

MULTIPLICATION

Week 25

Weekly objectives

Starter

- Count in jumps of 2, 5 and 10.

Teacher exposition and guided practice

 Develop knowledge of multiplication and the commutative law **C**

 Develop knowledge of x2, x5, x10, tables **C**

 Begin to recall the key facts for the x2, x5 and x10 tables **C**

 Apply knowledge of x2, x5 and x10 to solving word problems **C**

Notes on the teaching

The lessons at the beginning of the week provide a chance to consolidate understanding of multiplication, i.e. 3 lots of 4 is the same as $4 + 4 + 4$ or 3×4 .

Repeat some of the activities from previous lessons if the children have not fully understood the concept of multiplication.

Emphasise that multiplication may be done in any order (commutative law), e.g. 3×4 is the same as 4×3 . Multiplying by zero is not explored but it may be discussed if the need arises.

Strategies are introduced to children to find missing numbers in multiplication calculations.

When you feel the children have an understanding of the concept of multiplication, encourage them to memorise the multiplication facts for x2, x5 and x10 tables, beginning with the key facts. This will help them in the future as these tables constitute the key facts for **all** the other tables. In the last three lessons of the week there are simple games and activities that the children can repeat at other times and at home to help them to learn their tables by heart. Word problems feature in these lessons to provide opportunities for the children to apply their knowledge of multiplication facts.

Language and vocabulary

Groups of, lots of, multiplied by, times

How many groups?

Multiply/times

How many in each group?

Multiplied by

Table of two, five, ten

Starters for the week – choose from

Counting Y2 1.11

Counting Y2 1.14

Counting Y2 1.16

(Note: There is a space left in each lesson plan to write in the starter you plan to use).

WEEK 25 LESSON 1

Resources

Starter

Teacher exposition and guided practice

Part 1

Develop knowledge of multiplication and the commutative law C

- Recap on the work covered in previous lessons on multiplication.
- Display eight cubes in two groups of four.



- Ask: *What could I write to represent these groups?*
- Make a list as the children make suggestions, i.e.

$$4 + 4 = 8$$

$$2 \times 4 = 8.$$

- Rearrange the cubes to make four groups of two.



- Ask: *How can I represent this grouping?*
- Record the children's suggestions, i.e.

$$2 + 2 + 2 + 2 = 8$$

$$4 \times 2 = 8.$$

- Can the children identify the **multiplication** calculations?
- Point to $2 \times 4 = 8$.
- Say: *Two times four equals eight. Two multiplied by four is eight.*
- Point to $4 \times 2 = 8$.
- Say: *Four times two equals eight. Four multiplied by two is eight.*
- Emphasise the link between the multiplication facts and the groups of cubes.
- Can the children identify what each number in the calculation represents?
- Point to each number in turn in e.g.

$$4 \times 2 = 8.$$
- Say: *Four is the number of groups.
Two is the number in each group.
Eight is the total number of cubes.*
- Repeat the process for other pairs of multiplication facts, e.g.

$$3 \times 4 = 12, 4 \times 3 = 12 \quad 3 \times 5 = 15, 5 \times 3 = 15.$$

Cubes or other small objects

Practice and consolidation

Children work with cubes to make up their own pairs of multiplication facts.

They can draw the sets of cubes and record the multiplication sentences in their exercise books if you wish.

Part 2

Develop knowledge of multiplication and the commutative law C

- Display the first picture on Visual resource sheet 25:1.
- Ask the children how many squares are on the wardrobe.
- Point to the rows.
- Ask: *How many rows can you see?* (4). Write: 4.
How many squares in each row? (2). Write: 2.
How many squares altogether? (8). Write: 8.
- Say: *Four rows with two in each make eight in total.*
- Write: $4 \times 2 = 8$.
- Now draw attention to the columns in the wardrobe.
- Ask: *How many columns can you see?* (2). Write: 2.
How many squares in each column? (4). Write: 4.
How many squares altogether? (8). Write: 8.
- Say: *Two columns with four in each make eight in total.*
- Write: $2 \times 4 = 8$. Now write: $4 \times 2 = 2 \times 8$.
- Discuss the fact that multiplication can be done in any order and the answer will be the same. Repeat the process with other pictures from Visual resource sheet 25:1.

