

# Bond

No.1 for exam success

## 11+ Maths

Multiple-choice Test Papers

**Pack 2**

**The secrets of 11+ success**

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## The secrets of 11<sup>+</sup> success in maths

### How 11<sup>+</sup> exams work

Approaching 11<sup>+</sup> exams for the first time can be a daunting experience. They are unlike any other school exam your child will take for several reasons:

- **There's no pass mark.** Success or failure depends on your child's performance relative to the performance of other children sitting the test. The pass mark can vary from year to year and from school to school.
- **They can't be retaken.** There is no second chance with the 11<sup>+</sup> so it all rests on your child's performance on the day.
- **There's no national syllabus.** 11<sup>+</sup> exams vary from area to area, and often from town to town. Often schools are extremely unwilling to give out any information about the content of the exams.
- **It's often impossible to see past papers.** This varies from area to area but the actual papers usually remain a closely guarded secret.
- **Selective schools give out very little advice.** It is common for selective schools to give out only the vaguest advice to parents when approaching the exam and to discourage too much practice.

All these factors make preparing a child for the 11<sup>+</sup> a mysterious and often stressful process for parent and child alike. The most common question parents ask about using practice tests is 'What percentage does my child need to get to pass?' Unfortunately there's no easy answer to this but we can give guidance. (See 'What a score means and how to boost it' on page 3.) The second most common question is 'How can I help them improve?' The following sections give our tutors' top tips to help your child through the 11<sup>+</sup> process and boost their scores. We strongly recommend that you think about purchasing at least two other essential Bond resources.

- **The Parents' Guide to the 11<sup>+</sup>.** The essential manual that provides a simple and practical 4-step system for making the most of 11<sup>+</sup> preparation.
- **How To Do 11<sup>+</sup> Maths.** All the question types in these tests are fully explained in this guide to 11<sup>+</sup> maths.

### Tutors' top tips for 11<sup>+</sup> success

- **Find out what exams your child will sit but don't agonise over 'school gate gossip'.** Find out what the exams are and get the advice that the secondary schools give out, but don't waste your energy following rumours about what the pass mark is or exactly which questions will come up. It's better to spend your time helping your child.
- **It's always worth practising.** Whatever secondary schools say, it's worth it. Children can improve their performance by 10–15 per cent by careful practice.
- **Start early if you can, but don't worry if you haven't.** Ideally it is best to start preparation for the 11<sup>+</sup> exam at least one year ahead. However, don't panic if you don't have that much time; even a few weeks can make a difference.
- **Make a simple action plan.** However long you've got, have a clear, simple strategy. There are two key principles:
  - start from your child's present level of knowledge
  - help your child to learn from their mistakes.

*The Parents' Guide to the 11<sup>+</sup>* provides a set of ready-made action plans you can use, whether you have two years or just a few weeks to go.

- **Motivation, motivation, motivation!** You have to take your child with you on this journey. A simple rewards system can be highly effective. *The Parents' Guide to the 11<sup>+</sup>* can provide a tried and tested motivational system if you want one.
- **Don't just practise.** There's a tendency to think that just practising one paper after another will do the trick. It's far more important to learn from mistakes. Going through the paper afterwards with your child and filling in the gaps in learning is crucial.
- **Stay calm, manage stress, build confidence.** Don't talk about the 11<sup>+</sup> all the time. Use breaks, treats and bite-sized learning sessions to keep things fresh. Be realistic about your child's potential. Pass or fail, it's important to try to make this process a positive one.



- **Manage the exam day.** Make sure that you have everything ready for the day, that your child tries to get a good night's sleep, eats breakfast and gets there in good time.

## How and when to use these tests

- **It's best to use them as real exam practice.** These tests are mock exams. They are set out in a style as close as possible to the real thing – though the format will vary from area to area. It is best to use them as authentic exam experience rather than for general practice, and to use them quite close to the exam. Follow the instructions in the answers booklet on timings and administering the tests.

