## Year 2 Maths Addition and Subtraction Workbook



## Home Learning Year 2 Maths Workbook Pack

## Year 2 Programme of Study - Addition and Subtraction

| Statutory Requirements | Activity Sheet | Page <br> Number | Notes |
| :--- | :--- | :---: | :---: |
| Solve problems with addition <br> and subtraction using <br> concrete objects and pictorial <br> representations, including those <br> involving numbers, quantities <br> and measures. | 3 hops to 10 activity sheet <br> Adding to 20 with a number <br> line pack | $4-6$ |  |
| Solve problems with addition <br> and subtraction. | Monters colour by number <br> addition and subtraction up to <br> 20 | 7 |  |
| Applying their increasing <br> knowledge of mental and <br> written methods. | 20 |  |  |
| Recall and use addition <br> and subtraction facts to 20 <br> fluently, and derive and use <br> related facts up to 100. | Addition and Subtraction facts <br> to 20 <br> Deriving Facts to 100 | 8 |  |
| Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: |  |  |  |
| A two-digit number and ones. | Adding 2 digit numbers and <br> ones crossing 10 | $10-11$ |  |
| A two-digit number and tens. | Adding 2 digit numbers and <br> tens not crossing 100 | 12 |  |
| Two two-digit numbers. | Adding two 2-digit numbers <br> beyond 100 | $13-15$ |  |
| Adding three one-digit <br> numbers. | Adding three one-digit numbers <br> using number facts to 10 <br> Adding three one-digit numbers <br> - Which 3 numbers? | 16 |  |
| Show that addition of two <br> numbers can be done in any <br> order (commutative) and <br> subtraction of one number <br> from another cannot. | Addition can be done in any <br> order - subtraction can't! | $18-19$ |  |
| Recognise and use the inverse <br> relationship between addition <br> and subtraction and use this <br> to check calculations and solve | Number family Activity Sheets <br> Using Inverse Operations to <br> check - Two Digits Plus One <br> Digit | $20-23-25$ |  |

## 3 Jumps to 10 Activity Sheet

## Example:



Santa says he can get to his presents in 3 Jumps! Find different ways that Santa can do this and draw them on the number lines. Can you write number sentences to match his jumps?


How many other ways can you find? Can you find them all?

Addition to 20 on a
Number Line


| 1 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |

1. $5+3=\square$

2. $8+3=\square$

3. $6+6=\square$

4. $4+5=\square$

5. $4+7=\square$

6. $7+6=\square$

7. $8+4=\square$

8. $9+6=\square$

9. $3+9=\square$

10. $2+10=\square$

## Addition to 20 on a Number Line - Sheet 2

For these questions, can you work out which sums are being shown on the number lines? The first one has been done for you.

1. $5+7=12$

2. $\square+\square=\square$

3. $\square+\square=\square$

4. $\square+\square=\square$

5. $\square+\square=\square$

6. $\square+\square=\square$

7. $\square+\square=\square$

8. $\square+\square=\square$

9. $\square+\square=\square$

10. $\square+\square=\square$


## Addition to 20 on a Number Line - Sheet 3

actise what you have learned so far on a number line to 20 and progress to see if you can dra your own number line!

1. $11+4=\square$

2. 


3. $8+9=\square$

$4.6+\square=9$

5.

6. $\square+7=11$

7. $9+9=\square$

8. $12+3=\square$

9. $7+9=\square$

10. $13+5=\square$

 Santa Colour by Number Addition and

Solve the calculations in the picture to work out what colours they should be!
$12=$ black
$15=$ red
$18=$ pink
$20=$ brown


## Addition and Subtraction Facts to

## 20 - Speed Test

See how long it takes you to complete all of these or give yourself


| $6+6=$ | 8-6 = | 9-3 = | 13-4 = | 4-1 = |
| :---: | :---: | :---: | :---: | :---: |
| $14+5=$ | $2+17=$ | $7-4=$ | $4+9=$ | 4-2 = |
| 9-7 = | $3+9=$ | 15-1 = | 20-10 = | 10-5 = |
| $2+11=$ | $3+1=$ | 14-7 = | $17+2=$ | $2+3=$ |
| $2+15=$ | 3-2 = | $9+3=$ | $6+4=$ | 15-6 = |
| $7-3=$ | $11+5=$ | $8-5=$ | $7+8=$ | $4+6=$ |
| $10+10=$ | 18-4 = | $3+4=$ | 20-19 = | $4+9=$ |
| $8-2=$ | $10+0=$ | $8+8=$ | $14+2=$ | $7-2=$ |
| $11+1=$ | 13-5 = | 17-2 = | 9-4 = | $19+1=$ |
| 14-1 = | $12-9=$ | $3+7=$ | $5+5=$ | 15-9 = |

$\square$
$\square$

## Deriving Facts to 100

A. For each of the following, complete the number fact to 10 and then derive the number fact to 100 . The first one has been done for you.

