



Atomic Structure and Bonding

Set 6: Bonding

answers in red

- 1. Draw electron dot diagrams for the following atoms and ion;
 - (a) Na
 - (b) Br
 - (c) P
 - (d) S²-
 - (e) H⁺
 - (f) N³⁻
- Draw electron dot diagrams for the following covalent molecular compounds;
 - (a) H₂O
 - (b) CH₃Cℓ
 - (c) PH₃
 - (d) H₂S
 - (e) CHCl₃
 - (f) HCN
- 3. Draw electron dot diagrams for the following ionic compounds;
 - (a) NaOH
 - (b) CaCℓ₃
 - (c) Fe₂O₃
 - (d) K₂S
 - (e) Mg(OH)₂
 - (f) AgNO₃
- 4. Explain why the use of electron dot diagrams can help determine the solubility of a substance.

1.

a _{Na}

b .. :Br:

С

. P

d ..

_ '

H*

.N³·

:

f

2.

а .. н**:**о:

3.

 Electron dot diagrams can give information about the shape of a molecule hence the polarity of a molecule. Generally likes dissolve likes; meaning polar will dissolve polar and non-polar will dissolve nonpolar.