Varied Fluency
Step 19: 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. No conversions required.

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

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 5 and Year 6 Decimals and Percentages resources.

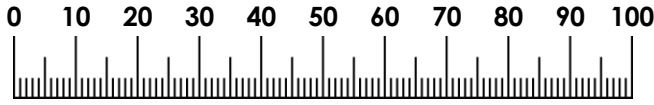Did you like this resource? Don't forget to review it on our website.

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Percentage of an Amount 1

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

D · 6 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
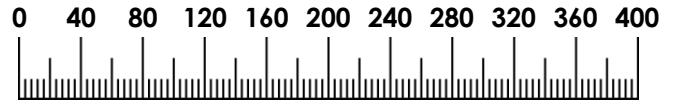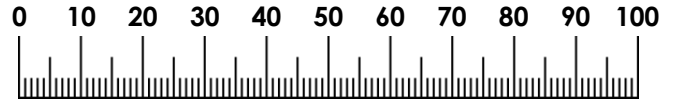
Percentage

D · 6 VF

2a. How many times does 10 fit into 100? Use your answer to complete the sentence below.

To find ___% of 70, I can divide 70 by _____.

D · 6 VF

2b. How many times does 50 fit into 100? Use your answer to complete the sentence below.

To find ___% of 8, I can divide 8 by _____.

D · 6 VF

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

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

D · 6 VF

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

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

D · 6 VF

4a. Complete the calculations.

50% of 150m = _____m

10% of 150kg = _____kg

10% of 210ml = _____ml

D · 6 VF

4b. Complete the calculations.

10% of 40km = _____km

50% of 16L = _____L

50% of 750g = _____g

D · 6 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
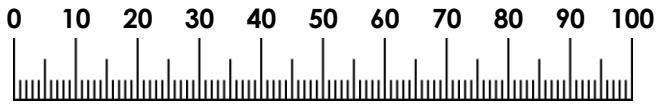
```
0   10  20  30  40  50  60  70  80  90  100
```
Percentage

6 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
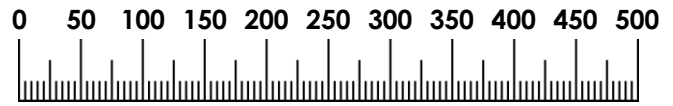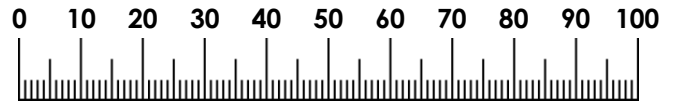
```
0   10  20  30  40  50  60  70  80  90  100
```
Percentage

6 VF

6a. How many times does 1 fit into 100? Use your answer to complete the sentence below.

To find ___% of 200, I can divide 200 by _____.

6 VF

6b. How many times does 10 fit into 100? Use your answer to complete the sentence below.

To find ___% of 360, I can divide 360 by _____.

6 VF

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

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

6 VF

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

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

6 VF

8a. Complete the calculations.

1% of 1km = _____m

10% of 2kg = _____g

25% of 2m = _____cm

6 VF

8b. Complete the calculations.

50% of 3L = _____ml

1% of 430cm = _____mm

25% of 5kg = _____g

6 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

6   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 |
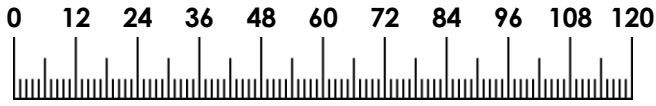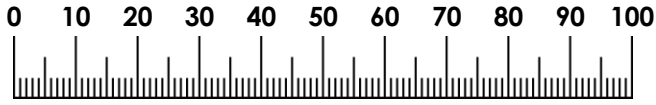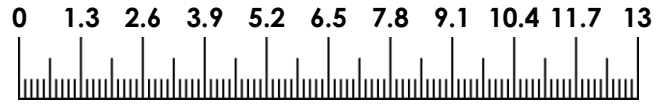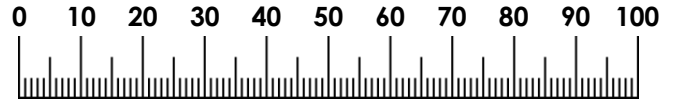
Percentage

6   VF

10a. How many times does 25 fit into 100? Use your answer to complete the sentence below.

To find ___% of 6.4, I can divide 6.4 by _____, which gives the answer _____.

6   VF

10b. How many times does 50 fit into 100? Use your answer to complete the sentence below.

To find ___% of 25, I can divide 25 by _____, which gives the answer _____.

6   VF

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

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

6   VF

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

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

6   VF

12a. Complete the calculations.

10% of 526km = _____km

25% of 0.25L = _____ml

1% of 4.25m = _____mm

6   VF

12b. Complete the calculations.

50% of 1.7kg = _____g

1% of 199L = _____L

25% of 3.22m = _____mm

6   VF

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

Varied Fluency
Percentage of an Amount 1

Developing
1a. **100**
2a. **10 times. 'To find 10% of 70, I can divide 70 by 10.'**
3a. **A = 50**
4a. **75m; 15kg; 21ml**

Expected
5a. **75**
6a. **100 times. 'To find 1% of 200, I can divide 200 by 100.'**
7a. **A = 1; B = 2**
8a. **10m; 200g; 50cm**

Greater Depth
9a. **1.2**
10a. **4 times. 'To find 25% of 6.4, I can divide 6.4 by 4, which gives the answer 1.6.'**
11a. **A = 10; B = 10; C = 0.77**
12a. **52.6km; 62.5ml; 42.5mm**

Developing
1b. **40**
2b. **2 times. 'To find 50% of 8, I can divide 8 by 2.'**
3b. **A = 10**
4b. **4km; 8L; 375g**

Expected
5b. **5**
6b. **10 times. 'To find 10% of 360, I can divide 360 by 10.'**
7b. **A = 25; B = 4**
8b. **1500ml; 43mm; 1,250g**

Greater Depth
9b. **3.25**
10b. **2 times. 'To find 50% of 25, I can divide 25 by 2, which gives the answer 12.5.'**
11b. **A = 100; B = 100; C = 0.45**
12b. **850g; 1.99L; 805mm**