



Year 6 Maths Wednesday 17th June



Starter

Find the value of the whole.

A.



B.



C.





Starter

Find the value of the whole.

A.

6	6	6	6	6	6	6	6
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48

B.

11	11	11	11	11	11	11
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77

C.

9	9	9
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27



Starter

How many of each unit fraction are needed
to make a whole?

1 fifth

1 eighth

1 eleventh

1 seventh

1 third

1 twelfth



Starter

How many of each unit fraction are needed to make a whole?

1 fifth

5

1 eighth

8

1 eleventh

11

1 seventh

7

1 third

3

1 twelfth

12



Starter

Match each calculation to the correct answer.

$$\frac{3}{5} \text{ of } 250$$

$$\frac{3}{8} \text{ of } 440$$

$$\frac{4}{7} \text{ of } 637$$

$$\frac{2}{9} \text{ of } 459$$

165

364

150

102



Starter

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$$\frac{4}{7} \text{ of } 637$$

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165

364

150

102



Lesson Aims

- I can solve percentages of amounts. .

Success Criteria:

- I understand percentage means out of 100.
- I understand 100% is one whole.
- I can relate fractions to percentages.



Main Teaching

Today we are exploring finding percentages of amounts. This is similar to finding a fraction of an amount. Why?



Main Teaching

Today we are exploring finding percentages of amounts. This is similar to finding a fraction of an amount. Why?

Fractions and percentages belong in the same family. They are both about finding part of a whole. Both finding a fraction of an amount and a percentage of an amount involves division.



Main Teaching

Finding 10%

To find 10% you just divide the amount by 10.
This is because 10 lots of 10 make 100%

Example:

10% of 80

$$80 \div 10 = 8$$



Main Teaching

Finding 20%

How do you think you would find 20%?



Main Teaching

Finding 20%

How do you think you would find 20%?

To find 20% first find 10% and then multiply by 2.

This is because 20% is 2 lots of 10%



Main Teaching

Finding 20%

Example : 20% of 40

$$40 \div 10 = 4$$

$$4 \times 2 = 8$$

20% of 40 is 8.



Main Teaching

Use the same method to find 30% , 40% etc.

Find 10% first.

20% means x 2 (2 lots of 10%)

30% means x 3 (3 lots of 10%)

40% means x 4 (4 lots of 10%)



Main Teaching

10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
7	7	7	7	7	7	7	7	7	7

The whole (100%) is 70

10% of 70 = 7

20% of 70 = 14

30% of 70 = 21



Main Teaching

Finding 5%

To find 10% we divide the total by 10.

How do you think you could find 5%?



Main Teaching

Finding 5%

To find 10% we divide the total by 10.

How do you think you could find 5%?

You could find 10% and then halve the answer.



Main Teaching

Finding 50%

How do you think we could find 50% of an amount?



Main Teaching

Finding 50%

How do you think we could find 50% of an amount?

You could halve the total.

The total is 100% so 50% is half the amount.



Main Teaching

Finding 1%

How do you think we could find 1% of an amount?



Main Teaching

Finding 1%

How do you think we could find 1% of an amount?

Divide the total by 100.

1% of 800

$$800 \div 100 = 8$$

1% of 800 is 8



Main Teaching Summary

To find...

10%	Divide by 10
1%	Divide by 100
50%	Divide by 2
20%	Find 10% and then x2
30%	Find 10% and then x3
40%	Find 10% and then x4
25%	Divide by 4



Activity

Now complete the percentage of amounts fluency work on the next slide. Choose from one of the three sections.

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PERCENTAGES OF AMOUNTS

Mild

Medium

Spicy

- 1) 10% of £80 =
- 2) 10% of £130 =
- 3) 10% of £459 =
- 4) 10% of £36 =
- 5) 20% of £60 =
- 6) 20% of £140 =
- 7) 20% of £62 =
- 8) 30% of £70 =
- 9) 30% of £180 =
- 10) 30% of £120 =
- 11) 40% of £80 =
- 12) 40% of £240 =

- 1) 50% of £160 =
- 2) 50% of £380 =
- 3) 50% of £131 =
- 4) 60% of £90 =
- 5) 60% of £110 =
- 6) 70% of £30 =
- 7) 70% of £410 =
- 8) 80% of £40 =
- 9) 80% of £120 =
- 10) 90% of £120 =
- 11) 90% of £800 =
- 12) 5% of £360 =

- 1) 15% of £180 =
- 2) 15% of £400 =
- 3) 25% of £180 =
- 4) 25% of £420 =
- 5) 35% of £60 =
- 6) 35% of £80 =
- 7) 45% of £90 =
- 8) 65% of £40 =
- 9) 75% of £60 =
- 10) 95% of £10 =



PERCENTAGES OF AMOUNTS

1) 10% of £80 = **£8**

2) 10% of £130 = **£13**

3) 10% of £459 = **£45.90**

4) 10% of £36 = **£3.60**

5) 20% of £60 = **£12**

6) 20% of £140 = **£28**

7) 20% of £62 = **£12.40**

8) 30% of £70 = **£21**

9) 30% of £180 = **£54**

10) 30% of £120 = **£36**

11) 40% of £80 = **£32**

12) 40% of £240 = **£96**

1) 50% of £160 = **£80**

2) 50% of £380 = **£190**

3) 50% of £131 = **£65.50**

4) 60% of £90 = **£54**

5) 60% of £110 = **£66**

6) 70% of £30 = **£21**

7) 70% of £410 = **£287**

8) 80% of £40 = **£32**

9) 80% of £120 = **£96**

10) 90% of £120 = **£108**

11) 90% of £800 = **£720**

12) 5% of £360 = **£18**

1) 15% of £180 = **£27**

2) 15% of £400 = **£60**

3) 25% of £180 = **£45**

4) 25% of £420 = **£105**

5) 35% of £60 = **£21**

6) 35% of £80 = **£28**

7) 45% of £90 = **£40.50**

8) 65% of £40 = **£26**

9) 75% of £60 = **£45**

10) 95% of £10 = **£9.50**



Varied Fluency

Use $<$, $>$ or $=$ to complete the comparison statement.

A. 45% of £60 80% of £30

B. 15% of £180 25% of £140



A. 45% of £60
(£27)

80% of £30
(£24)

B. 15% of £180
(£27)

25% of £140
(£35)



Varied Fluency

Which card shows the highest amount? Which shows the lowest?

A.

20% of
110

B.

35% of
80

C.

15% of
160



Varied Fluency

Which card shows the highest amount? Which shows the lowest?

A.

$$\begin{array}{l} 20\% \text{ of} \\ 110 \\ = 22 \end{array}$$

Lowest

B.

$$\begin{array}{l} 35\% \text{ of} \\ 80 \\ = 28 \end{array}$$

Highest

C.

$$\begin{array}{l} 15\% \text{ of} \\ 160 \\ = 24 \end{array}$$



Varied Fluency Activity

- Complete the varied fluency activity sheet.
- Choose from one of the three levels.



Review

- Can you review your learning?
- Can you explain to others how to find a percentage of an amount?

