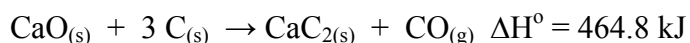


- 1) Which requires more energy: a) warming 100.0 mL of water from 20°C (room temperature) to 37°C (body temperature) or b) warming 50.0 mL of ethanol from 20°C to 37°C?
- 2) An unknown metal requires 561 J to heat a 32.4 g sample of it from 15.5°C to 34.7°C. What metal in Table 6.1 is the unknown?
- 3) How much energy (in kilojoules) would be required to raise the temperature of a cube of gold (1ft x 1ft x 1ft) from room temperature (25°C) to its melting point (1064°C) and then melt the gold completely at 1064°C? (the enthalpy of fusion of gold is 12.55 kJ/mole)
- 4) Given the thermochemical equation



What quantity of energy is transferred when:

- a) 10.0 g of CO are formed?
- b) 18.4 moles of CaO are used?
- c) 103.6 g of CaC₂ are made?

Chapter 6: 34, 36, 46, 52, 56, 70, 74, 76, 86, 92, 95, 102, 115, 126, 140