Bronze

1a. **1,000m**
2a. **False; 40cm > 4mm**
3a. **>**
4a. **60cm**

1b. No – 5cm needed
2b.

120	1,200
210	2,100
950	9,500

Divided by 10 instead of multiplying by 10.

3b. Cole is correct. 1cm x 100 = 100cm = 1m

Silver

5a. **2.5m**
6a. **False; 46km > 4,600m**
7a. **<**
8a. **96cm**

4b. Yes – 0.1m spare
5b.

0.9	90	900
1.3	130	1,300
5.08	508	5,080

Multiplied by 10 instead of 100
Multiplied by 100 instead of 10
Multiplied by 10 instead of 100

6b. Cassie is correct. 100cm = 1m. 10cm = 0.1m

Gold

9a. **1,050mm**
10a. **False; 0.45km < 450,000m**
11a. **<, <**
12a. **10,000cm**

7b. Yes. 1.5cm spare
8b.

10	1,000	10,000
8.02	802	8,020
6.04	604	6,040
0.21	21	210
0.01	1	10

Multiplied by 1,000 instead of 100
Multiplied by 10 instead of 100
Multiplied by 100 instead of 10
Multiplied by 100 instead of 10

9b. Orion is correct. You could convert metres to millimetres in two steps. For example; if you had 8.32m it would equal 832cm which in turn equals 8,320mm (multiplying by 100 to convert to cm then 10 to convert to mm).

Challenge

1. Amanda is displaying toys in her shop on a shelf display which is 2.48m wide. How could she arrange any of the toys below to fill the shelf, using only one of each toy? There is a minimum gap of 20mm at both edges of the shelf and between each toy.

Investigate different combinations of toys that can be displayed on the shelf.
Various possible answers, for example: This combination measures exactly 2.48m, but other answers may not be exact but will be no less than 2.4m.

| 38cm | $\frac{1}{2}$m | 300mm | 50mm | 350mm |

| 45cm |

| 45mm | 34mm | 200mm |

| 120cm |

| 1m 3cm | 12cm | 80mm | 5cm | 30cm |

DP