## Year 5 Maths

Addition and Subtraction
Learning From Home Activity Booklet

| Statutory Requirements | Activity Sheet | Page Number | Notes |
| :---: | :---: | :---: | :---: |
| Pupils should be taught to: <br> - add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction); | Vlogging Numbers | 2 |  |
|  | Mortgage Money | 3 |  |
|  | The Biscuit Factory | 4-5 |  |
|  | Kiwi Phones | 6 |  |
| - solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. | Wonderland | 7 |  |
|  | Wonderland 2 | 8-9 |  |
|  | Master <br> Mathematician | 10-11 |  |
|  | Parent Guide to Addition and Subtraction | 12 |  |

# Vlogging Numbers 

Veronica Logston is a famous celebrity vlogger. She has made video blogs about all her favourite history topics and posted them on line over the weekend. They have been extremely popular, but she wishes to find out which vlog was the most popular. To find out which vlog was the most popular, add the number of views each vlog received on Saturday and Sunday.


1 The Vikings
75

$+\quad 18$ | 4 |
| ---: |
| + |

4 The Ancient Greeks

| 71 |
| ---: |
| $+\quad 8 \quad 5 \quad 2 \quad 3$ |

## 7 The Victorians

$\begin{array}{lllll}2 & 9 & 3 & 1 & 4\end{array}$ $+13023$

2 The Ancient Egyptians
\(\left.$$
\begin{array}{r}3 \\
5\end{array}
$$ \begin{array}{r}2 <br>

2\end{array}\right]\)| 2 |
| :--- |
| $+\quad 9$ |

$\qquad$

5 The Anglo Saxons

| 73 |
| ---: |
| $+\quad 6 \quad 43$ |
| + |

$\qquad$

8 The Aztecs
$\begin{array}{lllll}2 & 8 & 1 & 6 & 7\end{array}$

$$
+35472
$$

$\qquad$

3 The Ancient Romans

| 83 |
| ---: |
| + |
| + |

$\qquad$

6 The Stone Age

```
    9
    + 5 8 8 1 6
```

9 The Shang Dynasty (Ancient China)
$\begin{array}{lllll}8 & 2 & 5 & 7 & 2\end{array}$
$+53346$

The most popular vlog was:

## Mortgage Money

The following families are trying to work out how much money they have left to pay on their mortgage for their houses. To calculate how much is remaining, subtract the amount each family has paid so far from the original price that they paid for their house.

## The Browns



| Cost of house: | $£$ | 5 | 0 | 6 | 4 | 8 | Cost of house: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Money paid so far: | £ | 3 | 7 | 1 | 4 | 2 | Money paid so far: |
|  | £ |  |  |  |  |  |  |


| Cost of house: | $£$ | 5 | 7 | 8 | 2 | 3 |
| ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Money paid so far: | - | $£$ | 3 | 6 | 1 | 7 |
|  | $£$ |  |  |  |  |  |

The Levocats

| Cost of house: | £ | 9 | 6 | 7 | 2 | 4 | Cost of house: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Money paid so far: | £ | 6 | 8 | 1 | 5 | 3 | Money paid so far: |
|  | £ |  |  |  |  |  |  |

## The Barlows

The Patels

| $£$ | 8 | 9 | 1 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $£$ | 5 | 8 | 4 | 2 | 9 |
| $£$ |  |  |  |  |  |
| The Ostapskis |  |  |  |  |  |


| Cost of house: | $£$ | 7 | 0 | 5 | 2 | 9 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Money paid so far: | - | $£$ | 4 | 5 | 2 | 8 |
|  | $£$ |  |  |  |  |  |

The Whites

| $£$ | 5 | 7 | 5 | 9 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $£$ | 2 | 8 | 3 | 7 | 5 |
| $£$ |  |  |  |  |  |

The Renshaws


| Cost of house: | $£$ | 7 | 9 | 0 | 3 | 5 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Money paid so far: | - | $£$ | 4 | 6 | 2 | 7 |
|  | $£$ |  |  |  |  |  |

Which family has the most left to pay on their mortgage? $\qquad$

## The Biscuit Factory

Look at the data for the amount of biscuits made each week in a biscuit factory. Use the statistics to answer the questions below. Complete your working out in the boxes provided.


| Day of the week | Number of plain <br> biscuits made | Number of chocolate <br> biscuits made |
| :--- | :--- | :--- |
| Monday | 29645 | 51766 |
| Tuesday | 41997 | 84363 |
| Wednesday | 33207 | 53201 |
| Thursday | 32195 | 23758 |
| Friday | 80599 | 68271 |
| Saturday | 27725 | 97653 |
| Sunday | 98257 | 26469 |

How many biscuits were made altogether on Monday?


On which day of the weekend were the most biscuits made? Saturday or Sunday?

On Monday, how many more chocolate biscuits were made than plain biscuits?


What is the difference between the number of plain biscuits made on Wednesday and the number of plain biscuits made on Thursday?

Look at the data for Thursday and Friday. Which of these days has the largest difference between the number of plain and chocolate biscuits made?


