1. (a) 2
   (b) 3
   (c) 3
   (d) 2
   (e) 4
2. 2 significant figures
3. 17
4. 1
5. sulphur
6. 137
7. 108
8. K
9. Sn
10. +2
11. (a) +2
    (b) -1
    (c) -1
    (d) -1
    (e) -2
12. $Mg(CH_3COO)_2$ or $(CH_3COO)_2Mg$
13. aluminum oxalate
14. $Ba(NO_3)_2$
15. ammonium acetate
16. (a) nitrogen dioxide
    (b) chlorine
    (c) barium chromate
    (d) potassium dichromate
    (e) ammonium chloride
17. $Ca(NO_2)_2 = 132$ g/mol
18. $Zn(OH)_2 = 99.4$ g/mol
    5.2 g ÷ 99.4 g/mol = 0.052 mol or 5.2×10^{-2} mol
19. $CH_3COONa = 82.0$ g/mol
    2.5 g ÷ 82.0 g/mol = 0.0305 mol or 3.05×10^{-2} mol
    $[CH_3COONa] = \frac{n}{V} = \frac{0.0305 \text{ mol}}{0.255 \text{ L}} = 0.12 \text{ M}$
20. a,d
21. HBr
22. (a) sulphuric
    (b) nitric
    (c) nitrous
    (d) benzoic
    (e) acetic or ethanoic
23. 8.2 - 10.0
24. red
25. pink
26. one
27. three
28. two chromium III ions or 2 Cr^{3+}