

MATHS

Hi Everyone, Miss Cosby and Miss Evans here!
Every day, we'll be providing Maths activities to keep all of your Maths skills alive.
Remember to also make time for TTRS and Mathletics – **these should be accessed daily.**



<https://play.ttrockstars.com/auth>



<https://login.mathletics.com/>

Maths Topic Overview:

Dear Year 3 mathematicians,

Welcome to week 3. We hope you are now becoming more confident with being able to add numbers by partitioning. This week we will be focussing on the different written methods of addition and solving word problems.

Most of the lessons will include a choice of bronze, silver and gold levels. The children are very used to these and can pick which they wish to start with.

Best wishes,
Miss Cosby and Miss Evans

Lesson 1

Get your brain going with 1 game in the GARAGE on RockStars!

Welcome back to your second week of addition using written methods.

Today, we are going to split the learning into two parts. If you would like to focus on the **expanded written method** pick **bronze** and **silver**. If you feel confident with that method, go straight onto **gold** to learn how to use the **formal written method**.

Bronze & Silver Learning

$$68 + 24 = 92$$

$$\begin{array}{r} 60 + 8 \\ + 20 + 4 \\ \hline 80 + 12 = 92 \end{array}$$

$$76 + 47 = 123$$

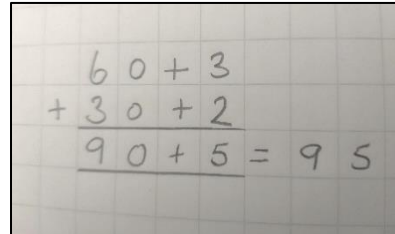
$$\begin{array}{r} 70 + 6 \\ + 40 + 7 \\ \hline 110 + 13 = 123 \end{array}$$

Let's take a closer look.



63+32=

1. Partition the number into tens and ones, making sure that you put one number and symbol in each box.
2. Begin with the ones column. Add the two numbers together. ($3+2 = 5$)
3. Then add the tens together. ($60+30 = 90$)
4. Finally add the tens and ones totals together. ($90+5 = 95$)



Top Tip: Make sure each digit is in the correct column. Look carefully. Are the tens in the tens column and the ones in the ones column?

Task: Use the method above to work out the calculations below.

Bronze	Silver
$45+23=$	$156+34=$
$56+13=$	$163+25=$
$33+25=$	$105+45=$
$54+42=$	$154+143=$
$64+24=$	$123+156=$
$55+33=$	$234+233=$

Gold Learning

Last week we started using the **expanded written method** shown below:

$$\begin{array}{r}
 68 \\
 + 24 \\
 \hline
 12 \quad (8 + 4) \\
 + 80 \quad (60 + 20) \\
 \hline
 92
 \end{array}$$

Then...

$$\begin{array}{r}
 76 \\
 + 47 \\
 \hline
 13 \quad (7 + 6) \\
 + 110 \quad (70 + 40) \\
 \hline
 123
 \end{array}$$

Today we are still using columns but taking out the part where we show our partitioning workings because now we really understand the value of each digit (hundreds, ten or ones).

Today's method – Formal written method:

$$\begin{array}{r}
 63 \\
 + 32 \\
 \hline
 95
 \end{array}$$

Use the language of place value to ensure understanding:
 'Three add two equals five. Write five in the ones/units column.
 60 add 30 equals 90. Write 9 (90) in the tens column.
 The total is 95.

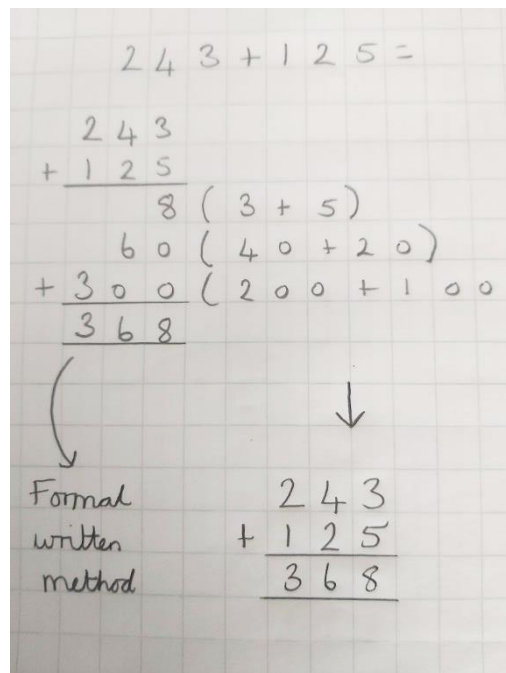
Task: Now use the formal written method to solve the calculations below.

Gold
234+161=
345+244=
256+222=
404+275=
532+256=
323+255=

Today's work.

The formal written method.

Always start with adding the ones, then the tens and finally the hundreds.



Lesson 2

Improve your rock speed with 1 game in the **STUDIO** on **RockStars!**

Hello. Day 2 already!

Just like yesterday, today will be in two parts. If you completed **bronze** and **silver** yesterday, you may want to stick to **bronze** and **silver** today. If you started with **gold** yesterday, go straight to **gold** today.

Bronze & Silver Learning

Today we are going to have a go at the **expanded written method** linked with the final formal written method.

