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| **Metallic Crystal** |
| Held together by metallic bonds |
| Delocalized electrons allow it to conduct electricity |
| m.p. varies depending on metal |
| Might be an alloy |
| lustrous |
| malleable |

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| **Covalent Network Crystal** |
| Held together by covalent bonds |
| Very high m.p. |
| Diamond |
| Quartz (SiO2) |
| hard and brittle |
| Doesn’t conduct electricity |

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| **Ionic Crystal** |
| Held together by ionic bonds |
| High m.p. |
| Calcite (CaCO3) |
| hard and brittle |
| Doesn’t conduct electricity |

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| **Molecular Crystal** |
| Held together by IMFs |
| Low m.p. |
| snow |
| Rock candy |
| soft |
| Doesn’t conduct electricity |

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| **Graphite** |
| A unique covalent network crystal with bonds throughout each layer, but layers are held together by IMFs |
| Delocalized electrons allow it to conduct electricity |
| An allotrope of carbon |
| High m.p., yet layers can slide off easily |