Varied Fluency
Step 4: Percentage of an Amount 1

National Curriculum Objectives:

Mathematics Year 6: (6R2) Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison

Mathematics Year 6: (6F11) Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

Differentiation:

Developing Questions to support finding percentages of an amount. Finding 10% and 50% of any number.

Expected Questions to support finding percentages of an amount. Finding 1%,10%, 25% and 50% of any number.

Greater Depth Questions to support finding percentages of an amount. Finding 1%,10%, 25% and 50% of any number. Some conversions required and decimal numbers used.

More Year 6 Percentages resources.

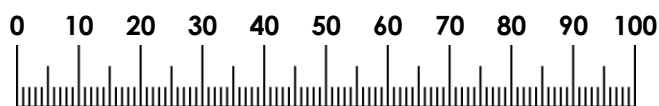## Did you like this resource? Don't forget to review it on our website.

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1a. By looking from one number line to the other, find 50% of 200.

```
0   20   40   60   80  100  120  140  160  180  200
|   |    |    |    |    |    |    |    |    |    |
```
Total

```
0   10   20   30   40   50   60   70   80   90  100
|   |    |    |    |    |    |    |    |    |    |
```
Percentage

VF

1b. By looking from one number line to the other, find 10% of 400.

```
0   40   80  120  160  200  240  280  320  360  400
|   |    |    |    |    |    |    |    |    |    |
```
Total

```
0   10   20   30   40   50   60   70   80   90  100
|   |    |    |    |    |    |    |    |    |    |
```
Percentage

VF

2a. Complete the statement, then circle the answer to the calculation below.

To find 10%, I divide by _____, so what is 10% of 70?

| 700 | 35 | 7 |

VF

2b. Complete the statement, then circle the answer to the calculation below.

To find 50%, I divide by _____. so what is 50% of 40?

| 20 | 2 | 4 |

VF

3a. What value should replace the letter in the calculation below?

$$A\% \text{ of } 14 = \frac{1}{2} \text{ of } 14 = 14 \div 2 = 7$$

VF

3b. What value should replace the letter in the calculation below?

$$10\% \text{ of } 60 = \frac{1}{A} \text{ of } 60 = 60 \div 10 = 6$$

VF

4a. Complete the calculations.

50% of 150m = _____m

10% of 150kg = _____kg

10% of 210ml = _____ml

VF

4b. Complete the calculations.

10% of 40km = _____km

50% of 16L = _____L

50% of 650g = _____g

VF

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Varied Fluency – Percentage of an Amount 1 – Year 6 Developing

5a. By looking from one number line to the other, find 25% of 300.

| 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 |

Total

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
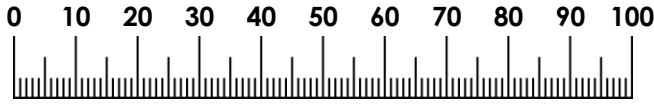
Percentage

VF

5b. By looking from one number line to the other, find 1% of 500.

| 0 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |

Total

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
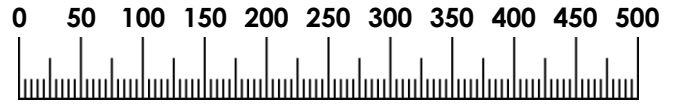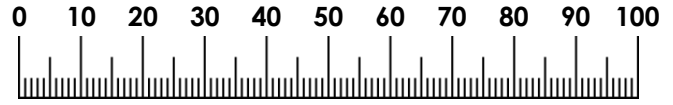
Percentage

VF

6a. Complete the statement, then circle the answer to the calculation below.

To find 1%, I divide by _____, so what is 1% of 200?

| 20 | 100 | 2 |

VF

6b. Complete the statement, then circle the answer to the calculation below.

To find 25%, I divide by _____, so what is 25% of 360?

| 180 | 36 | 90 |

VF

7a. What value should replace each letter in the calculation below?

$$50\% \text{ of } 36 = \frac{A}{2} \text{ of } 36 = 36 \div B = 18$$

VF

7b. What value should replace each letter in the calculation below?

$$A\% \text{ of } 84 = \frac{1}{B} \text{ of } 84 = 84 \div 4 = 21$$

VF

8a. Complete the calculations.

