1) 

a) $\mathbf{2}$ minutes $=120$ seconds
b) $\mathbf{6}$ minutes $\mathbf{= 3 6 0}$ seconds
c) 300 seconds $=\mathbf{5}$ minutes
d) 8 minutes $=480$ seconds
2) A and 4
$B$ and 2
$C$ and 3
D and 1
3)
a) $6 \times 60$ seconds $=\mathbf{3 6 0}$ seconds
$360+12$ seconds $=\mathbf{3 7 2}$ seconds
6 minutes and 12 seconds $=\mathbf{3 7 2}$ seconds
b) $3 \times 60$ seconds $=180$ seconds

180 seconds +18 seconds $=198$ seconds
3 minutes and 18 seconds $=198$ seconds
$4 \times 60$ seconds $=240$ seconds
240 seconds +27 seconds $=267$ seconds
4 minutes and 27 seconds $=\mathbf{2 6 7}$ seconds
$8 \times 60$ seconds $=480$ seconds
480 seconds +46 seconds $=526$ seconds
8 minutes and 46 seconds $=526$ seconds
1)
a) Bartek has assumed that there are $\mathbf{1 0 0}$ seconds in one minute when there are actually $\mathbf{6 0}$ seconds in one minute.
b) It takes 185 seconds to walk to school, which means it takes $\mathbf{3 7 0}$ seconds in total. This is also $\mathbf{6}$ minutes and 10 seconds.
2) Abi is incorrect. There are only two mistakes. Here are the incorrect statements.

3) Jia is incorrect. The first two are in the correct order but the last two are the wrong way round. 115 seconds equals 1 minute and 55 seconds, which is slower than 1 minute and 38 seconds.

1) 215 seconds and $3 \frac{1}{4}$ minutes are in the incorrect columns.
2) Tuesday, Wednesday, Friday
3) 

a) 9 lengths
b) $\mathbf{3 6 8}$ seconds

## Minutes and Seconds

1) Fill in the missing numbers.
a)

b) 6 minutes $=\square$ seconds
c) 300 seconds $=\square$ minutes
d) 8 minutes $=$ $\square$ seconds
2) Match each time in words to the equivalent digital time.
A one hundred and twenty-five seconds
1

2

$A$ and

B two hundred and five seconds
C
one hundred and forty-five seconds
D

$C$ and

D and $\qquad$
3) This bar model has been used to represent 6 minutes and 12 seconds in seconds.

a) Fill in the missing numbers.
$6 \times 60$ seconds $=\square$ seconds
$\square$ seconds +12 seconds $=\square$ seconds
6 minutes and 12 seconds $=\square$ seconds
b) Use this bar model method to help you convert these times.

3 minutes and 18 seconds = $\qquad$ seconds

4 minutes and 27 seconds $=$ $\qquad$ seconds

8 minutes and 46 seconds $=$ $\qquad$ seconds

## Minutes and Seconds

1) 



It takes 3 minutes and 5 seconds to walk to school. This is 305 seconds. I think it takes 610 seconds to walk to school and back.
a) What mistake has Bartek made?
$\qquad$
$\qquad$
b) How long does it take Bartek to get to school and back in seconds? Explain how you know.
$\qquad$
$\qquad$
2) Is Abi correct? Explain your reasoning.

| I think there are three mistakes in these comparison statements. | 2 minutes and 14 seconds | = | 134 seconds |
| :---: | :---: | :---: | :---: |
|  | 97 seconds | > | 1 minute and 25 seconds |
|  | 4 minutes | < | 200 seconds |
|  | 147 seconds | > | 2 minutes and 27 seconds |
|  | 3 minutes and 20 seconds | < | 210 seconds |

3) Jia's friends have had a running race. She has placed them in order from the fastest to the slowest.


Is Jia correct? Explain why. $\qquad$ n

$\qquad$
here for help.

