

Home learning Maths Year 3

Hello everyone, here are some maths activities for your first week of home learning. You don't have to print these out, you can if you want, but if not you can simply write the questions into your books. It would be great to see how you are all getting on with your learning from home so feel free to email any pictures, comments or questions to all Year 3 staff emails and we will get back to you as soon as we can. Happy learning, from all the Year 3 team.

web site links

<https://www.topmarks.co.uk/maths-games/daily10>

<http://www.math-exercises-for-kids.com/math-4.htm>

<https://uk.ixl.com/math/year-3>

<https://www.topmarks.co.uk/maths-games/7-11-years/ordering-and-sequencing-numbers>

<https://whiterosemaths.com/homelearning/>

Addition and Subtraction

Monday (Adding and subtracting multiples of 100)

Mathematical Talk

What is the same and what is different about 2 ones and 3 ones, 2 tens and 3 tens and 2 hundreds and 3 hundreds?

What is ___ hundreds and ___ hundreds equal to?

How many different ways can you represent $200 + 300$?

Use the bar model to complete the number sentences.



$$\begin{array}{l} _ + _ = 600 \quad 600 = _ - _ \\ _ + _ = 600 \quad 600 = _ - _ \\ _ - _ = 400 \quad 400 = _ - _ \\ _ - _ = 200 \quad 200 = _ - _ \end{array}$$

Odd One Out

Which is the odd one out?

Explain why.

$$\begin{array}{|c|c|} \hline \color{blue}{\square} & \color{blue}{\square} \\ \hline \end{array} + \begin{array}{|c|c|c|c|c|c|c|c|} \hline \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline \color{blue}{\square} & \color{blue}{\square} \\ \hline \end{array} + \begin{array}{|c|c|c|c|c|c|} \hline \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} \\ \hline \end{array} + \begin{array}{|c|c|c|c|c|c|} \hline \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} & \color{blue}{\square} \\ \hline \end{array}$$

There are a range of correct answers here but it is all about how the children explain using their knowledge of addition. If they can think of a reason for one, could they then think of other reasons for another number sentence?

Tuesday (3digit numbers and 1 digit numbers).

Notes and Guidance

During this small step, children add and subtract ones from a 3-digit number without an exchange. They consider which digits are affected when adding ones. For example, if a child is completing $214 - 3$ and $214 + 3$ they see that they just need to focus on the ones column. Therefore, all they need to do is $4 + 3$ and $4 - 3$ respectively.

The use of the column method can be used but mental arithmetic is the best strategy.

Mathematical Talk

Which column do I need to focus on?

What is the same about the subtractions? What changes each time? Write the number sentence that would come next in each list. Can you write the number sentence that would come before?

Can you use $<$ and $>$ to compare Jack and Tommy's team points?

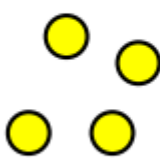
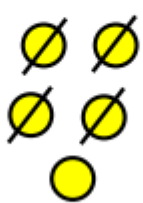
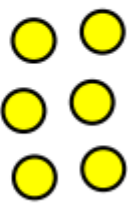
Complete:

| |
|-------------|
| $356 - 5 =$ |
| $357 - 5 =$ |
| $358 - 5 =$ |
| $359 - 5 =$ |

| |
|-------------|
| $356 - 5 =$ |
| $356 - 4 =$ |
| $356 - 3 =$ |
| $356 - 2 =$ |

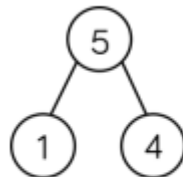
| |
|-------------|
| $356 - 5 =$ |
| $366 - 5 =$ |
| $376 - 5 =$ |
| $386 - 5 =$ |

Alex thinks the chart shows $456 - 4$
Do you agree?

| Hundreds | Tens | Ones |
|---|---|--|
|  |  |  |

Explain why.

