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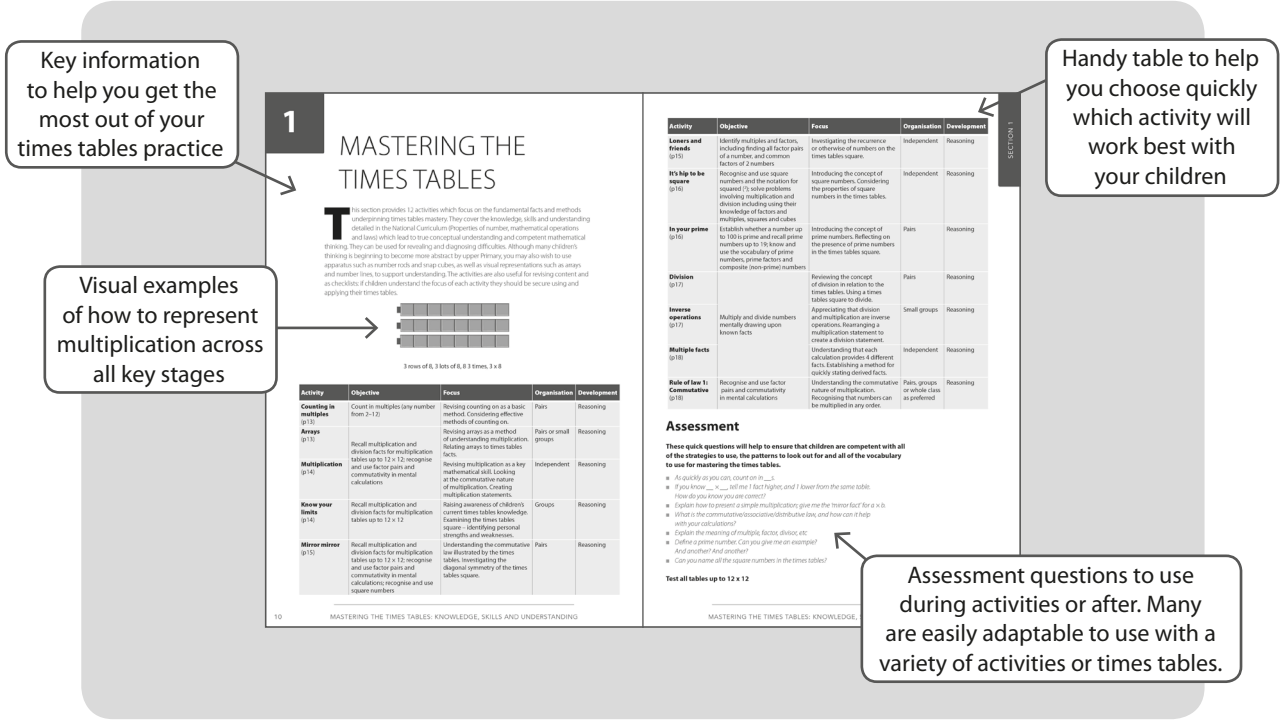
The components