Y2 VR 25:1

Y2 VR 25:1

Practice and consolidation

- Show the children Core worksheet 25:1 and ask them to write two related multiplication facts for each picture.

Y2 CW 25:1

Extension / differentiation

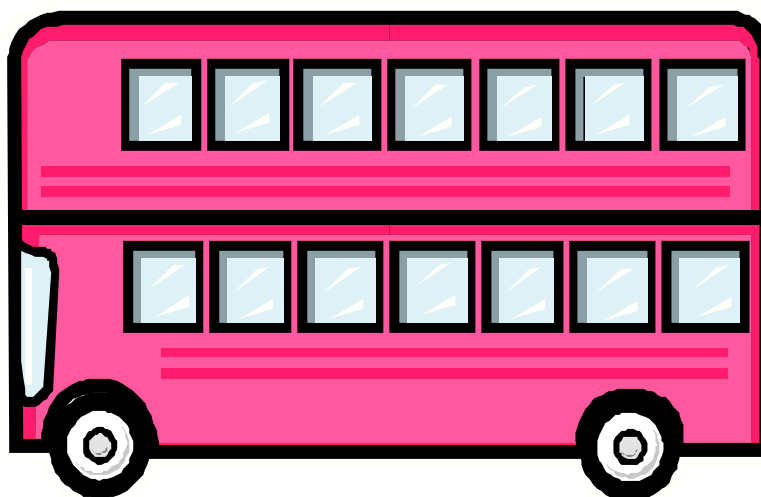
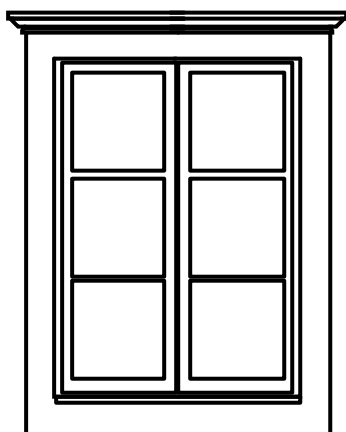
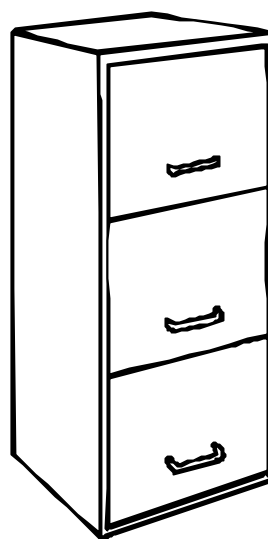
- Ask the children to complete examples with missing numbers. Explain that some examples have more than one possible answer.

$$3 \times \square = 6, \quad \square \times 6 = 18, \quad \square \times 3 = \square, \quad 4 \times \square = 24,$$

$$\square \times 2 = 6, \quad 3 \times \square = 9, \quad \square \times 7 = 14, \quad \square \times \square = 20.$$

Conclusion

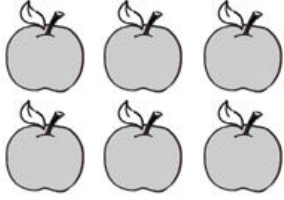
- Ensure the children know what each number in a multiplication fact represents.
- Display, e.g. three groups of four cubes.
- Write $3 \times 4 = 12$.
- Can they identify the number that represents how many groups there are, how many are in each group and how many there are altogether?



Name

Multiplication

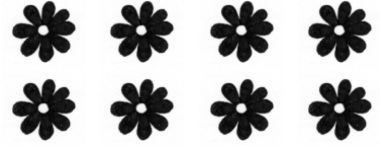
1.



2.



3.



4.



5.



6.



7.