We can partition our 1-digit number to calculate $379 + 5$



$$379 + 1 = 380$$

$$380 + 4 = 384$$

Use this method to calculate:

$$178 + 9$$

$$826 + 7$$

$$359 + 8$$

©White Rn

Which questions are harder to calculate?

$$234 + 3 =$$

$$506 + 8 =$$

$$455 + 7 =$$

$$521 + 6 =$$

Explain your answer.

Wednesday (Subtracting 1 digit from 3 digit numbers)

Notes and Guidance

Children subtract a 1-digit number from a 3-digit number using an exchange.

Children need to be secure in the fact that 321 is 3 hundreds, 2 tens and 1 one but that it is also 3 hundreds, 1 ten and 11 ones.

If children are not secure with regrouping, it is important to revisit this before subtracting.

Mathematical Talk

How many ones do we exchange for one ten?

Why do all these subtractions require an exchange? When do we not need to exchange?

Which method do you prefer? Can you calculate the subtractions mentally?

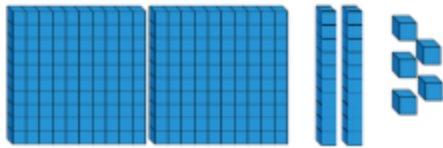
Red team have 672 points.

Blue team have 7 fewer points than red team.

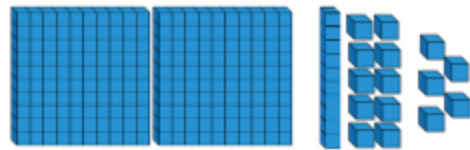
How many points do blue team have?

Ron and Jack use Base 10 to solve $225 - 8$

Ron's method:



Jack's method:



Explain which method you would use and why.

Whitney has 125 stickers. She gives less than 10 stickers to Eva. She has an odd number of stickers left. How many stickers might Whitney have given away?

What do you notice is the same about your answers?

If Whitney had an even number of stickers left, how many might she have given away?

Explain how you would solve these calculations:

$$564 - \underline{\quad} = 558$$

$$\underline{\quad} - 8 = 725$$

$$352 = 361 - \underline{\quad}$$

Thursday (3 digit and 2 digit numbers).

Notes and Guidance

Children look at what happens to a 3-digit number when a multiple of 10 is added or subtracted.

Different representations such as Base 10, arrow cards, place value charts should be used.

The use of the column method is exemplified in this example, but children should explore whether or not this is needed and explain why. Mental methods should be encouraged throughout.

Mathematical Talk

How many tens can we add to 352 without exchanging?

How many tens can we subtract from 352 without exchanging?

What patterns can you see between the additions and subtractions?

Can you see links between the columns?

Can you compare the calculations without finding the answer?

Complete using $<$, $>$ or $=$

- | | | |
|------------|-----------------------|------------|
| $773 + 1$ | <input type="radio"/> | $773 + 10$ |
| $653 + 10$ | <input type="radio"/> | $653 - 10$ |
| $647 + 10$ | <input type="radio"/> | $657 - 10$ |
| $721 + 10$ | <input type="radio"/> | $653 + 10$ |

Miss Wilson has 237 marbles in a box.
She adds 8 more bags of 10 marbles.
How many marbles does she have now?
Write the calculation for this problem.

Eva and Amir are calculating $783 + 90$



793, 803, 813, 823,
833, 843, 853, 863,
873

$783 + 100 = 883$
 $883 - 10 = 873$



Whose method do you prefer?
Explain why.

Friday (Subtracting 2 digit numbers from 3 digit numbers)

Notes and Guidance

Children subtract multiples of 10 from a 3-digit number, with an exchange. The examples show different ways this concept could be taught using number lines and part-whole models.

The column method could be used, however, it is not the most efficient method.

Counting backwards in tens or using 100 to help will support mental strategies.

Mathematical Talk

How many tens do we exchange one hundred for?

How can we partition 70 to subtract it from 240 more efficiently? Show this on the number line.

Count back in tens to solve $240 - 70$



Complete the missing digits.

$$13\boxed{} - 50 = 85$$

$$334 - \boxed{}0 = 294$$

$$545 = 6\boxed{}5 - 70$$

How many different methods could you use to solve $837 - 90$?

Share your methods with a partner.