



## Is your child a Regular Reader?

There is little you can do that is more important and has such far reaching educational benefits as encouraging your child to be a regular reader. It gives them access to the whole curriculum, develops vocabulary and language, and allows them to enjoy great stories, great non-fiction texts and it's fun!

To develop our pupils' love of reading for pleasure we will be having a Whole School Read on the school field (weather permitting) on Friday 22nd June.

## Secret Agent Training Service (S.A.T.S.)

I must say a massive well done to all of our children in Year 2 and Year 6 who have taken their SATS tests recently. All the children tried their very best and we are very **proud of them all**. We understand that schools need to be held to account for their standards and we also believe it is vital that we do everything we can to help your children develop to their full potential. At the same time, the staff do all they can to reduce stress on our young friends. Challenge – yes; support – yes; stress – hopefully not.

And remember, SATS do not define our children. They do not tell people what we know: that they are great children with diverse skills & talents (sporting, musical, artistic, scientific etc),

who show kindness, generosity, good humour and a unique personality. Well done each and everyone of them.



## SPORT RELIEF 2018



Well done to everyone taking part. We raised a fantastic total of

**£1,617**

for Sport Relief. A massive thank you to everyone for doing such a great job!



### Sports Days

We will be keeping our fingers trebly crossed for beautiful clear skies on our Sports Days. We are always weather dependent and it is always our least favoured decision-making task of the year: whether to hold the sports day afternoons or cancel because of weather! Typically, to make our job difficult, the skies are often grey in the morning, the ground damp and slippery and the various weather forecasts are 50:50 over the chance of showers!!!

None of us wants wet, cold children or children slipping and injuring themselves. On the other hand we don't want to prematurely cancel Sports Days only to end up sitting inside on what turns out to be a sunny afternoon. With the advent of text messaging we are able to delay making a final decision, if necessary, to later in the morning. However, we are mindful that parents need to make arrangements with their places of work as well as travel here. We will therefore try to make a decision as early as possible but will keep you informed in any event through the morning by text.

As last year, I would like to invite all parents to come dressed in the colours of their children's house. We often have parents who come in matching

red, blue, green or yellow colours – perhaps just an appropriately coloured top, jumper or flag would do. And don't forget to make lots of cheering noises in support of all our little friends whatever their house colour.

As usual we will be running traditional Sports Day Races in the afternoon: one afternoon for the Infants (EYFS & Key Stage 1) and one afternoon for Key Stage 2.

- EYFS, Year 1 and 2: Weds 27th June at 1pm
- Year 3,4,5 and 6 : Thurs 28th June at 1pm

In addition, as in previous years, we will also be holding a whole school 'carousel of activities' on the field one morning.

Sports Day Carousel of Activities - whole school: Thurs 28th June at 9.00am

Most parents attend the relevant afternoon of traditional sports races but don't forget that you are also welcome to come and watch the whole school carousel of activities on the specified morning. *(Please note that secondary school children are not allowed to attend Sports Days.)*

If time permits, we will also try to fit in a Staff race, Mum's race and Dad's race.

If you wish to take part, it is at your own risk. Please ensure you are wearing appropriate footwear (i.e trainers) and are not suffering from any medical condition that would make it inadvisable. Enjoy the afternoon.

**We have limited seating available so please bring camping chairs if you have them.**

**Refreshments will be on sale courtesy of the PFA**



Kids look to you to **keep them safe**





Rugby Tournament Team. Happy Squad!



**BE SUN SMART**

-  Put on a Shirt
-  Put on Sunscreen
-  Wear a Hat
-  Wear Sunglasses
-  Stay in the Shade



**SHARE THE SUN SAFE STORY WITH YOUR CHILD**

### Emergency Contacts

Have you changed your mobile phone number? Home phone number? Work number?

Have the people down as 2nd or 3rd contact changed their numbers?

Have you changed your email?

If so, please make sure you let us know as soon as possible, so that we can update our system.

We need up to date contacts so that you receive text alerts, emails and for emergencies.



## Introduction to using bar models for problem solving

One of the aims of the National Curriculum for Maths is that pupils can solve problems by applying their knowledge to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions. Pupils in Singapore are fantastic at problem-solving and much of this is down to their use of the bar model method.

Bar modelling allows pupils to draw and visualize mathematical concepts to solve problems.

### Bar modeling at a glance:

#### Concrete - modelling with real objects



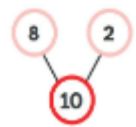
Should we add or subtract to find the total number of flowers?

