1) A. 0.0100 g
Chemistry, Ch 17 #1

2) A. 0.125 g
Chemistry, Ch 17 #3

3) D. 6.060 mg
Chemistry, Ch 17 #5

4) B. 13.3 g
Chemistry, Ch 17 #7

5) D. 23.02 g
Chemistry, Ch 17 #9

6) C. 47.9 g
Chemistry, Ch 17 #11

7) B. 0.07
Chemistry, Ch 17 #13

8) C. 63.9 cm^2
Chemistry, Ch 17 #15

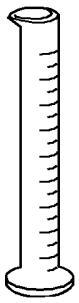
9) C. 10.2
Chemistry, Ch 17 #23

10) C. 15.0
Chemistry, Ch 17 #25

11) D. 10.0%
Chemistry, Ch 17 #27

12) D. $\frac{3.0}{39.3} \times 100\%$
Chemistry, Ch 17 #31

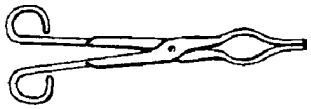
13)
B. 
Chemistry, Ch 17 #35

14) A. 

Chemistry, Ch 17 #37

15) B. 

Chemistry, Ch 17 #39

16) A. 

Chemistry, Ch 17 #41

17) C. *C*

Chemistry, Ch 17 #51

18) B. to the nearest tenth by ruler *A* and to the nearest hundredth by ruler *B*

Chemistry, Ch 17 #53

19) A. 466.20

Chemistry, Ch 17 #55

20) C. 41.35 mL

Chemistry, Ch 17 #57

21) C. 39.5 mL

Chemistry, Ch 17 #59

22) B. 4.5 g/cm^3

Chemistry, Ch 17 #63

23) A. 2.0 g/cm^3

Chemistry, Ch 17 #65

24) D. 0.87 g/mL

Chemistry, Ch 17 #69

25) D. The gas is carbon dioxide.
Chemistry, Ch 17 #73

26) D. separate insoluble substances in an aqueous mixture
Chemistry, Ch 17 #75

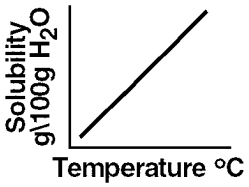
27) D. was exothermic
Chemistry, Ch 17 #77

28) B. 4,1,3,2,5
Chemistry, Ch 17 #81

29) B. Add the acid slowly to the water with steady stirring.
Chemistry, Ch 17 #85

30) A. 54°C
Chemistry, Ch 17 #93

31) C. 4 min
Chemistry, Ch 17 #95

32) C. 

Chemistry, Ch 17 #97

33) 10.8%
WORK SHOWN: % error = $\frac{\text{measured value} - \text{accepted value}}{\text{accepted value}}$ × 100 = ($\frac{1.6}{14.8}$) × 100 = 10.8%
Chemistry, Ch 17 #101

34) (a) 18.1%
WORK SHOWN: $\frac{1.13\text{ g}}{6.25\text{ g}}$ × 100 = 18.1%;

(b) 3.4%
WORK SHOWN: % error = $\frac{\text{measured value} - \text{accepted value}}{\text{accepted value}}$ × 100, % error = $\frac{18.1 - 17.5}{17.5}$ × 100 = 3.4%;

(c) SAMPLE ANSWER: The sample was heated a second time to prove that all of the water had been removed from the hydrated crystal.

Chemistry, Ch 17 #102

35) (a) 9.19 g/mL

WORK SHOWN: $D = \frac{M}{V}$, $D = \frac{32.16\ \text{g}}{3.50\ \text{mL}}$, D = 9.19 g/mL

(b) 2.57%

WORK SHOWN: % error = $\frac{\text{measured value} - \text{accepted value}}{\text{accepted value}} \times 100$, % error = $\frac{9.19 - 8.96}{8.96} \times 100$ = 2.57%

Chemistry, Ch 17 #103