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| Properties | Ionic Bonds | Covalent Bonds | Metallic Bonds |
| Melting Point  (low or high?) | High | Low | High |
| Boiling Point  (low or high?) | High | Low | high |
| Soluble? | Only soluble in polar solutions (e.g. water) | Soluble in non-polar solutions  (e.g. oil) | No |
| Conductive? | Only when dissolved in water or a liquid | No | Yes |
| Most common state of matter (solid, liquid, gas) | Crystal like Solid | Solid, liquid, gas | Solid |
| Texture | Hard but brittle  (easy to break) | Soft and flexible | Hard but can be molded and turned into wires |