There are 8 flowers in the vase.  
There are 2 flowers in Hannah's hand.  
How many flowers are there in total?



$$8 + 2 = 10$$

There are 10 flowers in total.



Why do we add?

#### Concrete - handling real objects



How many more cubes do they need to make a stack of 10 cubes?



How many more to make 10?



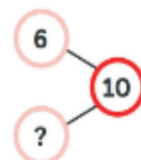
$$6 + \square = 10$$

$$6 + 1 = \square$$

$$6 + 2 = \square$$

$$6 + 3 = \square$$

$$6 + \square = 10$$



- A versatile maths model strategy that can be used across a wide range of concepts and topics.
- Gives pupils a powerful and adaptable strategy for solving increasingly difficult problems.
- Allows pupils to understand on a conceptual level what occurs when using complex formulas (for example, algebra).
- Draws on the concrete, pictorial, and abstract approach.

### Bar modeling and the CPA approach

The bar model method draws on the concrete, pictorial, and abstract (CPA) approach — an essential maths mastery concept. The process begins with pupils exploring problems via concrete objects. Pupils then progress to drawing pictorial diagrams, and then to abstract algorithms and notations (such as the +, -, x and / symbols).

The example below explains how bar modelling moves from concrete maths models to pictorial representations.

As shown, the bar method is primarily pictorial. Pupils will naturally develop from handling **concrete** objects, to



drawing **pictorial** representations to creating **abstract** rectangles to illustrate a problem. With time and practice, pupils will no longer need to draw individual boxes/units. Instead, they will label one long rectangle/bar with a number. At this stage, the bars will be somewhat proportional. So, in the example below, the purple bar representing 12 cookies is longer than the orange bar representing 8 cookies.

The lasting advantages of bar modelling

The lasting power of bar modelling is that once pupils master the approach, they can

easily use bar models year after year across many maths topics. For example, bar modelling is an excellent technique for tackling ratio problems, volume problems, fractions, and more.

Importantly, bar modelling leads pupils down the path towards mathematical fluency and number sense. Maths models using concrete or pictorial rectangles allow pupils to understand complex formulas (for example, algebra) on an intuitive, conceptual level. Instead of simply following the steps of any given formula, students will possess a strong understanding

of what is actually happening when applying or working with formulas.


The result? A stable, transferable, and solid mathematical framework for approaching abstract concepts that sets students up for long-term maths success.

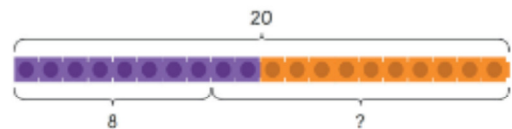
Concrete - modelling with other objects and pictures




Sam bakes 20 cookies. What if he gives some away?




Let's use   to help us.

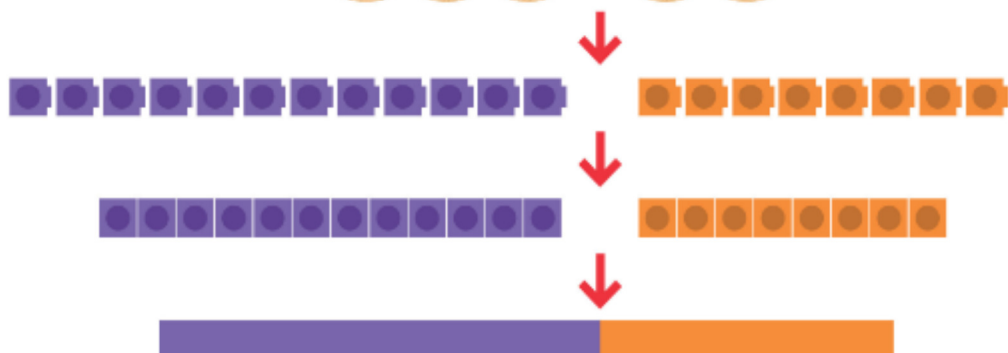


What if Sam gives away 8 cookies?

$20 - 8 =$  

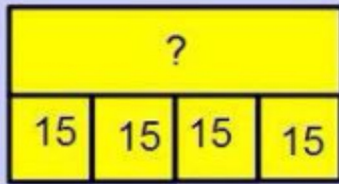
Then, Sam would have  cookies left.

