Honors Chemistry: Topic 9 Solutions

Like Dissolves Like Worksheet

1. Which solvent, water or carbon tetrachloride, would you choose to dissolve each of the following? Will any of these potential solutes never dissolve?

a. KrF_2

b. SF_2

c. SO_2

d. CO_2

e. MgF_2

f. CH_2O

g. $CH_2{=}CH_2$

h. Aluminum

i. $C_{diamond}$

2. Which solvent, water or hexane, would you choose to dissolve each of the following?

a. NaCl

b. HF

c. Octane (C_8H_{18})

d. $(NH_4)_2SO_4$

Like Dissolves Like Worksheet ANSWERS

3. Which solvent, water or carbon tetrachloride, would you choose to dissolve each of the following? Will any of these potential solutes never dissolve?

j. KrF_2 CCl_4

k. SF_2 H_2O

l. SO_2 H_2O

m. CO_2 CCl_4

n. MgF_2 H_2O (insoluble, use Ksp)

o. CH_2O H_2O

p. $CH_2{=}CH_2$ CCl_4

q. Aluminum (insoluble)

r. $C_{diamond}$ (insoluble)

4. Which solvent, water or hexane, would you choose to dissolve each of the following?

e. NaCl H_2O

f. HF H_2O

g. Octane (C_8H_{18}) CCl_4

h. $(NH_4)_2SO_4$ H_2O