Answers – Ch 17 Practice Problems

17.1

1. 836.8 kJ

2. 1.40 cal/g C

3. 6 C

4. 1100 J

17.2

1. 6300 J

2. -13.2 kJ

3. 2930 kJ

4. 4NH3 + 5O2(g) 4NO(g) + 6H2O(g)

 = -904 kJ

17.3

1. 11.7 kJ

2. \*omit\*…if you did it: = 436.1 kJ

3. 1132 kJ

4. \*omit\*…if you did it: = 47.8 kJ

17.4

1. \*you need the standard heat of formation for H2S (not given in Table 17.4) = -20.1 kJ/mol

 = -1037 kJ

2. -178.4 kJ exothermic

3. 50.6 kJ