

Bronze

1a. 2,345 and 1,783; 471 and 3,632; 1,059 and 3,030

2a. A

3a. C

4a. Various answers (depending on what the children choose to round to), for example: A. 3,150; B. 8,000; C. 7,400

1b. Various answers (depending on what the children choose to round to), for example: Rachel's answer is likely to be correct because (when rounding to the nearest 1,000) an approximate answer to the calculation is $4,000 - 2,000 = 2,000$, and Rachel's answer would round to 2,000.

2b. 23 counters.

3b. Sonya is incorrect because 1,856 rounds up to 2,000. $2,000 + 2,000 = 4,000$, not 3,000.

Silver

5a. £55.10 and £22.68; £46.77 and £31.49; £39.23 and £38.52

6a. C

7a. B

8a. Various answers (depending on what the children choose to round to), for example: A. 14,000; B. 20,000; C. £29

4b. Various answers (depending on what the children choose to round to), for example: Emily's answer is likely to be correct because (when rounding to the nearest 10,000) an approximate answer to the calculation is $30,000 + 10,000 = 40,000$, and Emily's answer would round to 40,000.

5b. 84 coins.

6b. Esther is correct because 17,750 rounds up to 20,000. $80,000 - 20,000 = 60,000$.

Gold

9a. 4,834m and 3,946m; $2\frac{1}{4}$ km and

6,353m; $6\frac{1}{2}$ km and 2,215m

10a. B

11a. C

12a. Various answers (depending on what the children choose to round to), for example: A. 40,000m; B. £248; C. 23,540m

7b. Various answers (depending on what the children choose to round to), for example: Seren's answer is likely to be incorrect because (when rounding to the nearest 100) an approximate answer to the calculation is $53,500\text{m} - 9,800\text{m} = 43,700\text{m}$, but Seren's answer would round to 49,900m.

8b. 17 pieces of rope.

9b. Olivia is incorrect because £244.89 rounds up to £245. $£290 - £245 = £45$, not £35 (3,500p).

Challenge

1. Managers of the food chain, Maccydoodles, are estimating the total takings for the day at 6 of their restaurants.

<u>Restaurant</u>	<u>Total takings</u>	<u>Rounded to the nearest whole number</u>
Manchester	£482.85	£483
Halifax	£593.70	£594
London	£743.38	£743
Newcastle	£2,364	£2,364
Cardiff	£482.74	£483
Edinburgh	£795.91	£796
	<u>Total</u>	<u>£5,463</u>

Use your knowledge of rounding to explore three approximate totals for all of the restaurants combined. Various answers, for example: the amounts could be rounded to the nearest whole number (as shown above) or they could be rounded to the nearest 10, 100, 50, 500 etc.