

Bronze

- 1a. Place value chart representing 46,100
- 2a. 162,510 circled
- 3a. 6,461,000
- 4a. 100
- 1b. 2,695 pages.
- 2b. circle = 10 because $812 \times 10 = 8,120$
- 3b. B is the odd one out because $9,189 \times 100 = 918,900$

Silver

- 5a. Place value chart representing 26,130
- 6a. 3,520,100 circled
- 7a. A = 183,600; B = 410,590; C = 6,273,000
- 8a. 100 and 10
- 4b. 237,816 seeds.
- 5b. A. triangle = 1,000 because $480 \times 1,000 = 480,000$
- B. square = 100 because $20,705 \times 100 = 2,070,500$
- C. circle = 10 because $4,816 \times 10 = 48,160$
- 6b. C is the odd one out because $7,250 \times 10 = 72,500$ and $702 \times 100 = 70,200$

Gold

- 9a. 1,602,000
- 10a. 3,705,000 and 425,500 circled
- 11a. A = 405,400; B = 2,306,000ml; C = 6,723,000cm
- 12a. 10 and 100 or 100 and 10; 10 and 10.

7b. 115,605ml.

8b. A. circle and triangle = 10 because

$$9,605 \times 10 \times 10 = 960,500$$

B. square = 10 if the trapezium = 1,000 or

the square = 1,000 if the rectangle = 10

$$\text{because } 710 \times 1,000 \times 10 = 7,100,000$$

C. rectangle = 10 if the triangle = 100 or

the rectangle = 100 if the triangle = 10

$$\text{because } 2,060 \times 10 + 100 = 2,060,000$$

9b. A is the odd one out because 104 tens

and 1 one $\times 100 = 104,100$ and 100 tens

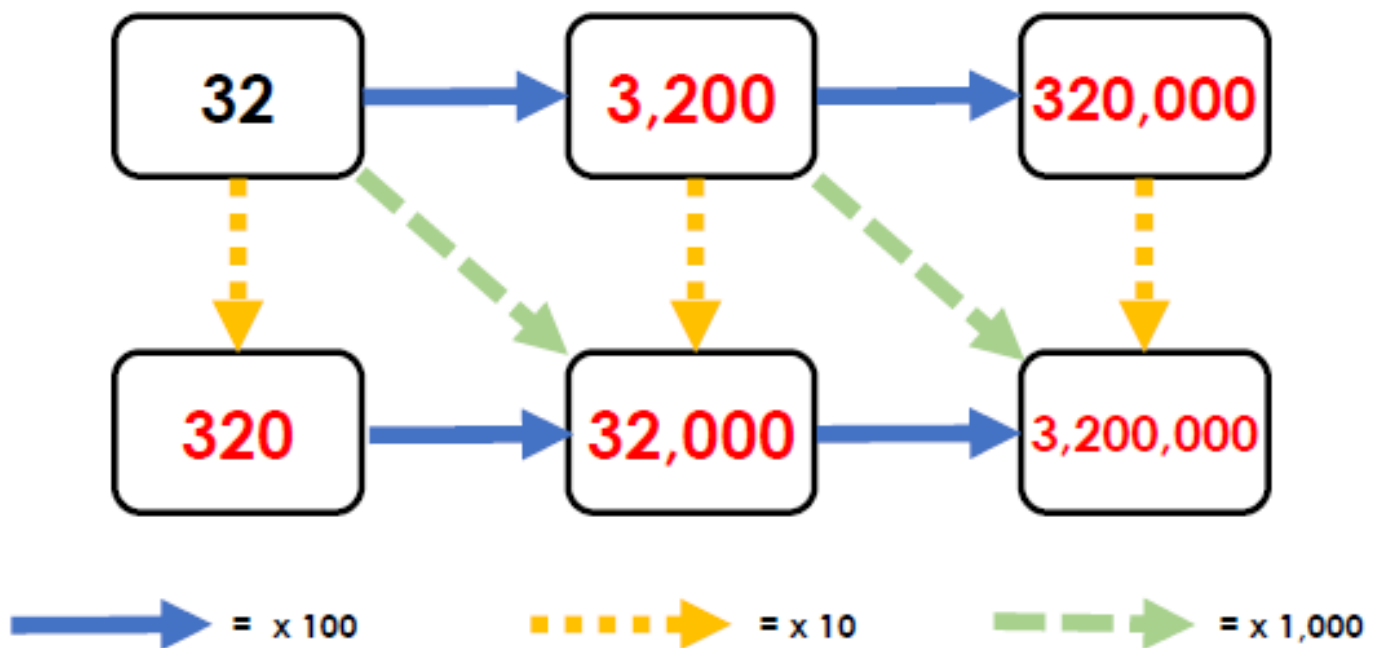
and 45 ones $\times 10 = 10,450$

Challenge

1. Here is a puzzle. The horizontal, vertical and diagonal arrows represent either multiply by 10, 100 or 1,000.

Investigate the different ways to complete the puzzle.

Various answers, for example:



2. Arrange the loop cards so that each calculation is matched to the correct answer. Fill in the missing card to complete the loop.

forty-four thousand, three hundred and twenty-one multiplied by 100	4,432,100	$72,234 \times 10$	722,340	the product of 44,321 and 10	443,210	one thousand, four hundred and eleven multiplied by 100
585,000						141,000
585×100 $\times 10$						$72,234 \times 10 \times 10$
37,359	372×100 $+ 159$	58,500	585×100	5,378,000	$5,378 \times 1,000$	7,223,400