Number line or bar model to 'prove it'

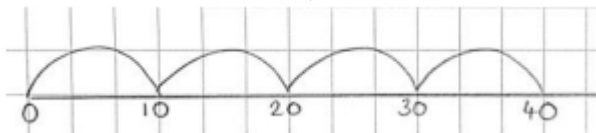
Ben has 40 cards.

He shares them equally between 4 party bags.

How many cards does he put in each bag?



"If I know that  $4 \times 10 = 40$ , then I know  $40 \div 4 = 10$ ".

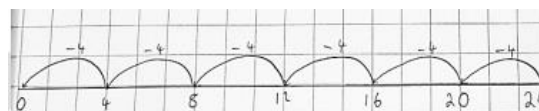


## Stage 2

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication.

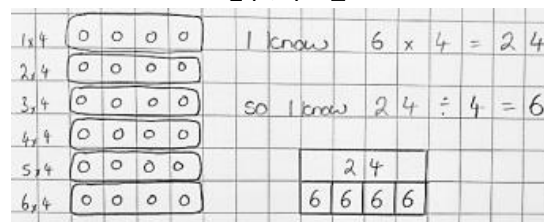
Counting back on a number line, e.g:

$$24 \div 4 = \square$$



Arrays and bar model, e.g:

$$24 \div 4 = \square$$

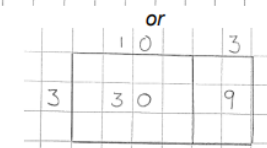
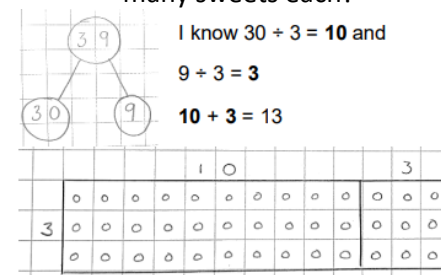


## End of year expectation

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication.

Partitioning and box arrays, e.g:

39 sweets shared between 3 children. How many sweets each?



$$39 \div 3 = 13$$

HIAS Progression in Calculation