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| Science 9 | Unit B |
| Transition Metals and Molecular Compounds | 84 Mins |

Review Notebook Quiz

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| Transition Metals   * Have more then one charge * Labeled with Roman Numerals   Formula to Words  FeCl2 -> Fe? 2Cl-  ? 2-  2+  Iron (II) Chloride  You do not have to name other metals in this way…. CaCl2 is Calcium Chloride NOT Calcium (II) Chloride  Words to Formula  Copper (I) Oxide  Cu1+ O2-  2Cu1+ 1O2-  Cu2O  Work for 15 Mins  Quick Method Again   1. Write the two Ions, **Metal First** 2. **“crisscross”** the charges 3. Rewrite the Formula   Ca2+ Cl-  Ca1 Cl2  CaCl2  Work for 15 Mins  **Molecular Compounds**  Two Non-Metals Combining   * Share of electrons * Insulators (poor conductors) * Low Melting point   Sharing results in MANY different combinations  Prefixes used to the different combinations   |  |  | | --- | --- | | # of Atoms | Prefix | | 1 | Mono | | 2 | Di | | 3 | Tri | | 4 | Tetra | | 5 | Penta | | 6 | Hexa | | 7 | Hapta |   **Molecular v. Ionic**   |  |  | | --- | --- | | Ionic | Molecular | | High Boiling Point  Metals and Non-Metals  Conducts Electricity  Give or Take e- (Ionic) | Low Boiling Point  Only Non-metals  Insulators  Share e- (Covalent) |   Work for rest of period | Co Hg  Co2+ Co3+ Hg+ Hg2+  Cobalt (II) Cobalt (III) Mercury (I) (II)  Ion  HgCl -> Hg? Cl-  ? 1-  1+  Mercury (I) Chloride  Cobalt (II) hydroxide  Co2+ OH­-  Co2+ 2(OH2-)  Co(OH)2  Carbon Dioxide CO2  Nitrogen Monoxide NO  First element only get a prefix if there is more then 1  Carbon Dioxide and Carbon Monoxide  CO2 CO  N2O4 Dinitrogen Tetraoxide |