

Chapter 10

Exercise 10A

- 1 21 m/s
- 2 364
- 3 22.5 cm²
- 4 a 3 g/cm³
b 755 kg/m³
- 5 208 km/hr
- 6 12 kPa
- 7 First is fake.
- 8 29

Activity

	volume (cm ³)	density (g/cm ³)	cost per gram (p)	cost (p)	sell = 2 X cost (£)
candlestick brass	6	8.5	29	1479	29.58
statue iron	15	7.2	83	8964	179.28
ring gold	0.5	19.3	1658	15999.7	319.99
tankard steel	4	7.5	33	990	19.80
jug silver	3	10.4	80	2496	49.92
plate copper	7	8.9	22	1370.6	27.41

Exercise 10B

- 1 a 525 g, 450 ml
b butter = 60 g
cookies = 210 g
leaves = 6
peanut butter = 210 g
syrup = 210 g
milk = 180 ml
cream = 324 ml
brown sugar = 2.4 tbsp
peanut brittle = 1.2 bar
- 2 a 400 ml
b 90 ml
c Yes
- 3 a 27
b 255 g
- 4 a 23.37
b 15.57
- 5 No
- 6 0.95 kg
- 7 Assuming linear interpolation
a 56.25 ft
b 100.8 ft
c 382.2 ft
- 8 a 8 m
b 57 m
c 79.7 m
- 9 yes, 497 m
- 10
China = 142 per km²
India = 377 per km²
USA = 33 per km²
Indonesia = 129 per km²
Brazil = 24 per km²
Pakistan = 231 per km²
Nigeria = 188 per km²
Bangladesh = 1040 per km²
Russia = 8 per km²
Japan = 337 per km²

11 910800

12 81250 km^2

13 £16.95 if emulsion, £59.92 if gloss

14 a 6

b £71.94

15 53.7 m^2 , £1717.86

16 a £107.91

b £87.12

Activity

1

tiles = £273.38

plain carpet = £293.10

luxury carpet = £425.34

beech wood = £608.03

oak wood = £657.73

ceramic = £562.98

2

Yes, luxury carpet

3 ceramic more durable than carpet or wood.
Wood more durable than carpet.

4 Recommend she pay a bit more for beech wood.