## Minutes and Seconds

1) These times have been sorted into the table. There are two mistakes. Find them.

| $<3 \frac{1}{2}$ minutes | $>210$ seconds |
| :---: | :---: |
| 200 seconds | 3 minutes and 40 seconds |
| 209 seconds | 3 minutes and 35 seconds |
| 215 seconds | $3 \frac{1}{4}$ minutes |
| 188 seconds | $3 \frac{3}{4}$ minutes |

$\square$
2) Year 3 were challenged by their teacher to work silently on their paintings for more than 6 minutes. On which days did they manage to do so?

| Monday 357 seconds <br> Tuesday 384 seconds <br> Wednesday 362 seconds <br> Thursday 344 seconds <br> Friday 425 seconds |
| :--- | :---: | :---: |

3) Joseph is completing a sponsored swim. Here are the lengths of time he swam on each day.

| day 1 | 3 minutes and 31 seconds |
| :---: | :---: |
| day 2 | 464 seconds |
| day 3 | 6 minutes and 45 seconds |
| day 4 | 579 seconds |
| day 5 | 5 minutes and 49 seconds |

a) It takes exactly 45 seconds for Joseph to swim one length of the pool. How many full lengths did he swim on day 3?

b) What is the difference, in seconds, between the longest and shortest amount of time that Joseph spent swimming?
$\square$


## Diving into Mastery



## Minutes and Seconds

## Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:


These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

## National Curriculum Aim

- Know the number of seconds in a minute and the number of days in each month, year and leap year

Fill in the missing numbers.


## Minutes and Seconds

## Diving

This bar model has been used to represent 3 minutes and 32 seconds in seconds.


Fill in the missing numbers.



| 1 minute and <br> 14 seconds | $=$ | 74 seconds |
| :---: | :---: | :---: |
| 93 seconds | $>$ | 1 minute and <br> 23 seconds |
| 6 minutes | $=$ | 300 seconds |
| 151 seconds | $>$ | 2 minutes and <br> 27 seconds |

Is Abi correct? Explain your reasoning.


## Jia

My friends have had a bike race. I have placed them in order from the slowest to fastest.


Is Jia correct? Explain your thoughts.

Joseph is completing a sponsored football keepy-up challenge. Here is the time of his most successful effort on each day.


| day 1 | 2 minutes and 31 seconds |
| :---: | :---: |
| day 2 | 364 seconds |
| day 3 | 3 minutes and 45 seconds |
| day 4 | 420 seconds |
| day 5 | 6 minutes and 11 seconds |

On which days did he manage to do keepy-ups for longer than 6 minutes?
$\square$
What is the difference, in seconds, between the longest and the shortest time that Joseph spent doing keepy-ups?

Dive in by completing your own activity!


Regent Studies | www.regentstudies.com

## Minutes and Seconds

1) Fill in the missing numbers.
a) $\square$ minutes $=120$ seconds
b) 6 minutes $=$ $\square$ seconds
c) 300 seconds = $\square$ minutes
d) 8 minutes $=$ $\square$ seconds
2) Match each time in words to the equivalent digital time.

A


B


C


D

3) This bar model has been used to represent 6 minutes and 12 seconds in seconds.

a) Fill in the missing numbers.

b) Use this bar model method to help you convert these times.

3 minutes and
18 seconds = $\qquad$ seconds


## Minutes and Seconds

1) Fill in the missing numbers.
a) $\square$ minutes $=120$ seconds
b) 6 minutes $=$ $\square$ seconds
c) 300 seconds = $\square$ minutes
d) 8 minutes $=$ $\square$ seconds
2) Match each time in words to the equivalent digital time.
A

1

B

2


C

3


D

4
00:02:05
3) This bar model has been used to represent 6 minutes and 12 seconds in seconds.

a) Fill in the missing numbers.

b) Use this bar model method to help you convert these times.

