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| dipole- dipole IMF  CλeMis+ry: http://genest.weebly.com  Stop in for help every day at lunch and Tues, Wed., &Thurs after school!  After-hours question? Email me at home: [eagenest@madison.k12.wi.us](mailto:eagenest@madison.k12.wi.us) | https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcR974Sf6LbwFCkCsdWTWzowgGTj6OBVzAV2rPKe6fUZRYu52qIWKA | Name\_\_\_\_\_\_\_\_\_  Period\_\_\_\_\_\_\_\_ |

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| 1. How many molecules are here? \_\_\_\_\_\_ 2. How many molecules here have a + end AND a - end \_\_\_\_\_\_\_ 3. How many molecules here are cations (just purely +): \_\_\_\_\_\_\_ 4. How many molecules here are anions (just purely -): \_\_\_\_\_\_\_ 5. How many of these are “dipoles”? \_\_\_\_\_\_ 6. Draw little dashed lines on the picture to connect things that feel attracted to each other. | http://www.chem.fsu.edu/editors/rlight/1020s00/ion%20dipole.gif |

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| 1. Extend this picture by adding five more molecules that look identical to the nine molecules already here. Important: make them point in the correct direction which their attraction causes. |  |

1. Define IMF:

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| 1. Write the electronegativity number next to each atom. 2. This atom has \_\_\_\_\_ covalent bonds 3. Of these, \_\_\_\_\_\_ are polar covalent bonds 4. And \_\_\_\_\_ are nonpolar covalent bonds | img498.jpg | Write arrows next to each bond to show which end of the bond the electrons go more towards  Does this molecule have a negative end and positive end that are opposite to each other?  (yes/no)  If you answered “yes”, draw a hollow arrow which shows which end the negative electrons are mostly going towards.  This molecule is  (polar / nonpolar ) |
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