## What's in an 11+ maths exam?

Unlike reasoning exams, for which your child has to practise special skills, maths for 11+ is just a continuation of the work your child does every day at school. Some of the questions may be a little harder, but they will be testing the same skills and content.


Although the content of a maths exam may differ from one region to the next, a paper will usually last from 45 minutes to one hour and will test your child's ability to:

- think and calculate quickly
- apply times tables knowledge
- apply the four number operations (+ –  $\times$   $\div$ )
- understand key aspects of number relationships, measurement, mental arithmetic, geometry and data handling.

For more details of the maths topics involved, see 'The maths your child needs for 11+ exams' on page 4 and *How To Do 11+ Maths*.

## What a score means and how to boost it

For the reasons given above, it is impossible to say that a certain score can guarantee a pass in the actual exams. However, we suggest that a score of more than 85% (43/50) would be a standard to aim at, without using this as a benchmark to frighten your child with. The best motivator is to see the scores going up. Here are some tried and tested tips for improvement:

- **Go over any incorrect answers.** Always go over incorrect answers so that your child can see what went wrong. To help with this process, each answer in these test papers is explained and also has an individual tutorial reference icon: . This icon links to the relevant section in *How To Do 11+ Maths* so your child can read more about the related topic and complete more practice questions if needed.
- **Use the Next Steps Planner inside the back cover.** This will provide a plan for what to do next when a test has been marked.
- **Improve basic exam technique.** Work on improving speed, working efficiently – coming back to trickier questions later – and pacing over the 50 minutes.
- **Improve basic maths.** Ensure the foundations are strong enough. Use the checklist in the section below to help.
- **Avoid the two most common maths errors.** These are:
  - not reading the question correctly
  - making a silly error in a question you know perfectly well how to answer.

Identify the 'silly mistakes' with your child. Get them to ring these mistakes themselves in pen so that they really see them.

- **Target what you don't know** – the secret is not to keep blindly practising but relentlessly to target the maths your child doesn't know. This is where crucial marks can be picked up.

## The maths your child needs for 11+ exams

11+ maths will draw on a number of key areas in line with the National Curriculum and the primary framework for (literacy and) mathematics. These can be broken down into a number of sub-topics as follows:

All these areas will be covered in these papers, but your child may be weaker on some than others. The tutors' answer explanations will help your child see how each question should be solved. For more detailed explanations of strategies and further practice of particular sub-topics, follow the tutorial links to the relevant sections in *How To Do 11+ Maths*.

Number	Fractions and decimals	Handling data	Shape and space	Measurement
1 Place value	10 Fractions	14 Organising and comparing information	17 2-D shapes: circles, angles and bearings	25 Metric and imperial measures
2 Addition and subtraction problems	11 Decimal fractions	15 Mean, median, mode and range	18 2-D shapes: triangles	26 Reading scales
3 Multiplication and division problems	12 Percentages	16 Probability	19 2-D shapes: quadrilaterals and polygons	27 Time and timetables
4 Mixed or several-step problems	13 Ratio and proportion		20 Perimeter and area	
5 Factors and multiples			21 3-D shapes	
6 Special numbers			22 Volume and capacity	
7 Sequences			23 Transformations	
8 Equations and algebra			24 Symmetry	
9 Function machines				

## Basic skills checklist

All maths topics are underpinned by a set of basic skills. We suggest that it is worthwhile reinforcing these if your child is having problems. See below for suggestions:

- 1 Check number bonds to twenty. Can they easily add and subtract numbers with answers up to 20?
- 2 Support times tables facts. For the purposes of 11+ maths it is crucial that children are fluent in their tables up to  $12 \times 12$ .
- 3 Help your child with place value. Can they read whole numbers to a million and multiply or divide any whole number by 10 quickly?
- 4 Help your child with doubling and halving. Your child should be able to double all numbers to 50 and halve all numbers to 100 quickly.
- 5 Revise the four number operations:  $+$   $-$   $\times$   $\div$ .
- 6 Check units of measurement. Both metric and imperial for key lengths, weights and capacities.

For more details on how to support these basic skills, see *How To Do 11+ Maths* pages 1–6.