ADD TWO 4-DIGIT NUMBERS (ONE EXCHANGE)

## GET READY

1) $4+\ldots=10$
2) $ـ+400=1,000$
3) 10 hundreds $=\ldots$ thousand
4) $4+\underline{6}=10$
5) $\underline{600}+400=1,000$
6) 10 hundreds $=1$ thousand

## LET'S LEARN

Dexter scores 1,351 points in a game. Rosie scores 2,263 points. How many points do they score altogether?

$+$| Th | $H$ | $T$ | $O$ |
| :---: | :---: | :---: | :---: |
| 2 | 2 | 6 | 3 |
| 1 | 3 | 5 | 1 |
| 3 | 6 | 1 | 4 |
| 1 |  |  |  |



Miss Rose has $£ 4,846$ in one bank account and $£ 1,233$ more in another account. How much money is in her second account? $£ 6,079$


1) $2,022+7,085$

2) $813+2,471$
3) $8,610+1,283$
4) $3,657+5,227$

| No exchange | Exchange 100s <br> for 1,000s | Exchange 10s <br> for 100s | Exchange 1s <br> for 10s |
| :---: | :---: | :---: | :---: |
| 3$)$ | $2)$ | $1)$ | $4)$ |

A pilot flies $3,641 \mathrm{~km}$ on Wednesday. On Thursday she flies $1,275 \mathrm{~km}$ further than she flew on Wednesday.
How far does she fly on both days in total?
8,557 km


## YOUR TURN

## Have a go at questions 1-5 on the worksheet

| Th H T O |  |  |  |
| :---: | :---: | :---: | :---: |
| 14836 |  |  |  |
|  | 1 | 1 | 7 |
|  | 2 | 5 | 3 |
|  |  | 1 |  |
| $\square+7=3$ |  |  |  |
| $6+7=13$ |  |  |  |


| Th | H | T | 0 |
| :---: | :---: | :---: | :---: |
| - | $\begin{aligned} & \circ 00 \\ & 0 \times 0 \end{aligned}$ | © |  |
| - | ®0 | ( ${ }^{\circ}$ |  |
| (3) ${ }^{(3)}$ |  |  | (1) |



## YOUR TURN

## Have a go at the rest of the worksheet

# ADD 4 DIGIT <br> NUMBERS WITH MORE THAN ONE EXCHANGE 

## GET READY

1) How many exchanges will there be in this addition?

$$
748+272
$$

2) 10 tens =__ hundred
3) 16 tens $=\ldots \quad$ hundred and ___ tens
4) How many exchanges will there be in this addition? There will be two exchanges

$$
7 \underline{4} \underline{8}+2 \underline{7} \underline{2}
$$

2) 10 tens $=1$ hundred
3) 16 tens $=\ldots 1$ hundred and $\underline{6}$ tens

## LET'S LEARN




Two cars are for sale. The first car costs $£ 3,655$
The second car costs $£ 1,755$ more.


1) How much does the second car cost? $£ 5,410$
2) Mr Jones has $£ 9,000$

He wants to buy both cars.
Does he have enough money?
No, he does not have enough money.

$+$| Th | $H$ | $T$ | $O$ |
| :---: | :---: | :---: | :---: |
| 5 | 4 | 1 | 0 |
| 3 | 6 | 5 | 5 |
| 9 | 0 | 0 | $\mathscr{S}$ |
| 1 | 1 | 1 |  |

## YOUR TURN

## Have a go at questions

 1-5 on the worksheet|  | Th H | T | 0 |
| :---: | :---: | :---: | :---: |
|  | 8 | 7 | 9 |
| + | 23 | 1 |  |
|  | 1 | 9 | 4 |
|  | 1 |  |  |
| $9+5=44$ |  |  |  |

8 hundreds +3 hundreds $=1$ hbaddfedds

$$
\square+\square=14
$$



3 hundreds +7 hundreds $=10$ hundreds

## YOUR TURN

Have a go at the rest of the worksheet

## SUBTRACT TWO

 4-DIGIT NUMBERS (ONE EXCHANGE)

## GET READY

1) $7,058-3,042=$
2) $1,635-601=$
3) 1 thousand =___ hundreds
4) $7,058-3,042=4,016$
5) $1,635-601=1,034$
6) 1 thousand $=\underline{10}$ hundreds

## LET'S LEARN

A cyclist rides $4,154 \mathrm{~km}$ in May. In June she cycles 1,522 km.
How many more km does she cycle during May?
2,632 km


| Th | $H$ | T | O |
| :---: | :---: | :---: | :---: |
| $\mathrm{B}_{\boldsymbol{y}}^{\boldsymbol{y}}$ | ${ }^{1} 1$ | 5 | 4 |
| 1 | 5 | 2 | 2 |
| 2 | 6 | 3 | 2 |