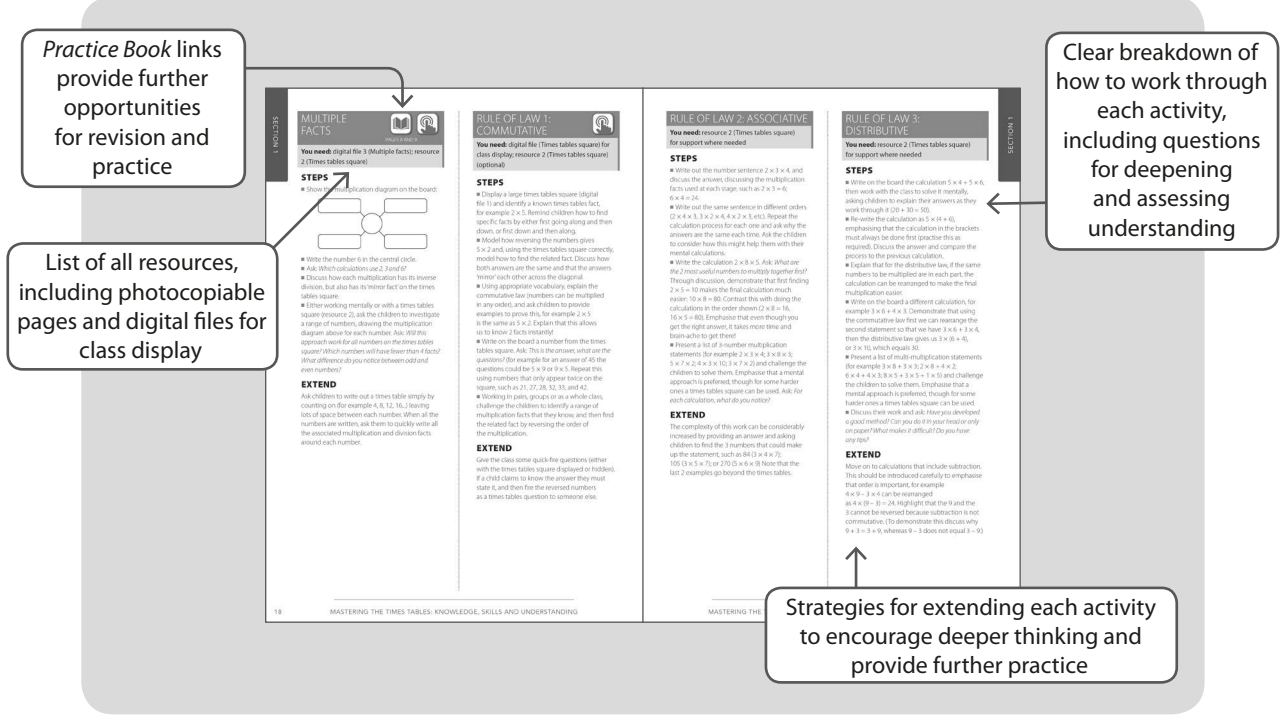
Teacher's Book

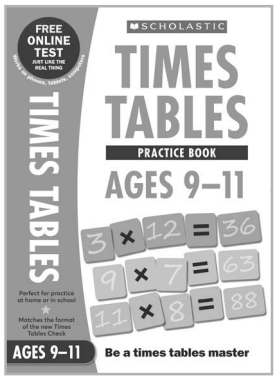
The *Scholastic Times Tables Teacher's Book* provides you with a wealth of activities to help your children master the times tables. Work through the activities one by one or dip in and out – whatever works best for you and your class!

Choose from a bank of activities which promote problem-solving, reasoning and fluency. Aim to use a range of activities so that children have an opportunity to approach the times tables in a variety of ways.

The activities use a wide range of resources: some rely on using concrete resources, others have a whiteboard component to them, and others may require a photocopiable resource which can be downloaded from www.scholastic.co.uk/timestables-resources. Finally, some require no resources at all.







The *Practice Book*

The *Scholastic Times Tables Practice Book* has been designed to provide children with further opportunities for revision and practice of the times tables.

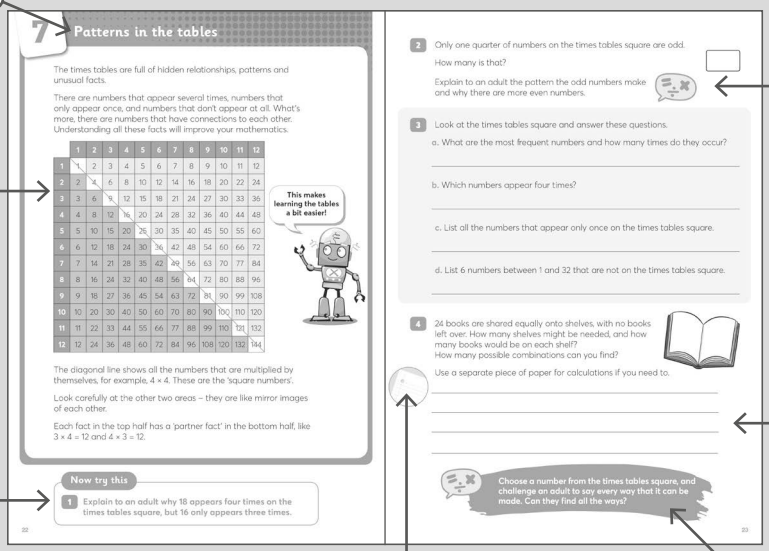
Use it alongside the *Teacher's Book*, as part of general class practice or for home learning. Look for the *Practice Book* icon in the 'You will need' section at the start of an activity for activities which relate directly to the *Times Tables Practice Book*.

Detailed answers are included at the back of the book.

Each unit focuses on a different topic or times table.

This section provides children with the opportunity to revisit what they have learned with visual examples to support their understanding.

Children should work through the questions in order for varied practice which builds in difficulty.



There are opportunities throughout for children to explain their reasoning aloud in pairs if appropriate or with an adult.

Space is provided for children to write their answers or share their reasoning.

Encourage children to use a separate piece of paper if they need to.

Using easy-to-access resources, children gain further practice at home or away from their desks.

Digital

Additional materials for this book can be found online at the following address: **www.scholastic.co.uk/timestables-resources** these include:

- resource pages including games and worksheets
- supporting PowerPoint digital files for display during your classroom teaching
- quick-fire written tests for additional practice or homework. These tests have three levels of differentiation and are aligned with a unit or group of units from the *Teacher's Book*. Assign one of the three sections at a time and progress through them in order.

If resource pages or digital files are required, they will be listed in the 'You will need' section at the start of an activity. Look for the digital icon for activities using digital content.

1

MASTERING THE TIMES TABLES

This section provides 12 activities which focus on the fundamental facts and methods underpinning times tables mastery. They cover the knowledge, skills and understanding detailed in the National Curriculum (Properties of number, mathematical operations and laws) which lead to true conceptual understanding and competent mathematical thinking. They can be used for revealing and diagnosing difficulties. Although many children's thinking is beginning to become more abstract by upper Primary, you may also wish to use apparatus such as number rods and snap cubes, as well as visual representations such as arrays and number lines, to support understanding. The activities are also useful for revising content and as checklists: if children understand the focus of each activity they should be secure using and applying their times tables.