1. $7+2=9$
$70+20=90$
2. $3.4+6=$
$40+60=$
3. $5-3=$
$50-30=$
4. $10-7=$
$100-70=$
5. $5+4=$
$50+40=$
6. $9-8=$
$90-80=$
$30+60=$
7. $7-4=$
$70-40=$
8. $3+6=$
9. $8-3=$
$80-30=$
10. $9+1=$
$90+10=$
11. $3-2=$
$30-20=$
12. $10-5=$
$100-50=$
B. Use the appropriate number fact to ten mentally to derive the number fact to 100 .
13. $50+50=$
14. $60-40=$
15. $10+80=$
16. $90-60=$
17. $20+80=$
18. $40+40=$
19. $50-40=$
20. $80-70=$
21. $40+30=$
22. $80-30=$
23. $20+60=$
24. $70-20=$

Adding 2-Digit Numbers and Ones Crossing 10 Activity Sheet 1

| 1. $\begin{aligned} & 5+6= \\ & 15+6= \\ & 45+6= \\ & 65+6= \end{aligned}$ | 2. $\begin{aligned} & 8+3= \\ & 18+3= \\ & 38+3= \\ & 78+3= \end{aligned}$ |
| :---: | :---: |
| 3. $\begin{aligned} & 6+8= \\ & 16+8= \\ & 46+8= \\ & 96+8= \end{aligned}$ | 4. $\begin{aligned} & 7+5= \\ & 17+5= \\ & 67+5= \\ & 87+5= \end{aligned}$ |
| 5. $\begin{aligned} & 5+9= \\ & 15+9= \\ & 55+9= \\ & 85+9= \end{aligned}$ | 6. $\begin{aligned} & 6+7= \\ & 16+7= \\ & 46+7= \\ & 76+7= \end{aligned}$ |
| 7. $\begin{aligned} & 9+3= \\ & 19+3= \\ & 59+3= \\ & 99+3= \end{aligned}$ | 8. $\begin{aligned} & 4+9= \\ & 14+9= \\ & 54+9= \\ & 74+9= \end{aligned}$ |
| 9. $\begin{aligned} & 7+8= \\ & 17+8= \\ & 57+8= \\ & 97+8= \end{aligned}$ | 10. $\begin{aligned} & 5+8= \\ & 15+8= \\ & 65+8= \\ & 85+8= \end{aligned}$ $\qquad$ |

Adding 2-Digit Numbers and Ones Crossing 10 Activity Sheet 2

| 1. $\begin{aligned} & 5+4= \\ & 15+4= \\ & 35+4= \\ & 75+4= \end{aligned}$ | 2. $\begin{aligned} & 8+6= \\ & 18+6= \\ & 28+6= \\ & 68+6= \end{aligned}$ |
| :---: | :---: |
| 3. $\begin{aligned} & 2+8= \\ & 12+8= \\ & 52+8= \\ & 92+8= \end{aligned}$ | 4. $\begin{aligned} & 7+6= \\ & 17+6= \\ & 47+6= \\ & 67+6= \end{aligned}$ |
| 5. $\begin{aligned} & 5+2= \\ & 15+2= \\ & 25+2= \\ & 65+2= \end{aligned}$ | 6. $\begin{aligned} & 9+7= \\ & 19+7= \\ & 39+7= \\ & 99+7= \end{aligned}$ |
| 7. $\begin{aligned} & 7+3= \\ & 17+3= \\ & 47+3= \\ & 67+3= \end{aligned}$ | 8. $\begin{aligned} & 4+8= \\ & 14+8= \\ & 44+8= \\ & 64+8= \end{aligned}$ |
| 9. $\begin{aligned} & 9+8= \\ & 19+8= \\ & 49+8= \\ & 79+8= \end{aligned}$ | 10. $\begin{aligned} & 1+8= \\ & 11+8= \\ & 61+8= \\ & 71+8= \end{aligned}$ $\qquad$ |

Adding 2-Digit Numbers and Tens, Not Crossing 100


$$
\vec{\sigma}
$$

Add together these two digit numbers:

$$
\begin{aligned}
& \overline{S 9+} \\
& 0 \angle(9)
\end{aligned}
$$

$$
\begin{aligned}
& \overline{\square 9+} \\
& 96 \quad(
\end{aligned}
$$

$$
y
$$



|  |  |  | $\stackrel{3}{4}$ |
| :---: | :---: | :---: | :---: |
|  | $\left.\right\|_{\text {cos }} ^{\substack{\text { a }}}$ |  |  |
| 缶む | + ${ }_{\text {a }}^{\text {a }}$ |  |  |
|  |  |  |  |
|  | $\left.\right\|_{\text {+a }} ^{\substack{\text { a } \\ \text { a }}}$ |  |  |
| - | \| ${ }_{\text {a }}^{\text {U }}$ |  |  |



## Adding Three One-Digit Numbers to 10 Activity Sheet

Circle the pairs of numbers that add up to 10 , then add the third number to make the total.