1 hundred -5 hundreds $=$
11 hundreds -5 hundreds $=$
1 thousand = 10 hundreds

## 1 ten $=10$ ones

## 1 hundred $=10$ tens

1 thousand = 10 hundreds


$$
8,231-7,620=611
$$



## YOUR TURN

## Have a go at questions 1-5 on the worksheet

## $2,534-1,702=832$



15 hundreds -7 hundreds

7 hundreds - 5 hundreds


## Have a think

The answer to $1,364-630$ will have 1 thousand because there is nothing to subtract from 1 thousand

Explain why Dexter is not correct.


During a dance competition, Ron scores a total of 3,527 points. He scores 1,447 points in the morning. How many points does he score in the afternoon?

2,080 points


## YOUR TURN

## Have a go at questions <br> 6-9 on the worksheet

## SUBTRACT TWO

## 4-DIGIT NUMBERS -

MORE THAN ONE
EXCHANGE

## GET READY

1) $7,614-6,344=$
2) 1 thousand $=\ldots$ _ hundreds
3) 1 hundred $=\ldots$ tens
4) 1 thousand $=\ldots \quad$ tens
5) $7,614-6,344=1,270$
6) 1 thousand $=\ldots$ hundreds
7) 1 hundred $=10$ tens
8) 1 thousand $=\underline{100}$ tens

## LET'S LEARN

A cargo ship's journey is $4,065 \mathrm{~km}$. It has sailed $2,128 \mathrm{~km}$.
How much further does it need to sail?
1,937 km


| Th | H | T | 0 |
| :---: | :---: | :---: | :---: |
| ${ }^{3} 4$ | $1_{0}$ | ${ }^{5} 8$ | $1_{5}$ |
| 2 | 1 | 2 | 8 |
| 1 | 9 | 3 | 7 |

$3,402-1,309=2,093 \quad$ Have a think $\quad \square$


## YOUR TURN

Have a go at the questions 1-3 on the worksheet

5,114 people attend the theatre. 2,309 are adults and 1,457 are girls. How many boys attend?



10 hundreds -6 hundreds $=4$ hundreds

## YOUR TURN

Have a go at the questions 4 to 7 on the worksheet

## ADD WHOLE

NUMBERS WITH MORE THAN 4 DIGITS


## GET READY

1) Without calculating, in what column will the exchange happen?
$8,322+1,294$
2) Ten 1,000s equals ____ ten thousand.
3) $\ldots \quad+4,135=6,352$
4) Without calculating, in what column will the exchange happen?
$8,322+1,294$ Tens column
5) Ten 1,000 s equals ___ ten thousand.
6) $2,217+4,135=6,352$

## LET'S LEARN

| TTh | Th | H | T | O |
| :---: | :---: | :---: | :---: | :---: |
|  | 7 | 7 | 7 | 5 |
|  | 4 | 4 | 2 | 0 |
| 1 | 2 | 1 | 9 | 5 |
| 1 | 1 |  |  |  |



Have thine (I)

$+$| Thh Th | $H$ | $T$ | $O$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 7 | 2 | 4 | 0 |
|  | 2 | 8 | 1 | 9 |
| 1 | 0 | 0 | 5 | 9 |
| 1 | 1 |  |  |  |


$+$| TTh | Th | $H$ | T | O |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 0 | 5 | 6 |
| 3 | 1 | 7 |  |  |
| 2 | 2 | 3 | 7 | 3 |
| 1 |  |  |  |  |

## YOUR TURN

Have a go at questions 1 and 2 on the worksheet

$$
6,412+3,563=9,975
$$


$582 \mathrm{~cm}+63,070 \mathrm{~cm}+76 \mathrm{~m}=$
$582 \mathrm{~cm}+63,070 \mathrm{~cm}+7,600 \mathrm{~cm}=71,252 \mathrm{~cm}$

$+$| $T \mathrm{Th}$ | Th | H | T | O |
| :---: | :---: | :---: | :---: | :---: |
| 6 | 3 | 0 | 7 | 0 |
|  | 7 | 6 | 0 | 0 |
|  |  | 5 | 8 | 2 |
| 7 | 1 | 2 | 5 | 2 |
| 1 | 1 | 1 |  |  |


$\square$ hundreds +7 hundreds $7+6$ humdreds
9 hundreds +7 hundreds7=+6|hulidreds

## YOUR TURN

Have a go at the rest of the questions on the worksheet

## SUBTRACT

## WHOLE NUMBERS

## WITH MORE THAN 4 DIGITS

## GET READY

1) ___ tens $=1$ thousand
2) $4,102-2,510=$
3) $738-461=337$

In which place value column in the answer is there an error?
4) $3,217-464=$

1) 100 tens $=1$ thousand
2) $4,102-2,510=1,592$
3) $738-461=337$

In which place value column in the answer is there an error?

