Answers to problems in page 252-253.
42. a. $127 \mathrm{~g} \mathrm{I}_{2}$
b. 675 g PbS
c. $233 \mathrm{~g} \mathrm{C}_{4} \mathrm{H}_{10}$
d. $103 \mathrm{~g} \mathrm{Al}_{2}\left(\mathrm{SO}_{4}\right)_{3}$
e. $35.4 \mathrm{~g} \mathrm{CuSO}_{4}$
43. a. 58.44 g NaCl
b. $36.04 \mathrm{~g} \mathrm{H}_{2} \mathrm{O}$
c. $260 \mathrm{~g} \mathrm{Ca}(\mathrm{OH})_{2}$
d. $163 \mathrm{~g} \mathrm{Ba}\left(\mathrm{NO}_{3}\right)_{2}$
44. $3.24 \times 10^{22}$ atoms Au
45. $1.337 \times 10^{24}$ formula units $\mathrm{ZnCl}_{2}$
46. $9.396 \times 10^{21}$ molecules naphthalene
47. $2.79 \times 10^{24}$ atoms Al
48. $5.53 \mathrm{~mol} \mathrm{H}_{2} \mathrm{O}$
49. a. $4.99 \times 10^{-2} \mathrm{~mol}\left(\mathrm{NH}_{4}\right)_{2} \mathrm{SO}_{4}$
b. $61 \mathrm{~mol} \mathrm{Ca}(\mathrm{OH})_{2}$
c. $7.49 \times 10^{-2} \mathrm{~mol} \mathrm{H}_{2} \mathrm{SO}_{4}$

