

Welcome to this book

This book will help you revise for the national tests in maths at the end of Key Stage 2.

Red headings show you which topic is covered.

This tells you which pages can help you with this topic.

Illustrations and diagrams help you to understand the topic.

Word problems

When faced with a problem:

- read it carefully
- write down important numbers
- decide how to work it out
- get an approximate answer, work it out, then check.

36 people were on the bus. At the bus stop 17 got off but 12 more got on. How many people were on the bus now?

Important numbers: 36, 17, 12
Subtract 17 from 36, and then add 12
Work it out: $36 - 17 = 19$, $19 + 12 = 31$
Check against approximate answer.
Answer 31



Approximation: $40 - 20 + 10 = 30$

Watch the units

Make sure all the numbers are in the same units before you **calculate**. Be particularly careful with pounds and pence – you shouldn't write both £ and p in your answers (for example, £5.87p). Don't mix metres and centimetres, or litres and millilitres.

Lucy pays £7.86 for 6 cupcakes to give to her friends. How much would she have paid for 27 cupcakes to give to the whole class?

Divide £7.86 by 6 to find the price of each cake.
Work it out: $786 \div 6 = 131$ p per cake
Multiply 131p by 27 to find the cost of 27 cakes.
Work it out: $131 \times 27 = 3537$ p or £35.37
Check against approximate answer.
Answer £35.37



Approximation: $130 \times 30 = 3900$ p or £39

Sunil buys a drink for 35p, crisps for 38p and a sandwich for £1.45. He buys the same drink, crisps and sandwich every day for 3 days. How much does he spend?

In one day, he spends $35\text{p} + 38\text{p} + 145\text{p} = 218\text{p}$
Multiply 218p by 3 to find the cost over 3 days. Work it out: $218 \times 3 = 654$ p or £6.54
Check against approximate answer.
Answer £6.54



Approximation: $40\text{p} + 40\text{p} + 150\text{p} = 230\text{p}$, $230\text{p} \times 3 = 690\text{p}$ or £6.90

Test yourself

1. Laptops are usually £392 each. In the sale there is a discount of £54 on each laptop. What is the new price?
2. 27 people were on the bus. When it stopped, 18 more got on and 23 got off. How many are on the bus now?
3. Tom buys a hot chocolate for £1.12, adds peppermint syrup for 39p and marshmallows for 22p. How much does he spend?

Remember

Make sure the numbers are in the same units before you calculate.

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Remainders in problem solving

When you are solving a problem that involves division, watch out for remainders. Remainders happen because numbers are not always exactly divisible by other numbers.

- All whole numbers are exactly divisible by 1.
- All even numbers are exactly divisible by 2.
(All odd numbers will have a remainder of 1 when divided by 2.)
- All whole numbers that end in 0 are exactly divisible by 10.
- All whole numbers that end in 0 or 5 are exactly divisible by 5.

See pages 36 and 37 for more information on dividing without remainders.

How many 4s in 46?

Calculate $46 \div 4$, and the answer is 11 remainder 2.

Answer 11 r2

46 children are going on a trip. Each car carries four children. How many cars are needed?

Which is right?

11 r2

11

12

Although there will be only two children in the 12th car, that car is still needed.

Answer 12



46 photos are in a photo album, with four on each page. How many pages are full?

Which is right?

11 r2

11

12

Only 11 pages are full, because $11 \times 4 = 44$, with two spare photos.

Answer 11



Test yourself

1. A postman has 356 letters to deliver. He can fit 100 letters in his bag. How many trips will he have to make?
2. The football club has £60 to buy footballs. Each football costs £8. How many can it buy?
3. I have 160 biscuits to put in boxes. One box holds 35 biscuits.
 - a How many boxes can I fill?
 - b How many boxes will I need?

Remember

Watch out for remainders and think carefully about what they mean. Sometimes you may need to round up or down.

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Find out about words in **bold** by turning to the Glossary.

Test yourself questions to check your understanding (answers are at the back of the book).

Remember boxes summarise important information.

How to revise

- Turn to the topic and read about it.
- Read the Remember box and then cover it up. Can you remember what it says?
- Read the Test yourself questions and write your answers on a piece of paper.
- Check your answers against the right answers at the back of the book.
- If you got any answers wrong, read the topic again, then have another go at the questions.
- If you got the answers right – well done! Move on to the next topic.
- Once you have worked through this revision guide, move on to the **Key Stage 2 Maths Practice Papers**.

Tips for tests

- Always read the question carefully before you answer it.
- Have a go at as many questions as you can. If there is a question you really can't answer, just move on to the next one. You can always come back to it if you have time.
- Always approximate before you calculate. Check your calculations by doing them a different way, using an inverse operation and by using your approximation.
- If you have time at the end, check through your work.