Tens column
4) $3,217-464=2,753$

## LET'S LEARN

$56,490-35,491=20,999$

|  | Th | th | H | T | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $88$ | $\begin{aligned} & 88 \\ & 88 \\ & 80 \end{aligned}$ | 0.0000088888 |  |  |
| H | T | 0 |  |  |  |
|  | ${ }^{18} 8$ | ${ }^{1} 0$ |  |  |  |
| 4 | 9 | 1 |  |  |  |
| 9 | 9 | 9 |  |  |  |

$$
14,372-2,540=11,832
$$



Mr Jones has $£ 22,200$ Have a think He buys a new car for $£ 15,515$ and spends £1,008 on a holiday. How much money does he have left? $£ 5,677$

| TTh | Th | H | T | 0 | Th | H | T | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1} 2$ | ${ }^{11} 2$ | ${ }^{11} 2$ | $\chi_{8}{ }^{9}$ | $1_{0}$ | 6 | 6 | ${ }^{7} 8$ | 15 |
| 1 | 5 | 5 | 1 | 5 | 1 | 0 | 0 | 8 |
| 0 | 6 | 6 | 8 | 5 | 5 | 6 | 7 | 7 |

The distance around the middle of the moon is $10,921 \mathrm{~km}$.
The distance around the middle of the earth is $40,075 \mathrm{~km}$.
How much further is it around the earth than the moon? $29,154 \mathrm{~km}$


Miss Rose has $£ 76,350$ £9,160 of her money is in High Street bank and the rest is in National Bank. How much is in National Bank?

£67,190

| TTh | Th | $H$ | T | 0 |
| :---: | :---: | :---: | :---: | :---: |
| ${ }^{6} \not \boldsymbol{Z}$ | $1_{6}$ | ${ }^{2} \not 2$ | 15 | 0 |
|  | 9 | 1 | 6 | 0 |
| 6 | 7 | 1 | 9 | 0 |

## YOUR TURN

Have a go at the questions on the worksheet

## ROUND TO ESTIMATE

 AND APPROXIMATE
## GET READY

## 1) $7,116-3,655=$

2) $51,540+5,154=$
3) Round 84,564 to the nearest 1,000
4) Round 84,564 to the nearest 10,000
5) $7,116-3,655=3,461$
6) $51,540+5,154=56,694$
7) Round 84,564 to the nearest $1,00085,000$
8) Round 84,564 to the nearest $10,00080,000$

## LET'S LEARN



How?! I haven't written the numbers yet!

STOP! I already know he can afford it.


## I rounded $£ 2,138.95$ to $£ 2,100$

I rounded $£ 1,219.40$ to $£ 1,200$
$£ 2,100$ plus $£ 1,200$ is $£ 3,300$ so Ron has enough money

## An estimate - a sensible but not exact answer.

## $7,116-3,655=$

7,116 rounded to the nearest 1,000 is $\underline{7,000}$
3,655 rounded to the nearest 1,000 is $\underline{4,000}$

$$
7,000-4,000=3,000
$$

7,116 rounded to the nearest 100 is 7,100
3,655 rounded to the nearest 100 is 3,700

$$
7,100-3,700=3,400
$$

Have a think
Which is the more accurate estimate?

|  | Shop A | Shop B | Shop C |
| :---: | :---: | :---: | :---: |
| Morning | $£ 4,000$ | $£ 6,231$ | $£ 2,002$ |
| Afternoon | $£ 11,613$ | $£ 9,199$ | $£ 14,508$ |

Estimate which shop made the most money.

## Shop C

Shop A: 4,000 + 7he, rounded to the Shop B: 6,000 + m, \&@Ot $\ddagger, 000115,000$

## YOUR TURN

## Have a go at questions

 1-5 on the worksheet
## True or false?



What's rbangedifference

## $25,501-1,000=25,500-999$

True 1 lessHave pethink
What's stayed the same?
What's changed?

