## Step 1: Kilometres

## National Curriculum Objectives:

Mathematics Year 4: (4M5) Convert between different units of measure (for example, kilometre to metre; hour to minute)

## Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Complete the calculations, using conversion between metres and kilometres where some kilometres are represented as halves.
Expected Complete the calculations, using conversion between metres and kilometres where kilometres are represented as wholes, halves and quarters.
Greater Depth Complete the calculations, using conversion between metres and kilometres where kilometres are represented as wholes, halves, quarters and tenths. Some kilometres are represented in words.

Questions 2, 5 and 8 (Varied Fluency)
Developing Order distances by converting between metres/kilometres where some kilometres are represented as wholes and halves.
Expected Order distances by converting between metres/kilometres where kilometres are represented as wholes, halves and quarters.
Greater Depth Order distances by converting between metres/kilometres where kilometres are represented as wholes, halves, quarters and tenths. Some kilometres are represented in words.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Explain whether a given statement is correct using conversion between metres/kilometres where kilometres are represented as wholes and halves. Expected Explain whether a given statement is correct using conversion between metres/kilometres where kilometres are represented as wholes and quarters.
Greater Depth Explain whether a given statement is correct using conversion between metres/kilometres where kilometres are represented as wholes, halves, quarters and tenths. Some kilometres are represented in words.

## More Year 4 Length and Perimeter resources.

## Did you like this resource? Don't forget to review it on our website.

## Kilometres

1. Complete the following calculations. Don't forget to use a unit of measurement in the answer!
A.
7km
$+2,000 \mathrm{~m}$
$=\square$
B. $3,500 \mathrm{~m}$
3km

C. $5,000 \mathrm{~m}$
$-\quad 3 \frac{1}{2} \mathrm{~km}$

2. Four children swam for an hour. The results of how far they swam are shown in the table below.

| James | $1 \frac{1}{2} \mathrm{~km}$ |
| :---: | :---: |
| Aaron | $2,500 \mathrm{~m}$ |
| Ellie | 1 km |
| Charlotte | 2 km |

Order the distances swam from shortest to furthest in metres.

3. Harry has taken part in a sponsored bike ride.

He says,


I cycled $\frac{1}{2}$ of a kilometre less than $\mathbf{1 , 0 0 0 m}$. I think I cycled 500 metres.

Is he correct? Explain your answer.
classroomsecrets.co.uk

## Kilometres

4. Complete the following calculations. Don't forget to use a unit of measurement in the answer!
A.
5km
$+6,500 \mathrm{~m}$
$=\square$
B. $\quad \mathbf{1 , 2 5 0 m}$
$+\quad 5 \frac{1}{2} \mathrm{~km}$
$+\quad 2,750 \mathrm{~m}$ $=$ $\square$
C. $8,000 \mathrm{~m}$
$-\quad 3 \frac{1}{4} \mathrm{~km}$ $\square$
5. Four children ran for an hour. The results of how far they ran are shown in the table below.

| Hannah | $2 \frac{1}{2} \mathrm{~km}$ |
| :---: | :---: |
| David | $2,200 \mathrm{~m}$ |
| Michael | $2 \frac{1}{4} \mathrm{~km}$ |
| Sarah | 3 km |

Order the distances run from shortest to furthest in metres.

6. Sam has taken part in a charity swim at the local swimming baths.

She says,


I swam $\frac{1}{4}$ of a kilometre less than $3,000 \mathrm{~m}$. I think I swam 3,250 metres.

Is she correct? Explain your answer.
mes.

## Kilometres

7. Complete the following calculations. Don't forget to use a unit of measurement in the answer!
A. $3 \frac{1}{4} \mathrm{~km}+\square=6,500 \mathrm{~m}$
B. $\square$
$+3 \frac{4}{10} \mathrm{~km} \quad+\quad 2,900 \mathrm{~m}$

$-3 \frac{1}{4} \mathrm{~km} \quad=$| Two thousand |
| :---: |
| metres |

8. Four children walked for an hour. The results of how far they walked are shown in the table below.

| Malcolm | $6 \frac{6}{10} \mathrm{~km}$ |
| :---: | :---: |
| Julie | Six and a half <br> kilometres |
| Oliver | $6 \frac{3}{4} \mathrm{~km}$ |
| Ruby | Half of 12 km |



Order the distances walked from shortest to furthest in metres.

9. Joe skated for charity at his local skating rink.

He says,


Is he correct? Explain your answer.

## Homework/Extension

## Kilometres

## Developing

1. A. $9,000 \mathrm{~m}$ or 9 km B. $6,500 \mathrm{~m}$ or $6 \frac{1}{2} \mathrm{~km}$ C. $1,500 \mathrm{~m}$ or $1 \frac{1}{2} \mathrm{~km}$
2. $1,000 \mathrm{~m}, 1,500 \mathrm{~m}, 2,000 \mathrm{~m}, 2,500 \mathrm{~m}$
3. Harry is correct. $\frac{1}{2}$ of a kilometre is $500 \mathrm{~m} .1,000 \mathrm{~m}-500 \mathrm{~m}=500 \mathrm{~m}$.

## Expected

4. A. $11,500 \mathrm{~m}$ or 11 km
B. $9,500 \mathrm{~m}$ or $9 \frac{1}{2} \mathrm{~km}$
C. $4,750 \mathrm{~m}$ or $4 \frac{3}{4} \mathrm{~km}$
5. $2,200 \mathrm{~m}, 2,250 \mathrm{~m}, 2,500 \mathrm{~m}, 3,000 \mathrm{~m}$
6. Sam is incorrect. The correct answer should be $2,750 \mathrm{~m}$ because $\frac{1}{4} \mathrm{~km}=250 \mathrm{~m}$ and $3,000 \mathrm{~m}-250 \mathrm{~m}=2,750 \mathrm{~m}$.

## Greater Depth

7. A. $3,250 \mathrm{~m}$ or $3 \frac{1}{4} \mathrm{~km}$ B. $1,700 \mathrm{~m}$ or $1 \frac{7}{10} \mathrm{~km}$ C. $5,250 \mathrm{~m}$ or $5 \frac{1}{4} \mathrm{~km}$
8. $6,000 \mathrm{~m}, 6,500 \mathrm{~m}, 6,600 \mathrm{~m}, 6,750 \mathrm{~m}$
9. Joe is incorrect. If he had skated two tenths of a kilometre more, he would have skated $2,550 \mathrm{~m}+200 \mathrm{~m}=2,750 \mathrm{~m}$ or $2 \frac{3}{4} \mathrm{~km}$ because two tenths of a kilometre is 200 m .