This was how we worked out our answers yesterday.

$$\begin{array}{r} 60 + 3 \\ + 30 + 2 \\ \hline 90 + 5 = 95 \end{array}$$

This is today's learning

$$\begin{array}{r} 63 \\ + 32 \\ \hline 5 \text{ (3 + 2)} \\ + 90 \text{ (60 + 30)} \\ \hline 95 \end{array}$$

Columns (keep tens and ones separate)

First add the ones

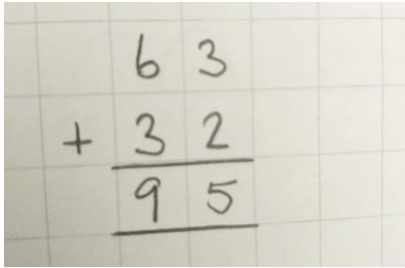
Next add the tens

Now find the total by first adding up the total of the ones and then the tens.

Task: Use the new method to solve the calculations below.

Bronze	Silver
$34 + 22 =$	$145 + 123 =$
$46 + 23 =$	$234 + 145 =$
$41 + 33 =$	$133 + 123 =$
$44 + 45 =$	$121 + 114 =$
$67 + 22 =$	$336 + 143 =$

Bronze & Silver Challenge



Now look at the final format, do you think you could use the same number sentences from above to rewrite them in this format?

Top Tip: Always add the ones first

Gold Learning

Now you have an understanding of the **formal written method**, we will look to see what happens when the ones add up to more than 10.

$$68 + 24 = 92$$

$$\begin{array}{r} 60 + 8 \\ + 20 + 4 \\ \hline 80 + 12 = 92 \end{array}$$

In this example, the ones column total is greater than 10 (12). When we record it using the expanded method it is not as challenging but when we use the final written format, it needs more thought.

$$\begin{array}{r} 68 \\ + 24 \\ \hline 92 \\ \hline 1 \end{array}$$

First you add the ones.

Because the total is more than 10 we have to partition it.

12 is made up of **1** ten and **2** ones.

$$10 + 2$$

The 2 ones go in the ones column and the remaining ten passes over into the tens column ready to be added to the total.

$$60 + 20 + 10 = 90$$

Watch the clips below for more examples:

2 digits + 2 digits

<https://www.youtube.com/watch?v=7ujcg3HAyNY>

3 digits + 3 digits

<https://www.youtube.com/watch?v=FiggoORt6to>

Task

Now try answering the number sentences below using both methods.

Gold	Platinum
$56+27=$	$125+146=$
$43+48=$	$234+158=$
$67+28=$	$345+238=$
$53+39=$	$326+239=$
$156+37=$	$467+256=$
$148+35=$	$367+258=$

Extra

For extra practice complete the worksheet for Lesson 2 on the Virtual School.

Lesson 3

Get your brain going with 1 game in the **GARAGE** on **RockStars!**

Today you are going to use your addition skills to solve problems.

Your first task will be to sort out the problems to see if they asking you to **add** or **subtract**. Put the subtraction ones aside (do not answer) as you will use these next week when we have practised our subtraction skills.

What kind of vocabulary will we look for in addition problems?

What is the **sum of** the numbers?

What is the **total** number of...?

How many are there **altogether**?

Increase the number by ...

What is the **combined total**?



Click on the link for the word problems on the Maths Virtual School page.

Choose from **Bronze, Silver or Gold**

The answers are at the end of each set of problems.

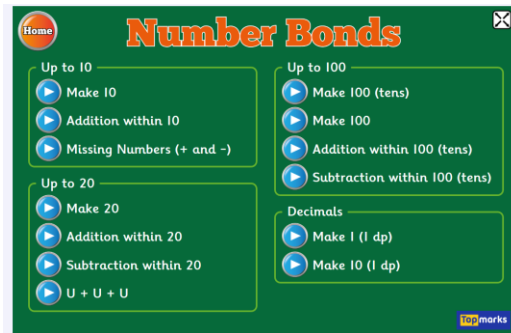
Lesson 4

Get your brain going with 1 game in the **GARAGE** on **RockStars!**

Mental Maths Time

Today we would like you to practice your mental maths skills

Only focus on the addition sections.



<http://www.ictgames.com/funkyMummy/index.html>

<https://www.topmarks.co.uk/maths-games/hit-the-button>

Answers

Lesson 1

Bronze	Silver
$45+23=68$	$156+34=190$
$56+13=69$	$163+25=188$
$33+25=58$	$105+45=150$
$54+42=96$	$154+143=297$
$64+24=88$	$123+156=279$
$55+33=88$	$234+233=467$

Gold
$234+161=395$
$345+244=589$
$256+222=478$
$404+275=679$
$532+256=788$
$323+255=578$

Lesson 2

Bronze	Silver
$34+22=56$	$145+123=268$
$46+23=69$	$234+145=379$
$41+33=74$	$133+123=256$
$44+45=89$	$121+114=235$
$67+22=89$	$336+143=479$

Gold	Platinum
$56+27=83$	$125+146=271$
$43+48=91$	$234+158=392$
$67+28=95$	$345+238=583$
$53+39=92$	$326+239=565$
$156+37=193$	$467+256=723$
$148+35=183$	$367+258=625$