## Kiwi Phones

The mobile phone company, Kiwi, has just released its latest mobile... the jphone 8. Kiwi has released the phone in two different sizes: the jphone 8 and the jphone 8 supersize. Below are the statistics for the amount of phones sold in the first week of release.

| Day of the week | jphone 8 | jphone 8 supersize |
| :--- | :--- | :--- |
| Monday | 64166 | 64952 |
| Tuesday | 64913 | 16762 |
| Wednesday | 13346 | 97831 |
| Thursday | 47943 | 16485 |
| Friday | 14697 | 23482 |
| Saturday | 36756 | 23146 |
| Sunday | 69743 | 64397 |

Task: Using the statistics above, write and solve your own addition word problems in the spaces provided. You could even test your family and friends to see if they can answer your questions.

1. $\qquad$
$\qquad$

2. $\qquad$
$\qquad$
$\square$

## Wonderland

The Head Chef at the theme park 'Wonderland' has been asked to order supplies for food and drink next month. He needs to ensure that the theme park has enough food and drink to feed all their customers in the month of August. Round the figures for July to the nearest 10000 to give an indication of how many he will need to order in August.

For example: 146684 rounded to the nearest 10000 is 150000.

| Hundred <br> Thousands | Ten <br> Thousands | Thousands | Hundreds | Tens | Ones |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4 | 6 | 6 | 8 | 4 |

Hint: Find the Ten Thousands column. Look at the digit in the Thousands column. If it is 5 or more, you round up or if it is 4 or below you round down.

| Food and drink items | Number sold in July | Estimate for August |
| :--- | :--- | :--- |
| Sausages | 164562 |  |
| Burgers | 236461 |  |
| Lollipops | 486482 |  |
| Cheese Sandwiches | 461955 |  |
| Bottles of lemonade | 764169 |  |
| Tea bags | 846562 |  |
| Cakes | 861461 |  |
| Bags of crisps | 354495 |  |
| Ice lollies | 429344 | 137465 |
| Meat pies |  |  |

## Wonderland 2

The owner of Wonderland, Maximillian McMoney, is visiting the park. He is estimating how much money the park has made each day that the park has been open. To do this, he must round the figures to the nearest ten thousand. Then he subtracts the cost of running the park from the amount of money made on tickets each day. For example:

| Monday | Rounded to the nearest ten thousand |
| :--- | :--- |
| Money from tickets sold: $£ 864482$ | $£ 860000$ |
| Cost or running the park: $£ 235745$ | $£ 240000$ |
|  | Estimate: $£ 620000$ |

Task: Circle the correct estimate for each calculation that Maximilian has estimated. Write your rounded numbers below the numbers in the calculation.

Tuesday
£495 468-£174 $792=$

| 230000 | 330000 | 430000 |
| :--- | :--- | :--- |

## Wednesday

£843 468-£354 592 =

| 490000 | 480000 | 470000 |
| :--- | :--- | :--- |

Thursday
£657 $384-£ 423551=$

| 250000 | 230000 | 240000 |
| :--- | :--- | :--- |



## Friday

£465 561 - £217 $641=$

| 230000 | 250000 | 220000 |
| :--- | :--- | :--- |

## Saturday

£978 466-£358 941 =

| 620000 | 610000 | 630000 |
| :--- | :--- | :--- |

## Sunday

£892 549-£527 946 =

| 260000 | 160000 | 360000 |
| :--- | :--- | :--- |

Based on the estimates, on which day was the most money made?
$\qquad$


## Master Mathematician



Use your knowledge of rounding, estimating and column addition and subtraction to solve the following problems. Some may even ask you to demonstrate your reasoning by explaining how you solved the problem or knew the right answer.

1. Romina and Lucas are discussing a question.


What is 368846 rounded to the nearest 10000 ?
Explain who is correct and how you know.
2. Daniel is out shopping. He has $£ 536.87$. He spends $£ 247.56$ on a new laptop and $£ 172.26$ on a present for his mum. How much money does he have left remaining after buying the gifts?

Use this space for your working out.

3. Set out and solve these calculations using a column method of addition or subtraction.


Use this space for your working out.
4. Mr and Mrs Woods both need a new car. They have gone to the car show room with $£ 25496$ to spend. Mr Woods buys a car for $£ 12964$ and Mrs Woods buys a car for $£ 9462$. How much money do they have remaining?

Use this space for your working out.

## Parent Guide to Addition and Subtraction

In the Year 5 National Curriculum, children are taught to use column addition and column subtraction to add and subtract numbers with more than four digits. The focus of the curriculum is that children will become 'masters' of this method and should be able to apply this method to a range of problems and situations. Therefore, the range of activities in this book will help your child develop their fluency, reasoning and problem solving when using column addition and column subtraction.

## The Column Method

For a full explanation of the column methods of addition and subtraction, please see the parents section of the 'Year 4 Maths: Addition and Subtraction' working from home booklet.

You can also refer to the following resources on the Twinkl website:
Year 3 Addition and Subtraction Lesson 3b Adding 3 and 3 Digit Numbers Without Carrying PowerPoint
Year 3 Additon and Subtraction Lesson 4d Subtracting 3 Digit Numbers from 3 Digit Numbers PowerPoint


#### Abstract

Estimation: Children are encouraged to estimate their answers mentally before completing column additions and subtractions. They can do this by rounding the numbers to the nearest thousand (if using a four-digit number) or ten thousand (if using a five-digit number) and then adding or subtracting the rounded numbers. This helps the child as it gives them an indication of what the answer should be. For example:


$38490+47616$ Rounded is: $40000+50000=90000$
Please ensure your child is secure with rounding before encouraging him or her to estimate the answers.

