

# Varied Fluency

## Measure in Kilometres and Metres

### 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 uMeasure in Kilometres and Metrestions for tenths.

## Measure in Kilometres and Metres

## Measure in Kilometres and Metres

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

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?

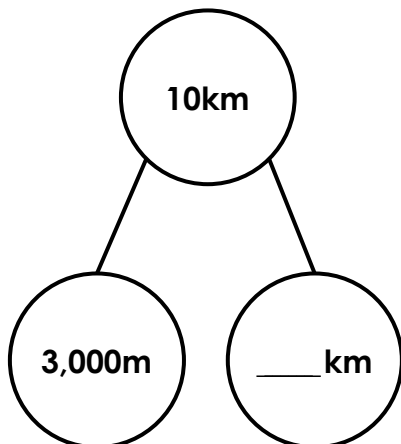
3km      2km      3,000m

2,000m      1km



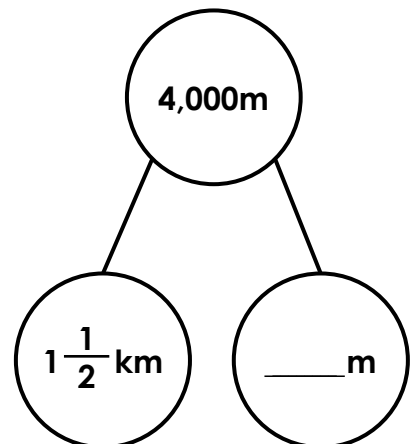
VF

4a. Complete the part whole model.



VF

4b. Complete the part whole model.



VF

## Measure in Kilometres and Metres

## Measure in Kilometres and Metres

5a. Match up the equal distances.

$8\frac{1}{2}$ km	$\frac{1}{4}$ km
5,000m	1,000m
1km	8,500m
250m	5km



VF

5b. Match up the equal distances.

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



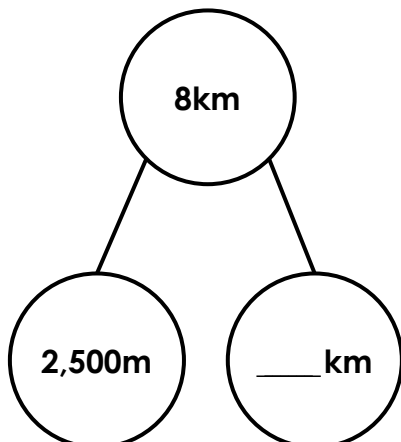
VF

7b. Which is the odd one out?



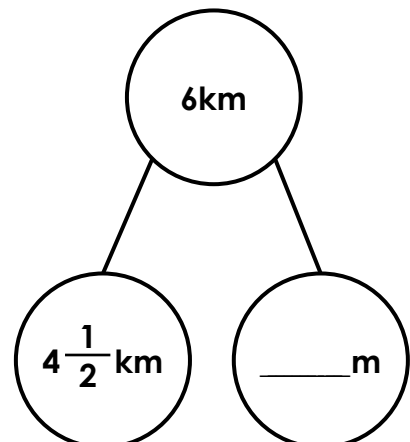
VF

8a. Complete the part whole model.



VF

8b. Complete the part whole model.



VF

## Measure in Kilometres and Metres

## Measure in Kilometres and Metres

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

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?

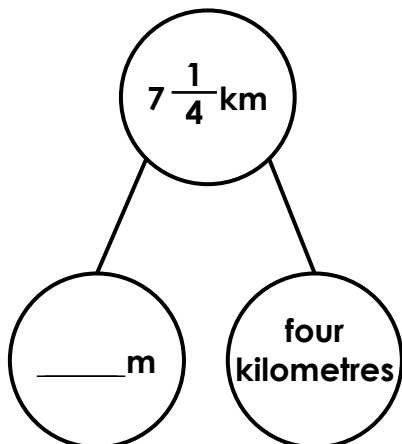
9,750m    6,250m     $9\frac{3}{4}$  km

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



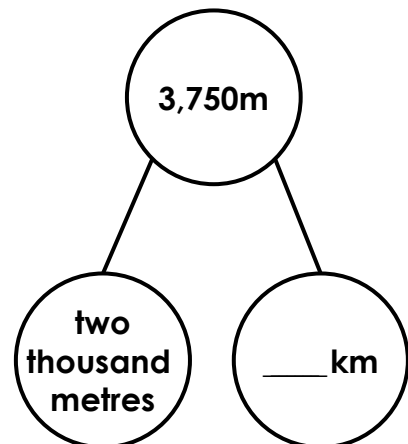
VF

12a. Complete the part whole model.



VF

12b. Complete the part whole model.



VF

## Varied Fluency

### Measure in Kilometres and Metres

#### 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.  $4,750$ m =  $4\frac{3}{4}$  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

### Measure in Kilometres and Metres

#### 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