Multiplication facts - two times table

National Curriculum attainment targets

- Recall and use multiplication facts for the 2 multiplication table
- Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (×) and equals (=) signs

Previous related lessons

Unit 3, Week 1, Lesson 2; Unit 3, Week 1, Lessons 3 & 4; Unit 3, Week 2, Lessons 2–4; Unit 4, Week 1, Lessons 2–4

Prerequisites for learning

Pupils need to:

- recognise and write numbers from zero to 50
- be familiar with multiplication and know how to count in 'lots of'

Vocabulary

zero, nought, two, four, six ... twenty-four, twos, lots of, groups of, sets of, multiplication, multiplied by, times

Future related lessons

Unit 6, Week 1, Lessons 2 & 4; Unit 6, Week 2, Lessons 3 & 4; Unit 8, Week 1, Lessons 2–4; Unit 10, Week 1, Lessons 2 & 4; Unit 10, Week 2, Lessons 2–4; Unit 12, Week 1, Lessons 2–4

Lesson objective

the two times table

• Recall and use multiplication facts for

Success criteria

Pupils can:

- recognise and use the multiplication (×) and equals (=) signs correctly
- recognise multiplication facts for the two times table, and write the corresponding multiplication fact for a given situation



Connect

Year 2, Unit 6,

Week 1

Getting Started

- Choose an activity from Number Multiplication and division.
- Choose an activity from Fluency in Number Facts: Y1/Y2 Multiplication and division.

The word 'ones' has been used throughout this lesson when referring to the least significant digit. However, children also need to be familiar with the word 'units'.



Resources

h II.

mini whiteboard, pen and eraser (per pair)

- Display: the Number Line tool showing multiples of two. Count on in twos from zero to 20 with the class.
- Say: Remember that each of these numbers is a multiple of two. Ask: How can we tell if a number is a multiple of two?
- Encourage children to suggest that any number that has 0, 2, 4, 6 or 8 as its ones digit is a multiple of two.
- Write the multiplication sign (x) on the board and ask: Can you tell us what this sign means?
- Ask children for their suggestions and then say: This is a multiplication sign. Remember that multiplication is a quick way of adding up equal groups. We can sometimes call it 'repeated addition'. Remind the class that the multiplication sign means 'lots of', 'groups of', 'times' or 'multiplied by'.
- Display: the Number Line tool showing the numbers 0–30. Set up the frog to start on zero.
- Say: The frog is going to make jumps of two along the number line. One, two one set of two is two.
- Count: One, two... and show the frog jumping from zero to two. Place a snail 'marker' above 2 on the number line.
- Show another set of two jumps from two to four, saying: Here is another set of two. One, (point to 3), two (point to 4).
- Point to zero, then two and then four on the number line and say: **One, two two sets of two make four.** Place a snail 'marker' above 4 on the number line.
- Ask: If the frog makes another jump of two, where will I land?
- Children identify that the next number in the sequence will be six. Place a snail 'marker' above 6.



- Continue in this way to identify the multiples of two up to 20.
- Say: Work together to find the next two numbers in the pattern.
- Children write 22 and 24 on their whiteboards. Ask them to explain their reasoning, encouraging them to say 'Eleven sets of two make 22' and 'Twelve sets of two make 24'.
- All multiples of two from 2 to 24 should now be identified by having a snail 'marker' over them.
- Draw a line on the board to join the first and second markers to show one jump (or one set) of two, and write: 1 × 2. Then join the markers at 2 and 4, show jumps 0–2 and 2–4 and write: 2 × 2.
- Ask children to help to complete this sequence up to 12×2 .
 - Remind the class that the multiplication sign (x) means 'lots of' or 'times', then point and say: One times two is two, two times two is four, three times two is six and so on, up to 12 times two is 24.
 - Together with the class, say the two times table, pointing to each multiplication fact along the number line as it is said.

Individualised Learning

Refer to Activity 2 from the Learning activities on page 260.

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Activity Book 2B: – Page 5: Skateboard multiplication facts Progress Guide 2: – Support, Year 2, Unit 6, Week 1, Lesson 2: Multiply by 2

Plenary

Resources

mini whiteboard, pen and eraser (per pair)

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- Display: the Number Line tool with the markers still showing from the Teach section.
- Ask children questions relating to the two times table up to the 12th multiple, and point to the appropriate multiples on the number line.
- Write on the board: $7 = 14 \times 2$, $4 = 8 \times 2$ and $5 = 10 \times 2$.
- Point to the first set of numbers and ask children if they can suggest the correct order so that the numbers make a multiplication fact for the two times table.
- Ask children for their suggestions, and then write the correct fact, i.e. $4 \times 2 = 8$.
- Check this with the class, showing the 'jumps' on the number line.
- Ask children to work in pairs to arrange the remaining two sets of numbers into the correct order, writing the multiplication facts ($5 \times 2 = 10$ and $7 \times 2 = 14$) on their whiteboards.
- Demonstrate each fact on the number line.
- Remind children that, like addition, multiplication can be done in any order and the answer remains the same.
- Choose one of the calculations, e.g. $5 \times 2 = 10$. Using the number line, show the children that five jumps of two (5×2) and two jumps of five (2×5) both have the same answer.

Overcoming Barriers

- Some children may have difficulty in understanding that 'one times two is two' means the same as 'one group of two makes two altogether' and may find it hard to apply their understanding of counting in groups and multiples to the language and process of multiplication.
- Provide children with opportunities to work practically using resources to make up to 12 sets of two, counting and recording the totals of these, for example: three sets of two is six altogether ... five sets of two makes ten. Show how the numbers that they use are used in the multiplication facts, e.g. $3 \times 2 = 6$, $5 \times 2 = 10$.