|  |  |
| --- | --- |
| Hydrophilic | Hydrophobic |
| Water is attracted  To these substances | These substances  Repel water |
| Charges in these substances attract  δ+ H and δ- O atoms  of water | These substances contain no charged  atoms, so water  is not attracted. |
| Ionic compounds with  + charged metal ions  & - charged nonmetal  Ions…like NaCl or KF | Nonpolar covalent compounds in which atoms with similar electronegativity share electrons equally. |

|  |  |
| --- | --- |
| Polar covalent compounds  in which atoms w/ low electronegativity share electrons unequally w/  atoms of high electronegativity | Hydrocarbons  <http://chemstine.com/images/oilwater.jpg> |
| LiCl MgCl2  NaF Na1+  Cl1- Li1+  F1- KI  K1+ I1- | Phospholipid fatty  acid tails  <http://telstar.ote.cmu.edu/biology/membranepage/images/phospholipid.jpg> |
| Phospholipid phosphate head groups  <http://telstar.ote.cmu.edu/biology/membranepage/images/phospholipid.jpg> | <http://foodspace.files.wordpress.com/2008/05/cholesterol.gif> |
| <http://www.chem.latech.edu/~upali/chem102/102MSJc15_files/image004.gif> | <http://4.bp.blogspot.com/_P3QbBrepTgI/THEsTvimfwI/AAAAAAAAA0o/aECf3y64DOQ/s400/fatty+acid.jpg> |

|  |  |
| --- | --- |
| Water loving | Water fearing  Or  Water hating |
| <http://studentweb.usq.edu.au/home/U1013108/biotutor/images/PLB.jpg> | <http://studentweb.usq.edu.au/home/U1013108/biotutor/images/PLB.jpg> |
| http://www.hobbybrouwen.nl/artikel/alfa-glucose.JPG | <http://upload.wikimedia.org/wikipedia/commons/b/b9/Butane-2D-flat.png> |
| http://chem.wisc.edu/deptfiles/genchem/netorial/ROttosen/tutorial/modules/intermolecular_forces/if_icons/ethanol_hb.gif | Outer cloth of a  rain coat or  plastic for a water  bottle |