

Varied Fluency

Step 2: 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 units.
Expected Questions to support converting metres and kilometres using half and whole units.

Greater Depth Questions to support converting metres and kilometres using quarter, half, three-quarter and whole units.

[More resources](#) which follow the same small steps as White Rose.

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

Kilometres

1a. Match up the equal distances.

3km	4km
7,000m	6,000m
4,000m	3,000m
6km	7km



4 VF

Kilometres

1b. Match up the equal distances.

9,000m	1km
2km	5,000m
1,000m	2,000m
5km	9km



4 VF

2a. True or false?

$$6\text{km} < 3,000\text{m}$$



4 VF

2b. True or false?

$$5,000\text{m} > 2\text{km}$$



4 VF

3a. Which is the odd one out?

12,000m	9km	8,000m
9,000m	12km	



4 VF

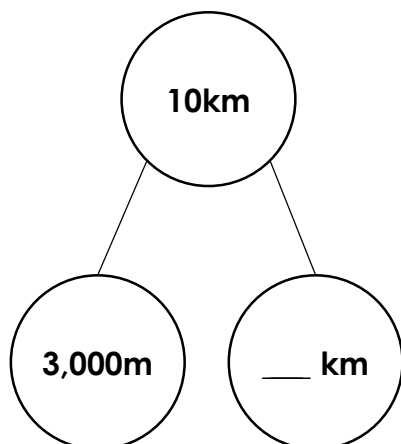
3b. Which is the odd one out?

3km	6km	3,000m
6,000m	13km	



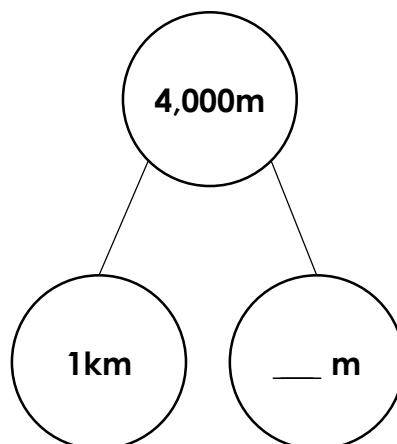
4 VF

4a. Complete the part whole model.



4 VF

4b. Complete the part whole model.



4 VF

Kilometres

5a. Match up the equal distances.

$8\frac{1}{2}$ km	$\frac{1}{2}$ km
5,000m	1,000m
1km	8,500m
500m	5km



4 VF

Kilometres

5b. Match up the equal distances.

9,000m	$3\frac{1}{2}$ km
3,500m	4,000m
$7\frac{1}{2}$ km	9km
4km	7,500m



4 VF

6a. True or false?

$$4\text{km} < 4,000\text{m}$$



4 VF

6b. True or false?

$$11,500\text{m} < 11\text{km}$$



4 VF

7a. Which is the odd one out?

1km	1,500m	5,000m
5km	1,000m	



4 VF

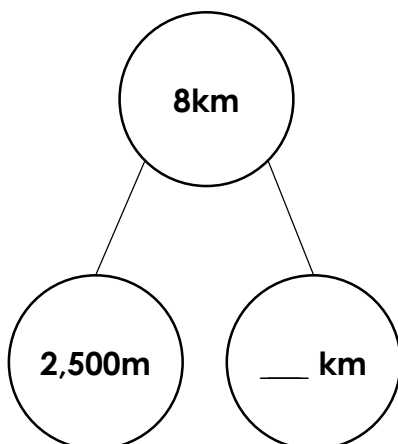
7b. Which is the odd one out?

$13\frac{1}{2}$ km	14,000m	14km
13,500m	13,000m	



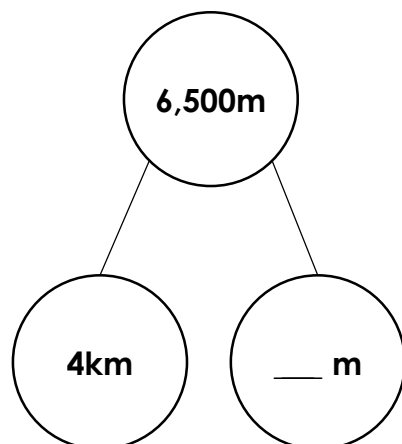
4 VF

8a. Complete the part whole model.