1% of 4,500m = _____ m

50% of 390g = _____ g

25% of 680cm = _____ cm

VF

8b. Complete the calculations.

50% of 782ml = _____ ml

1% of 1,700cm = _____ cm

25% of 536kg = _____ kg

VF

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Varied Fluency – Percentage of an Amount 1 – Year 6 Expected

9a. By looking from one number line to the other, find 1% of 120.

```
0   12  24  36  48  60  72  84  96  108 120
```
Total
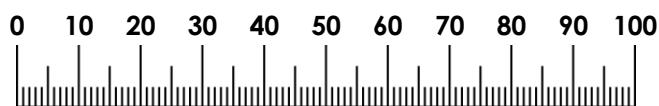
```
0   10  20  30  40  50  60  70  80  90  100
```
Percentage

VF

9b. By looking from one number line to the other, find 25% of 13.

```
0  1.3 2.6 3.9 5.2 6.5 7.8 9.1 10.4 11.7 13
```
Total
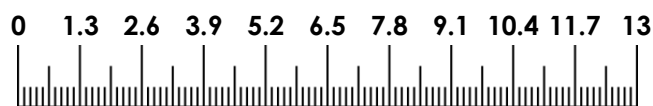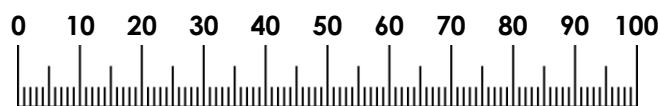
```
0   10  20  30  40  50  60  70  80  90  100
```
Percentage

VF

10a. Use the numbers below to make the statement correct.

To find 25% , I can divide by _____ , or divide by _____ then multiply by _____ .

| 8 | 4 | 2 |

VF

10b. Use the numbers below to make the statement correct.

To find 10% , I can divide by _____ , or divide by _____ then multiply by _____ .

| 2 | 10 | 20 |

VF

11a. What value should replace each letter in the calculation below?

$$A\% \text{ of } 7.7 = \frac{1}{10} \text{ of } 7.7 = 7.7 \div B = C$$

VF

11b. What value should replace each letter in the calculation below?

$$1\% \text{ of } 45 = \frac{1}{A} \text{ of } 45 = 45 \div B = C$$

VF

12a. Complete the calculations.

_____% of 526km = 52.6km

25% of 0.25L = _____ml

1% of 4.25m = _____mm

VF

12b. Complete the calculations.

50% of 1.7kg = _____g

_____% of 199L = 1.99L

25% of 3.22m = _____mm

VF

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Varied Fluency – Percentage of an Amount 1 – Year 6 Greater Depth

Developing
1a. **100**
2a. **10; 10% of 70 = 7**
3a. **A = 50**
4a. **75m; 15kg; 21ml**

Expected
5a. **75**
6a. **100; 1% of 200 = 2**
7a. **A = 1; B = 2**
8a. **45m; 195g; 170cm**

Greater Depth
9a. **1.2**
10a. To find 25% , I can divide by **4**, or divide by **8** and multiply by **2**.
11a. **A = 10; B = 10; C = 0.77**
12a. **10%; 62.5ml; 42.5mm**

Developing
1b. **40**
2b. **2; 50% of 40 = 20**
3b. **A = 10**
4b. **4km; 8L; 325g**

Expected
5b. **5**
6b. **4; 25% of 360 = 90**
7b. **A = 25; B = 4**
8b. **391ml; 17cm; 134kg**

Greater Depth
9b. **3.25**
10b. To find 10% , I can divide by **10**, or divide by **20** then multiply by **2**.
11b. **A = 100; B = 100; C = 0.45**
12b. **850g; 1%; 805mm**

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Varied Fluency – Percentage of an Amount 1 **ANSWERS**