Multiplication and Division: The Twelves

Aim:	Success Criteria:	Resources:
To recall multiplication and division facts for multiplication tables up to 12 × 12. I can multiply and divide by 12.	I can count in twelves. I can recognise multiples of 12 up to 12 × 12. I can use my knowledge of the 12 times table to find the related division facts. I can solve word problems using the 12 times tables.	**Lesson Pack** Calculators
	Key/New Words: Multiplication, multiple, dozen.	**Preparation:** Differentiated **The Twelves Activity Sheet** – 1 per child **Beat the Clock Grid** – as required **Multiplication Square** – as required

Prior Learning:	It will be helpful if children have previous experience of counting in sixes and twelves, and can recall multiplication and division facts from the 2×, 3×, 4×, 5×, 8× and 10× multiplication tables.

Learning Sequence

![icon]	**Beat the Clock:** Choose appropriate columns for each child to complete on **Beat the Clock Grid.** Set the timer for five minutes. If the children finish before the five minutes is up, then they should shout 'finished' and write their finishing time on the top of the sheet. When their work is marked, they will have a score to write at the top also. If children didn't get all the answers correct, that should be their focus next time, even if it takes them the full five minutes. If they got all answers correct, next time they should try to improve their time or choose a different multiplication table.	![egg]
![icon]	**Let's Count in Twelves:** Count in twelves using the counting stick. Ask the children which values they can work out. 10 × 12 = 120, halve this for 5 × 12. Double 12 for 2 × 12. Subtract 12 from 10 × 12 for 9 × 12. What would 11 × 12 and 12 × 12 be? Work these out by counting on.	![egg]
![icon]	**Twelve:** Why is the number 12 special? Have the children heard of a 'dozen'? Explain the Latin origin of the word and discuss things that are still sold in dozens. The number 12 is significant when discussing time; there are 12 numbers on an analogue clock and twelve months in a year. There are 12 zodiac signs. There are 12 inches in a foot. There are also 12 days of Christmas. Can children think of anything else that comes in twelves?	![egg]
![icon]	**The Twelves Activities:** Children complete differentiated **The Twelves Activity Sheets**, using their 12 times table facts to solve multiplication and division problems.	![egg]
	★ Children write out their 12 times table and check it using a **Multiplication Square**. They then use multiplication and division facts from the twelve times table to solve missing number questions and simple word problems.	★★ The children practise rapid recall of 12 times table facts in pairs. They could check answers with a **Multiplication Square**. They then answer mixed multiplication and division questions to reinforce 12 times table facts up to 12 × 12. Next, they think about things that come in twelves and use their ideas to write word problems.	★★★ The children practise rapid recall of multiples of 12 (up to 20 × 12) in pairs. They could check answers with a calculator. They then answer mixed multiplication and division questions using multiples of 12. Next, they think about things that come in twelves and use their ideas to write word problems.
![Whole Class icon]	**Twelve Times Table Test:** Children practise recalling the facts for the 12 times table, working as a class to complete the Times Table Test on the **Lesson Presentation.**	![egg]

Masterit
    Findit: Practise speedy recall of 12 times table facts using the
    Skipit: Recite the 12 times table whilst skipping: one twelve is twelve; two twelves are twenty-four etc. Can they keep up with the rope?
    Playit: Children play **Bamzooki Multiplication and Division Game** by BBC to practise finding multiples beyond their multiplication tables knowledge.