4 VF

8b. Complete the part whole model.



4 VF

Kilometres

9a. Match up the equal distances.

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

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



4 VF

Kilometres

9b. Match up the equal distances.

$15\frac{1}{2}$ km
2,250m
22,500m
$8\frac{3}{4}$ km

$2\frac{1}{4}$ km
$22\frac{1}{2}$ km
8,750m
15,500m



4 VF

10a. True or false?

$$7\text{km} < 7,250\text{m}$$



4 VF

10b. True or false?

$$11,250\text{m} < 11\text{km}$$



4 VF

11a. Which is the odd one out?

18,250m	13,000m	$13\frac{1}{2}$ km
13,500m	$18\frac{1}{4}$ km	



4 VF

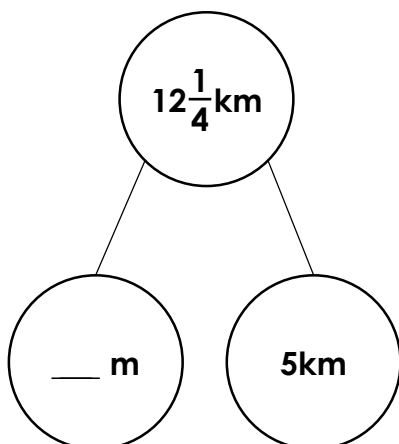
11b. Which is the odd one out?

9,750m	6,250m	$9\frac{3}{4}$ km
$6\frac{3}{4}$ km	$6\frac{1}{4}$ km	



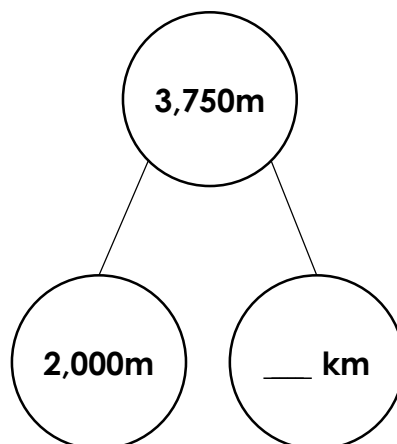
4 VF

12a. Complete the part whole model.



4 VF

12b. Complete the part whole model.



4 VF

Varied Fluency Kilometres

Developing

- 1a. 3km and 3,000m; 7,000m and 7km;
4,000m and 4km; 6km and 6,000m
- 2a. False, 6km is bigger.
- 3a. 8,000m
- 4a. 7km

Expected

- 5a. $8\frac{1}{2}$ km and 8,500m; 5,000m and 5km;
1km and 1,000m; 500m and $\frac{1}{2}$ km
- 6a. False, they are equal.
- 7a. 1,500m
- 8a. $5\frac{1}{2}$ km

Greater Depth

- 9a. 4,750m and $4\frac{3}{4}$ km; $9\frac{3}{4}$ km and 9,750m;
 $7\frac{1}{4}$ km and 7,250m; 5,500m and $5\frac{1}{2}$ km
- 10a. True, 7,250m is bigger.
- 11a. 13,000m
- 12a. 7,250m

Varied Fluency Kilometres

Developing

- 1b. 9,000m and 9km; 2km and 2,000m;
1,000m and 1km; 5km and 5,000m
- 2b. True, 5,000m is bigger.
- 3b. 13km
- 4b. 3,000m

Expected

- 5b. 9,000m and 9km; 3,500m and $3\frac{1}{2}$ km;
 $7\frac{1}{2}$ km and 7,500m; 4km and 4,000m
- 6b. False, 11,500m is bigger.
- 7b. 13,000m
- 8b. 2,500m

Greater Depth

- 9b. $15\frac{1}{2}$ km and 15,500m; 2,250m and $2\frac{1}{4}$ km;
22,500m and $22\frac{1}{2}$ km; $8\frac{3}{4}$ km and
8,750m
- 10b. False, 11,250m is bigger.
- 11b. $6\frac{3}{4}$ km
- 12b. $1\frac{3}{4}$ km