3 rows of 8, 3 lots of 8, 8 3 times, 3 x 8

Activity	Objective	Focus	Organisation	Development
Counting in multiples (p13)	Count in multiples (any number from 2–12)	Revising counting on as a basic method. Considering effective methods of counting on.	Pairs	Reasoning
Arrays (p13)	Recall multiplication and division facts for multiplication tables up to 12 × 12; recognise and use factor pairs and commutativity in mental calculations	Revising arrays as a method of understanding multiplication. Relating arrays to times tables facts.	Pairs or small groups	Reasoning
Multiplication (p14)		Revising multiplication as a key mathematical skill. Looking at the commutative nature of multiplication. Creating multiplication statements.	Independent	Reasoning
Know your limits (p14)	Recall multiplication and division facts for multiplication tables up to 12 × 12	Raising awareness of children's current times tables knowledge. Examining the times tables square – identifying personal strengths and weaknesses.	Groups	Reasoning
Mirror mirror (p15)	Recall multiplication and division facts for multiplication tables up to 12 × 12; recognise and use factor pairs and commutativity in mental calculations; recognise and use square numbers	Understanding the commutative law illustrated by the times tables. Investigating the diagonal symmetry of the times tables square.	Pairs	Reasoning

8-TIMES TABLE: SPIDERAMA

You need: digital file 10 (Spiderama); digital file 11 (Spider legs)

STEPS

- Display digital file 10 (Spiderama). Point out that all spiders have 8 legs, and so we have written a large 8 inside the body.
- Explain the meaning of 'arachnophobia' (fear of spiders), and explain that a young person who has this wants to persuade their parents that they need to act. Telling their parents that there are 3 spiders in their room doesn't sound very dramatic, but saying that there are 24 creepy, hairy, spider legs walking towards them has more impact!
- So, the child wants to keep a legs log. They will count the number of spiders in the house each day then work out how many legs this is.
- Create a chart like the one below, or use digital file 11 (Spider legs) adding as many facts as desired. Challenge the children to copy and complete it. Try doing a week's worth, and ask for total numbers of spiders and legs.

Day	Spiders spotted	Legs
1	6	48
2	3	

- In reviewing work, ask: *Could you use earlier answers to help with later ones? Which facts did you find harder to recall?*

EXTEND

Repeat the above activity, but for larger numbers of spiders between 13 and 24. Demonstrate how, for larger numbers of spiders, the number can be split to enable the use of times tables facts, for example 18 spiders is 2 lots of 9 spiders, which is 72 + 72 = 144 legs).

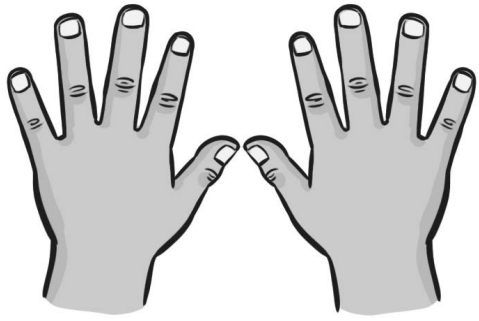
Test the 5-, 6-, 7- and 8-times tables

9-TIMES TABLE: GET HANDY

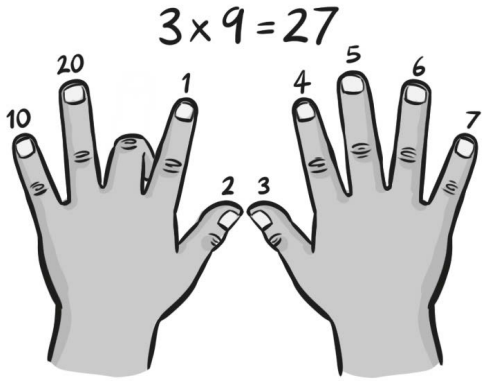
You need: no resources needed

STEPS

- Demonstrate the method of using our hands to find 9-times table facts up to 90. Hold the hands together in front of you, palms down.



- Show how by dropping a finger, 9-times table facts are revealed. So, dropping the middle finger of the left hand – the third digit along from the left – represents 3 9s. The fingers to the left represent 10s, and those to the right represent 1s.



- Give the children time to practise looking at their hands and moving fingers while stating times tables facts from 1 × 9 = 9 to 10 × 9 = 90.
- Progress to challenging children to recite the 9-times table without looking at their hands (they can still move them under the desk if it helps).
- Conclude by calling out random facts from the table, challenging the class to make each fact with their hand, and to state it followed by 2 other connected facts.

EXTEND

Challenge the children, in pairs, to produce a written or recorded explanation of the method to try on an adult at home. Given that the 'hands' method only works up to 90, be sure to practise recital up to 12 × 9 = 108.