Percentage of an amount (2)

1 **a)** Use the bar model to find 10% of 500

?

0%   10%   20%   30%   40%   50%   60%   70%   80%   90%   100%

500
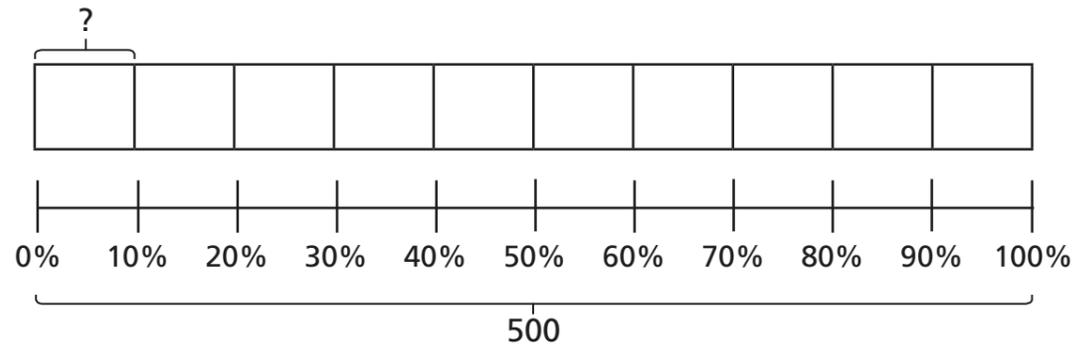
10% of 500 = | 50 |

b) Use your answer to part a) to help you complete the calculations.

20% of 500 = | 100 | 70% of 500 = | 350 |

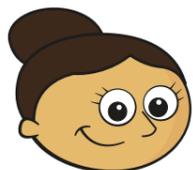90% of 500 = | 450 | 60% of 500 = | 300 |

30% of 500 = | 150 | 100% of 500 = | 500 |

2

> To find 5% you can find 10% and then halve it.

Use Dora's method to complete the calculations.

a) 5% of 40 = | 2 | **d)** 5% of 2,000 = | 100 |

b) 5% of 400 = | 20 | **e)** 5% of 6,000 = | 300 |

c) 5% of 4,000 = | 200 |

What do you notice about your answers?
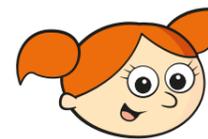
_____

3 Some children are asked to find 75% of 340

> I will find 25% and multiply it by 3

a) Use Dexter's method to find 75% of 340

| 255 |

> I will find 10% and multiply it by 7, then find 5% and add them together.

b) Use Alex's method to find 75% of 340

| 255 |

I will find 25% and 50% and add them together.

c) Use Amir's method to find 75% of 340

255

d) Are there any other methods you could use?

4 Talk to a partner about different methods for finding these percentages.

20%　　90%　　60%　　15%　　55%　　40%

Use your preferred method to calculate the percentages.

a) 20% of 1,000 = 200

20% of 550 = 110

20% of 40 = 8

b) 90% of 1,000 = 900

90% of 4,230 = 3,807

90% of 90 = 81

c) 60% of 1,000 = 600

60% of 400 = 240

60% of 98 = 58.8

d) 15% of 1,000 = 150

15% of 300 = 45

15% of 30 = 4.5

e) 55% of 1,000 = 550

55% of 4,400 = 2,420

55% of 8 = 4.4

f) 40% of 1,000 = 400

40% of 400 = 160

40% of 98 = 39.2

5 Ron is calculating these percentages.

10% of 20　　　20% of 10
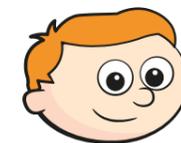
20% is double 10%, and 10 is half of 20, so I know these will both have the same answer.

How does Ron know this?

6 **a)** Complete the calculations.

20% of 40 = 8　　25% of 60 = 15

40% of 20 = 8　　60% of 25 = 15

b) What do you notice about the answers?

Each column is the same.

c) Does this always happen? Investigate with other examples.

d) Talk about your findings with a partner.