|  |  |
| --- | --- |
| Hydrophilic | Hydrophobic |
| Water is attractedTo these substances | These substancesRepel water |
| Charges in these substances attractδ+ H and δ- O atoms of water  | These substances contain no charged atoms, so wateris not attracted. |
| Ionic compounds with + charged metal ions & - charged nonmetalIons…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- KIK1+ I1- | Phospholipid fatty acid tailshttp://telstar.ote.cmu.edu/biology/membranepage/images/phospholipid.jpg |
|  Phospholipid phosphate head groupshttp://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 |

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| --- | --- |
| Water loving | Water fearingOr 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 |