3 minutes and
18 seconds $=$ $\qquad$ seconds

4 minutes and
27 seconds = $\qquad$ seconds

8 minutes and 46 seconds = $\qquad$ seconds

## Minutes and Seconds

1) 



It takes 3 minutes and 5 seconds to walk to school. This is 305 seconds. I think it takes 610 seconds to walk to school and back.
a) What mistake has Bartek made?
b) How long does it take Bartek to get to school and back in seconds? Explain how you know.
2)


Is Abi correct? Explain your reasoning.
3) Jia's friends have had a running race. She has placed them in order from the fastest to the slowest.

1)


It takes 3 minutes and 5 seconds to walk to school. This is 305 seconds. I think it takes 610 seconds to walk to school and back.
a) What mistake has Bartek made?
b) How long does it take Bartek to get to school and back in seconds? Explain how you know.
2)


| 2 minutes and <br> 14 seconds | $=$ | 134 seconds |
| :---: | :---: | :---: |
| 97 seconds | $>$ | 1 minute and <br> 25 seconds |
| 4 minutes | $<$ | 200 seconds |
| 147 seconds | $>$ | 2 minutes and <br> 27 seconds |
| 3 minutes and <br> 20 seconds | $<$ | 210 seconds |

Is Abi correct? Explain your reasoning.
3) Jia's friends have had a running race. She has placed them in order from the fastest to the slowest.


Is Jia correct? Explain why.


## Minutes and Seconds

1) These times have been sorted into the table. There are two mistakes. Find them.

| $<3 \frac{1}{2}$ minutes | $>210$ seconds |
| :---: | :---: |
| 200 seconds | 3 minutes and 40 seconds |
| 209 seconds | 3 minutes and 35 seconds |
| 215 seconds | $3 \frac{1}{4}$ minutes |
| 188 seconds | $3 \frac{3}{4}$ minutes |

2) Year 3 were challenged by their teacher to work silently on their paintings for more than 6 minutes.

| Monday | 357 seconds |
| :---: | :---: |
| Tuesday | 384 seconds |
| Wednesday | 362 seconds |
| Thursday | 344 seconds |
| Friday | 425 seconds |

On which days did they manage to do so?
3) Joseph is completing a sponsored swim. Here are the times he swam on each day.

| day 1 | 3 minutes and 31 seconds |
| :---: | :---: |
| day 2 | 464 seconds |
| day 3 | 6 minutes and 45 seconds |
| day 4 | 579 seconds |
| day 5 | 5 minutes and 49 seconds |

a) It takes exactly 45 seconds for Joseph to swim one length of the pool. How many full lengths did he swim on day 3?
b) What is the difference, in seconds, between the longest and shortest amount of time that Joseph spent swimming?

## Minutes and Seconds

1) These times have been sorted into the table. There are two mistakes. Find them.

| $<3 \frac{1}{2}$ minutes | $>210$ seconds |
| :---: | :---: |
| 200 seconds | 3 minutes and 40 seconds |
| 209 seconds | 3 minutes and 35 seconds |
| 215 seconds | $3 \frac{1}{4}$ minutes |
| 188 seconds | $3 \frac{3}{4}$ minutes |

2) Year 3 were challenged by their teacher to work silently on their paintings for more than 6 minutes.

| Monday | 357 seconds |
| :---: | :---: |
| Tuesday | 384 seconds |
| Wednesday | 362 seconds |
| Thursday | 344 seconds |
| Friday | 425 seconds |

On which days did they manage to do so?
3) Joseph is completing a sponsored swim. Here are the times he swam on each day.

| day 1 | 3 minutes and 31 seconds |
| :---: | :---: |
| day 2 | 464 seconds |
| day 3 | 6 minutes and 45 seconds |
| day 4 | 579 seconds |
| day 5 | 5 minutes and 49 seconds |

a) It takes exactly 45 seconds for Joseph to swim one length of the pool. How many full lengths did he swim on day 3?
b) What is the difference, in seconds, between the longest and shortest amount of time that Joseph spent swimming?

