

# Year 2 Problem-Solving and Games: A Step-by-Step Guide for Parents

This step-by-step explanation to problem-solving will help you support your child's learning at home. The subject is broken down into manageable chunks, providing you with a simple guide to follow when problem-solving, either to support your child's homework or if you decide to give you child some extra support. In this guide, you will find a step that matches your child's level of understanding and then have suggested activities which can be used to support that step.

Within **this area of the website**, you will find a selection of resources intended to help your child learn about each step of this guide. Each step also contains a keyword or phrase that you can use to search the Twinkl site for more resources and activities, designed to support your child in achieving that stage. Simply type the keyword or phrase into the search bar and press enter to explore together.



We hope you find the information on our website and resources useful. The contents of this resource are for general, informational purposes only. This guide is intended to offer parents general guidance on what subject areas tend to be covered in their child's year group and where they could support their children at home. However, please be aware that every child is different and information can quickly become out of date. There are some subject areas that we have intentionally not covered due to the nature of how they are taught or because a trained professional needs to teach these areas. We try to ensure that the information in our resources is correct but every school teaches the national curriculum in its own way. If you would like further guidance or are unsure in any way, we recommend that you speak to your child's teacher or another suitably qualified professional.

# Problem-Solving and Games

## Do Maths Games Help Children with Year 2 SATs?

Taking an assessment can be a stressful event for young children. Although teachers work hard to make assessments run smoothly, the process can raise anxiety and have a negative impact on some children. Maths games are great for overcoming anxiety, especially when helping your child at home. Maths games are great for providing repeated opportunities to practise all calculations, including times tables, which often become more of a focus in year 2. When playing games, the emphasis is on having fun and scoring points, meaning that children focus less on getting things marked 'wrong'. This positive approach can help to boost children's confidence and self-esteem.

## How Do I Support My Child with Word Problems?

Young children, especially those aged under eight, are still working practically at school and although maths increasingly uses numbers and traditional symbols, children can still use practical techniques to help with word problems. Either drawing objects to complete a calculation or using counters, pom-poms or blobs of modelling clay can help children to understand how to count up, subtract or, when placed in rows, how to multiply. To multiply three by five, make three rows of five; you can try counting the total or counting in fives to get to the answer of fifteen. Letting your child use drawings or objects to complete word problems gives them a real strategy that they can use over and over again.

## What Is a Word Problem?

In the English national curriculum, word problems are questions in which an everyday scenario is used to describe a maths calculation. It could be making a cake, buying sweets or sharing a sack of footballs. Children need to decide which operation to use (addition, subtraction, multiplication or division) and then need to work out the answer. Children are encouraged to use practical equipment, especially at key stage 1, to work towards an answer. Even in an assessment, they can draw simple symbols to represent the objects and work out the calculation practically.

### Bake and Measure

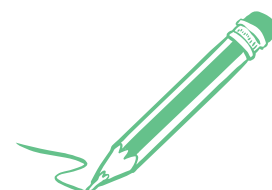
Bake cakes together. Talk about the weight of flour, the volume of milk, the number of eggs, the amount of time the cakes will bake for, how hot the oven will be. If your child is practising doubling, get them to double any simple amounts in your recipe so you can make twice as much!

### Shop and Calculate

While shopping, encourage your child to add up items of shopping and to calculate change. If you're doing a big shop, then why not estimate to the nearest pound and use a scan-and-shop device so your child can estimate each new total and then scan to check their answer.

### Bake a Shape

If your child finds remembering shape names difficult, try using leftover biscuit dough or pastry to bake squares, rectangles, circles, triangles, pentagons, hexagons and octagons. Ask your child to use the end of a teaspoon to write the word in the pastry or dough.



## Step 1

### Board Games

It's a great idea to play maths board games throughout your child's year 2 journey. Children need to keep reviewing the work from year 1 as they move on to develop an understanding of multiplication and division in year 2. Maths games offer a great way of revising, reviewing and practising. Using games helps to make maths a part of ordinary home life, rather than a formal, written homework task. This pack will review maths from the basics of number and counting that your child learnt in the early years and will move on to doubling, counting and time to boost your child's calculation speed and fluency. Some of the games also help with problem-solving skills.

### Word Problems

The SATs test in year 2 in England usually includes word problems. Children can find long pages of black and white problems daunting, so try using **these challenge cards** on a computer screen so each problem is presented separately and in colour. To start with, read the problem with your child and get your child to talk to you about it. Is this adding or subtracting? Could we draw something to help us? Only try three or four problems at a time and be sure to get your child to do the last one or two on their own.

## Step 2

## Step 3

### Multiplication Problems

Multiplication problems can be introduced once your child has started to practise their  $2\times$ ,  $5\times$  and  $10\times$  tables. Remember to get the brain ready before trying word problems by counting in 2s, then in 5s and then in 10s. Once you've done this, try counting up to 20 in 2s, then reverse and go back down to zero. Then, try it with 5s. Finally, try counting to 100 in 10s and then back down to zero. These multiplication problems are ideal to try in the middle of year 2. They use pictures to help your child understand the setting of the question. Remember, your child can sketch or write symbols to help them to work out the answers.

### Maths Mystery

As the summer term of year 2 approaches, children start to practise for assessments in many schools. **This emoji maths challenge** is a great problem-solving activity that your child is sure to enjoy. It revises several strategies but does so in an entertaining and colourful way, using words and numbers. It supports your child's learning on mathematical thinking and reasoning, word problems and problem-solving. Be prepared to support your child with the reading and encourage them to engage with the techniques shown. If it seems too tricky, work on it together, learning as you go.

## Step 4

# Explore and Discover More

Twinkl Go! is a digital platform, hosting interactive content such as videos, games, audiobooks and more. Twinkl Go! enables digital content to be streamed to your computer or mobile device.



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twinkl  
Book Club

Twinkl Book Club is our book subscription service. Enjoy our original works of fiction in beautiful printed form, delivered to you each half-term and yours to keep!



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Boost

Twinkl Boost is a range of intervention resources, created to support and lift learning with children at every level. These include our easy-to-use SATs and Phonics Screening resources.



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imagine

Imagine resources are designed to help your children to think creatively, question and imagine. Every week, a new topic consisting of five photos, each with related activities, is created.



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ORIGINALS

Twinkl Originals are engaging stories written to inspire children from EYFS to KS2. Designed to encourage a love of reading and help curriculum-wide learning through accompanying resources.



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KIDS' TV

Twinkl Kids' TV is our wonderful YouTube channel dedicated to fun and informative video-style resources full of new and creative activities you can try at home!