

Varied Fluency

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:

Developing Questions to support converting metres and kilometres using whole and half units.

Expected Questions to support converting metres and kilometres using wholes, halves, quarters and tenths. Tenths used in metres only. Kilometres represented as numbers and some use of fractions for halves and quarters.

Greater Depth Questions to support converting metres and kilometres using wholes, halves, quarters and tenths. Including a mixture of numbers and words. Kilometres represented as numbers and some use of fractions for tenths.

More [Year 4 Length and Perimeter](#) resources.

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

Kilometres

1a. Match up the equal distances.

| | |
|-------------------|-------------------|
| $3\frac{1}{2}$ km | 4km |
| 7,500m | 6,000m |
| 4,000m | 3,500m |
| 6km | $7\frac{1}{2}$ km |



VF

Kilometres

1b. Match up the equal distances.

| | |
|--------|-------------------|
| 9,500m | $1\frac{1}{2}$ km |
| 2km | 5,000m |
| 1,500m | $9\frac{1}{2}$ km |
| 5km | 2,000m |



VF

2a. True or false?

$$5,000\text{m} < 4\frac{1}{2}\text{km}$$



VF

2b. True or false?

$$6\frac{1}{2}\text{km} > 5,500\text{m}$$



VF

3a. Which is the odd one out?

10,000m 9km 5,000m

5km 10km



VF

3b. Which is the odd one out?

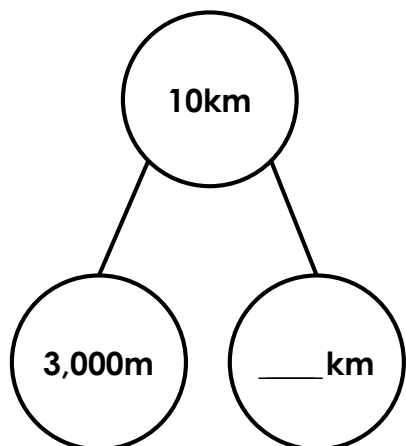
3km 2km 3,000m

2,000m 1km



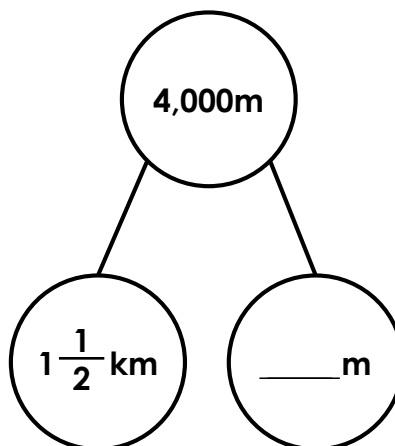
VF

4a. Complete the part whole model.



VF

4b. Complete the part whole model.



VF

Kilometres

5a. Match up the equal distances.

| |
|-------------------|
| $8\frac{1}{2}$ km |
| 5,000m |
| 1km |
| 250m |

| |
|------------------|
| $\frac{1}{4}$ km |
| 1,000m |
| 8,500m |
| 5km |



VF

Kilometres

5b. Match up the equal distances.

| |
|-------------------|
| 9,000m |
| 3,250m |
| $7\frac{1}{2}$ km |
| 4km |

| |
|-------------------|
| $3\frac{1}{4}$ km |
| 4,000m |
| 9km |
| 7,500m |



VF

6a. True or false?

$$1\text{ km} < \frac{1}{10} \text{ of } 9,000 \text{ m}$$



VF

6b. True or false?

$$7\text{ km} > \frac{1}{10} \text{ of } 7,000\text{ m}$$



VF

7a. Which is the odd one out?

1km 1,500m 5,000m
 $\frac{1}{2}$ of 10km 1,000m



VF

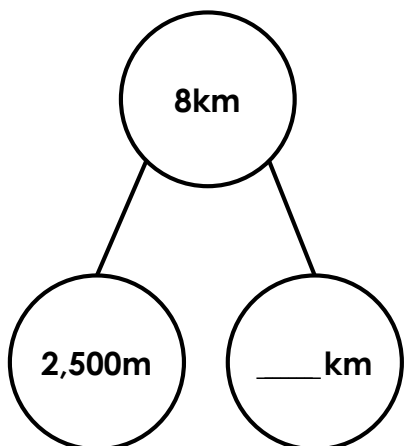
7b. Which is the odd one out?

