Assignment 6

1. a) A 100 g sample of water at 20 °C is heated to 50 °C. How much energy is required?

b) A 50 g sample of water is cooled from 100 °C to 20 °C. How much energy is released?

2. A 100 g sample of water is heated from 30 °C to 100 °C and then cooled back to 30 °C. What is the total change in its internal energy?

3. A 200 g sample of water is heated from 20 °C to 100 °C. How much energy is required?

4. A 500 g sample of water is cooled from 100 °C to 0 °C. How much energy is released?

5. A 300 g sample of water is heated from 0 °C to 100 °C. How much energy is required?

6. A 100 g sample of water is cooled from 20 °C to 10 °C. How much energy is released?

7. A 50 g sample of water is heated from 20 °C to 100 °C. How much energy is required?

8. A 100 g sample of water is cooled from 100 °C to 50 °C. How much energy is released?