1. $4+6+3=\square$
2. $5+5+6=\square$
$3.7+3+4=\square$
3. $8+2+9=\square$
4. $1+9+7=\square$
5. $7+2+3=\square$
$7.6+3+4=\square$
6. $3+8+7=\square$
7. $5+3+5$

8. $2+9+8=\square$
9. $5+8+5=$

10. $5+7+3=$

11. $4+8+2=\square$
12. $9+5+1=\square$
13. $8+2+7=\square$
14. $7+7+3=\square$
15. $4+8+2=\square$
16. $5+5+5=\square$
17. $3+3+7=\square$
18. $8+8+2=\square$
19. $6+4+6=\square$
20. $5+2+5=\square$
21. $1+1+9=\square$
22. $7+8+3=\square$

23. $6+4+9=\square$
24. $7+2+3=\square$
$28.6+3+7=\square$
25. $7+6+4=\square$
26. $9+2+8=\square$

Challenge: Can you use number bonds to 10 to make sets of 4 one-digit numbers that total 20 ? How many different sets can you make?


## Adding Three One-Digit Numbers - Which 3 Numbers?

Choose 3 numbers which add to the total given. Write as a calculation.

| 1. Which 3 numbers add to 15 ? $\begin{gathered} 45761 \\ +\quad+\quad=15 \end{gathered}$ | 8. Which 3 numbers add to 20? $\begin{gathered} 65926 \\ +\quad+\quad+\quad=20 \end{gathered}$ | 15. Which 3 numbers add to 23 ? $\begin{aligned} & 46859 \\ & +\quad+\quad=23 \end{aligned}$ |
| :---: | :---: | :---: |
| 2. Which 3 numbers add to 18 ? $\begin{gathered} 91458 \\ +\quad+\quad=18 \\ \hline \end{gathered}$ | 9. Which 3 numbers add to 7 ? $\begin{gathered} 46231 \\ +\quad+\quad=7 \end{gathered}$ | 16. Which 3 numbers odd to 8 ? $\begin{gathered} 23551 \\ +\quad+\quad=8 \end{gathered}$ |
| 3. Which 3 numbers add to 16 ? 37812 $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $=16$ | 10. Which 3 numbers odd to 13 ? $\begin{gathered} 35795 \\ +\quad+\quad=13 \end{gathered}$ | 17. Which 3 numbers add to 19 ? $\begin{gathered} 46859 \\ +\quad+\quad+\quad=19 \end{gathered}$ |
| 4. Which 3 numbers add to 20 p $\begin{aligned} & 84568 \\ & +\quad+\quad=20 \end{aligned}$ | 11. Which 3 numbers odd to 11 ? $\begin{gathered} 34251 \\ +\quad+\quad=11 \end{gathered}$ | 18 Which 3 numbers add to 24 ? $\begin{gathered} 87695 \\ +\quad+\quad=24 \\ \hline \end{gathered}$ |
| 5. Which 3 numbers add to $12 ?$ $\begin{aligned} & 32451 \\ & +\quad+\quad+\quad=12 \end{aligned}$ | 12. Which 3 numbers add to 22? $\begin{gathered} 78295 \\ +\quad+\quad=22 \end{gathered}$ | 19. Which 3 numbers add to 15 ? $\begin{gathered} 42635 \\ +\quad+\ldots=15 \end{gathered}$ |
| 6. Which 3 numbers add to 10 ? $\begin{aligned} & 23413 \\ & +\quad+\quad+\quad=10 \end{aligned}$ | 13. Which 3 numbers add to 17 ? $\begin{gathered} 65824 \\ +\quad+\quad+\quad=17 \end{gathered}$ | 20. Whith 3 numbers add to 20 ? $\begin{gathered} 67349 \\ +\quad+\quad+\quad=20 \end{gathered}$ |
| 7. Which 3 numbers add to $14 ?$ $\begin{gathered} 35784 \\ +\quad+\quad=14 \end{gathered}$ | 14. Which 3 numbers add to 9 ? $\begin{gathered} 43541 \\ +\quad+\quad=9 \end{gathered}$ | 21, Which 3 numbers add to 12 ? $\begin{gathered} 38125 \\ +\quad+\ldots=12 \end{gathered}$ |

Challenge using just the numbers $1,2,3,4$ and 5 , find as many ways as possible of adding 3 numbers to make 8,10 and 12 .


## Addition Can Be Done In Any Order - Subtraction Can't!

Numbers can be added in any order and the answer will stay the same.
E.g.

| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2+$ | $5+$ |  |  |  |  |  |  |  |  |  |  |


| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $5+$ |  |  |  |  |  |  |  |  |  |  |  |

The total is the same! Use this to help you answer the questions below.
A.

1. $4+3=7$

2. $9+2=11$

3. $6+4+7=17$

4. $19+10=29$
$10+19=\square$
5. $18+15=33$
$15+18=\square$
6. $2+7=9$
$7+\square=9$
7. $7+3+6=16$
$3+\square+6=16$
8. $4+5+6+5=20$
$6+\square+\square+\square=20$

9. $23+20=43$

10. $27+24=51$


## -

$24+\square=\square$

B.







## Using Inverse Operations to Check


A. For each of these addition calculations, work out the answer to the inverse operation, to check whether each answer is right or wrong.


| Correct? |
| :---: |
|  |
|  |
|  |
|  |
|  |
|  |
|  |


B. For each of these subtraction calculations, work out the answer to the inverse operation, to check whether each answer is right or wrong.