2,000m 3km 7,000m
 $\frac{1}{4}$ of 8km 3,000m



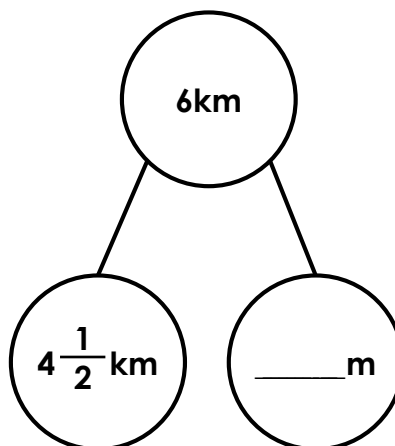
VF

8a. Complete the part whole model.



VF

8b. Complete the part whole model.



VF

Kilometres

9a. Match up the equal distances.

| | |
|-------------------|-------------------|
| 4,750m | $5\frac{1}{2}$ km |
| $9\frac{3}{4}$ km | 7,250m |
| $7\frac{1}{4}$ km | 9,750m |
| 5,500m | $4\frac{3}{4}$ km |



VF

Kilometres

9b. Match up the equal distances.

| | |
|-------------------|-------------------|
| $6\frac{1}{2}$ km | $2\frac{1}{4}$ km |
| 2,250m | $8\frac{1}{2}$ km |
| 8,500m | 8,750km |
| $8\frac{3}{4}$ km | 6,500m |



VF

10a. True or false?

7km < one tenth of nine kilometres



VF

10b. True or false?

$1\frac{1}{4}$ km > one tenth of ten thousand metres



VF

11a. Which is the odd one out?

8,250m 3,000m 5,500m

$\frac{1}{2}$ of 11km $8\frac{1}{4}$ km



VF

11b. Which is the odd one out?

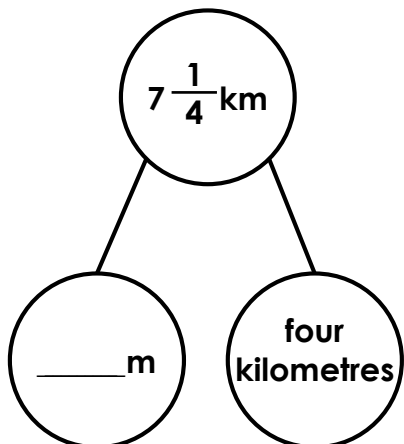
9,750m 6,250m $9\frac{3}{4}$ km

$\frac{3}{4}$ of 9km $6\frac{1}{4}$ km



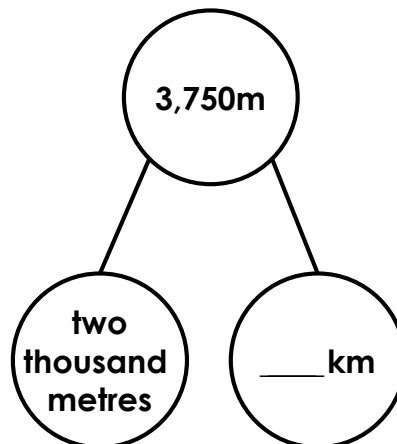
VF

12a. Complete the part whole model.



VF

12b. Complete the part whole model.



VF

Varied Fluency Kilometres

Developing

1a. $3\frac{1}{2}$ km = 3,500m; 7,500m = $7\frac{1}{2}$ km;

4,000m = 4km; 6km = 6,000m

2a. False, 5,000m is more than $4\frac{1}{2}$ km.

3a. 9km

4a. 7km

Expected

5a. $8\frac{1}{2}$ km = 8,500m; 5,000m = 5km;

1km = 1,000m; 250m = $\frac{1}{4}$ km

6a. False, $\frac{1}{10}$ of 9,000m is 900m which is less than 1km.

7a. 1,500m

8a. $5\frac{1}{2}$ km

Greater Depth

9a. 4,750m = $4\frac{3}{4}$ km; $9\frac{3}{4}$ km = 9,750m;

$7\frac{1}{4}$ km = 7,250m; 5,500m = $5\frac{1}{2}$ km

10a. True

11a. 3,000m

12a. 3,250m

Varied Fluency Kilometres

Developing

1b. 9,500m = $9\frac{1}{2}$ km; 2km = 2,000m;

1,500m = $1\frac{1}{2}$ km; 5km = 5,000m

2b. True

3b. 1km

4b. 2,500m

Expected

5b. 9,000m = 9km; 3,250m = $3\frac{1}{4}$ km;

$7\frac{1}{2}$ km = 7,500m; 4km = 4,000m

6b. True

7b. 7,000m

8b. 1,500m

Greater Depth

9b. $6\frac{1}{2}$ km = 6,500m; 2,250m = $2\frac{1}{4}$ km;

8,500m = $8\frac{1}{2}$ km; $8\frac{3}{4}$ km = 8,750m

10b. False, $1\frac{1}{4}$ km equals 1,250m which is more than 1,000m.

11b. $\frac{3}{4}$ of 9km

12b. $1\frac{3}{4}$ km