## YOUR TURN

Have a go at the rest of the worksheet

INVERSE
OPERATIONS
(ADDITION AND SUBTRACTION)


## GET READY

1) Estimate the answer to:

$$
6,212-255=
$$

2) Round 176,388 to the nearest 10,000
3) Round 450 to the nearest 1,000
4) Calculate $5,993+4,011=$
5) Estimate the answer to:

$$
\begin{aligned}
& 6,212-255= \\
& 6,200-300=5,900
\end{aligned}
$$

2) Round 176,388 to the nearest $10,000180,000$
3) Round 450 to the nearest 1,0000
4) Calculate $5,993+4,011=10,004$

## LET'S LEARN


$6,834+2,417=9,251$
$9,251-6,834=2,417$
$\underline{9,251}-\underline{2,417}=\underline{6,834}$
Have a think

Fact family $\quad 2,417+6,834=9,251$ $6,834+2,417=9,251$ $9,251-2,417=6,834$ $9,251-6,834=2,417$

Addition is the inverse of subtraction
Subtraction is the inverse of addition

## $92,733-35,904=56,829$

Have a think

$$
\underline{92,733}-\underline{56,829}=\underline{35,904}
$$

$$
\underline{56,829}+\underline{35,904}=\underline{92,733}
$$

(1)

$$
\underline{35,904}+\underline{56,829}=\underline{92,733}
$$

$$
\underline{92,733}+\underline{35,904}=\underline{56,829}
$$

$$
42,125-17,641=24,484
$$

Which addition is the inverse of this subtraction?
$42,125+17,641 \quad 24,484+42,125$

$$
17,641+24,484
$$

$$
42,125
$$

## YOUR TURN

Have a go at the questions 1-5 on the worksheet

Calculate the missing part

| 31,050 |  |  |
| :---: | :---: | :---: |
| 9,777 | 18,188 | 3,085 |

## 27,965 <br> Have a think

$+$| $\operatorname{TTh}$ | Th | $H$ | T | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 8 | 1 | 8 | 8 |
|  | 9 | 7 | 7 | 7 |
| 2 | 7 | 9 | 6 | 5 |
| 1 |  | 1 | 1 |  |

Use an inverse operation to check this addition.

$+$| Th | H | T | O |
| :---: | :---: | :---: | :---: |
| 5 | 4 | 8 | 5 |
| 4 | 4 | 1 | 0 |
| 9 | 8 | 9 | 5 |


| Th | H | T | O |
| :---: | :---: | :---: | :---: |
| 9 | 8 | 9 | 5 |
| 5 | 4 | 8 | 5 |
|  |  |  |  |
| Th | H | T | O |
| 9 | 8 | 9 | 5 |
| 4 | 4 | 1 | 0 |
|  |  |  |  |

## When I subtract 12,210 from my number I get 12,210

What was Dora's starting number? 24,420


## YOUR TURN

Have a go at the questions 6-8 on the worksheet

# MULTI-STEP <br> ADDITION AND <br> SUBTRACTION PROBLEMS 

## GET READY

1) "Teddy scores 74 points. Dora scores 103 points.
How many more points does Dora score than Teddy?"
What operation is needed to answer this question?
2) Complete the fact family:
$454+352=806$

3) Round 95,032 to the nearest 10,000
4) "Teddy scores 74 points. Dora scores 103 points.
How many more points does Dora score than Teddy?"
What operation is needed to answer this question?
5) Complete the fact family: $454+352=806 \quad \underline{806}-\underline{454}=\underline{352}$ $\underline{352}+\underline{454}=\underline{806} \quad \underline{806}-\underline{352}=\underline{454}$
6) Round 95,032 to the nearest 10,000 100,000

## LET'S LEARN

On Monday, Richard scores 411 points. On Tuesday he scores 63 points fewer than on Monday.

How many points does he score on Tuesday? 348


On Monday, Richard scores 411 points.
On Tuesday he scores 63 points fewer than on Monday.
How many points does he score on Tuesday? 348 Richard needs to score 1,000 points by the end of Wednesday.
How many points does he need to score on
Wednesday? 241


| $H$ | $T$ | 0 |
| :---: | :---: | :---: |
| 9 | 9 | 9 |
| 7 | 5 | 8 |
| 2 | 4 | 1 |

Eva and Mo each have some money. ©0, Mo has $£ 900$
The difference between the two amounts is $£ 900$ What is the sum of their money altogether?

$900+1,800=2,700900+900=1,800$

## YOUR TURN

## Have a go at questions 1-4 on the worksheet

At a cricket match there are 7,114 adults in the crowd.
There are 2,009 fewer children than adults. How many people attend the match? 12,219

$$
7,114+2,009=
$$



## Two different numberssum to 8,264

One of the numbers is 1,444 greater than the other.
What are the two numbers? $B=3,410 \quad A=4,854$
3 and 4 sum to 7


$$
3,416,820,444=3, \$ 50
$$

## YOUR TURN

## Have a go at questions

 5-8 on the worksheet