

Units worksheet answers

Mathematics for A-level Science

Practice your understanding

Convert the following numbers into metres:

1. $3 \text{ km} = 3000 \text{ m}$

2. $20 \text{ cm} = 0.2 \text{ m}$

3. $2.3 \text{ mm} = 0.0023 \text{ m}$

4. $550 \text{ nm} = 0.000\,000\,55 \text{ m}$

5. $5.1 \mu\text{m} = 0.000\,0051 \text{ m}$

6. $13.7 \text{ Gm} = 13\,700\,000\,000 \text{ m}$

7. $0.0025 \text{ km} = 2.5 \text{ m}$

8. $1.0001 \text{ km} = 1001 \text{ m}$

Simplify the following units:

9. $\text{cm} \times \text{cm} = \text{cm}^2$

10. $\text{km}^2 \times \text{cm} = \text{km}^3$

11. $\text{nm}^2 \times \text{nm}^{-1} = \text{nm}$

12. $\frac{\text{kg m}}{\text{m}} = \text{kg}$

13. $\frac{\text{cm}^3}{\text{cm}} = \text{cm}^2$

14. $\frac{\text{kg cm}^3}{\text{cm}} = \text{kg cm}^2$

15. $\frac{\text{cm}}{\text{cm}^2} = \text{cm}^{-1}$

16. $\frac{\text{g cm}^2}{\text{cm}^{-1}} = \text{g cm}$

17. Concrete has a density of 2400 kg m^{-3} . What volume of concrete would have a mass of 96 kg ?

0.04 m^3

18. What would this volume be in a) dm^3 and b) cm^3

a) 40 dm^3

b) $40\,000 \text{ cm}^3$