Concrete to pictorial - drawing



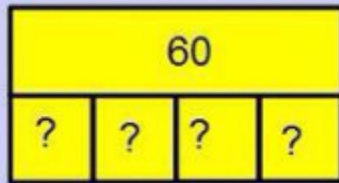
Examples of bar models being used to solve problems

Whole unknown...



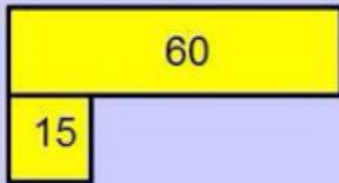
4 children go to the cinema. They each pay £15. How much do they spend altogether?

Size of groups unknown...



4 children go to the cinema. They each pay £60 altogether. How much do they spend each?

Number of groups unknown...



Tickets to the cinema are £15. Some children buy tickets that cost £60. How many children bought tickets?

## Ratio

National Centre  
for Excellence in the  
Teaching of Mathematics

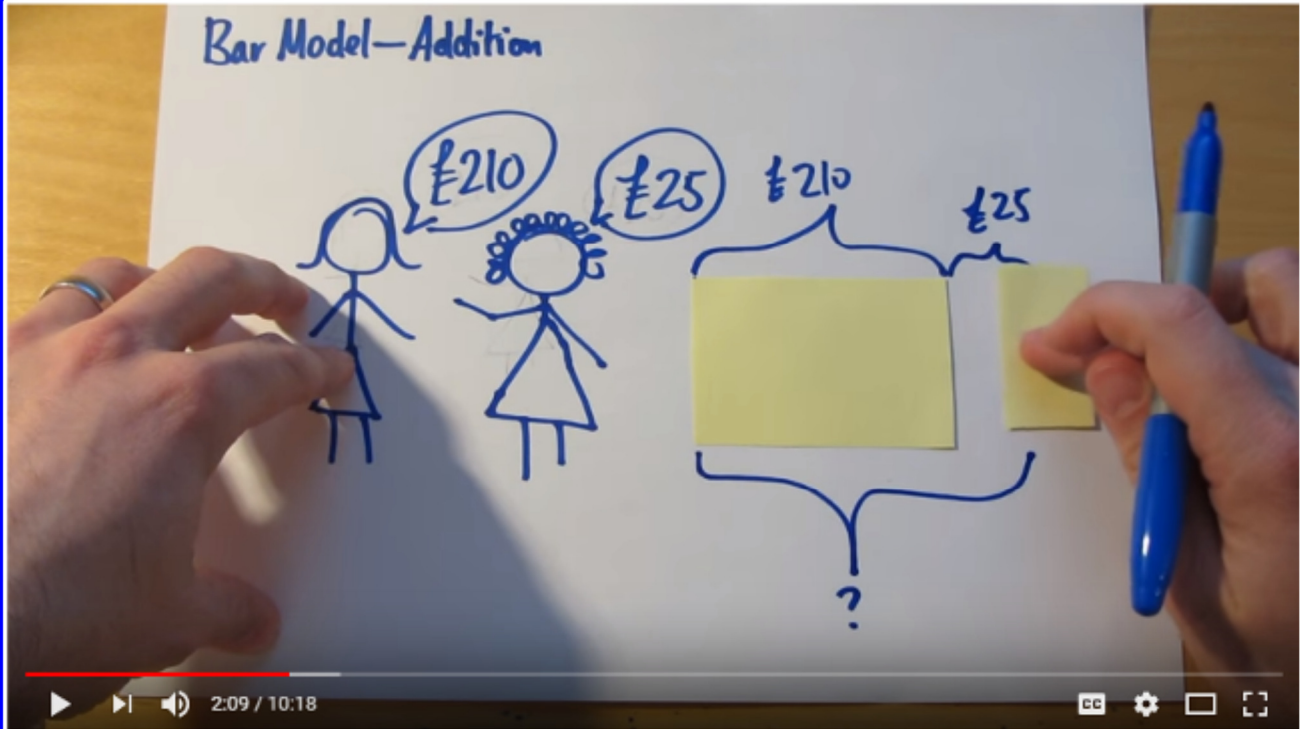


Tim and Sally share marbles in the ratio of 2:3  
If Sally has 36 marbles, how many are there altogether?

Bar Model Videos

For a simple video introduction on solving word problems using a bar model, please see:

<https://www.youtube.com/watch?v=4pfvel6TtEY>



For a more complex example of how bar models are used higher up the school, please see the video:

<https://www.youtube.com/watch?v=PEAoJUYELtk>

