

	<b>Answers</b>
<b>1</b>	<b>Ammonium sulfate</b>
<b>2</b>	<b>Dinitrogen trioxide</b>
<b>3</b>	<b>Phosphorus pentachloride</b>
<b>4</b>	<b>Iron (III) oxide</b>
<b>5</b>	<b>Sulfur hexafluoride</b>
<b>6</b>	<b>Nitric acid</b>
<b>7</b>	<b>Hydronitric acid</b>
<b>8</b>	<b>Lithium chloride</b>
<b>9</b>	<b>Iron (II) sulfide</b>
<b>10</b>	<b>Nitrous acid</b>
<b>11</b>	<b>Lead (II) oxide</b>
<b>12</b>	<b>Dinitrogen pentoxide</b>
<b>13</b>	<b>Sulfurous acid</b>
<b>14</b>	<b>CaO</b>
<b>15</b>	<b>HI</b>

16	<b>N<sub>2</sub>O<sub>4</sub></b>
17	<b>Pb(SO<sub>4</sub>)<sub>2</sub></b>
18	<b>N<sub>2</sub>O</b>
19	<b>CuSO<sub>4</sub></b>
20	<b>12</b>
21	<b>Ionic bonds lose or gain electrons to have a full outer shell of electrons, their total charge is 0, bond between metal and a nonmetal</b>
22	<b>Electrons are shared between 2 nonmetals, they share electrons to have a full outer shell of electrons</b>
23	<b>Ionic bonds melt at a higher temperature</b>
24	<b>Ionic bonds conduct electricity when dissolved in water. Solid metals also conduct electricity</b>
25	<b>Synthesis <math>N_2 + 3H_2 \rightarrow 2NH_3</math></b>
26	<b>Single: <math>3Li + AlCl_3 \rightarrow 3LiCl + Al</math></b>
27	<b>Decomposition: <math>2N_2O_5 \rightarrow 2N_2 + 5O_2</math></b>
28	<b>Combustion: <math>C_{10}H_{24} + 16O_2 \rightarrow 10CO_2 + 12H_2O</math></b>
29	<b>Double replacement: <math>3NH_4OH + H_3PO_4 \rightarrow (NH_4)_3PO_4 + 3H_2O</math></b>
30	<b>Octet; all bonds occur so the atoms have an electron configuration like a noble gas = full octet, NOT 8 electrons</b>

31	$\text{CuCl}_2 + 2\text{KNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + 2\text{KCl}$
32	$\text{Sn} + \text{Al}_2\text{O}_3 \rightarrow \text{NR}$
33	$\text{FeCl}_3 + 3\text{NH}_4\text{OH} \rightarrow \text{Fe}(\text{OH})_3 + 3\text{NH}_4\text{Cl}$
34	$2\text{KOH} + \text{CaF}_2 \rightarrow 2\text{KF} + \text{Ca}(\text{OH})_2$
35	$6\text{Cs} + \text{N}_2 \rightarrow 2\text{Cs}_3\text{N}$
36	$\text{C}_6\text{H}_8 + 8\text{O}_2 \rightarrow 6\text{CO}_2 + 4\text{H}_2\text{O}$
37	$\text{Zn} + \text{CuO} \rightarrow \text{ZnO} + \text{Cu}$
38	$2\text{AlCl}_3 \rightarrow 2\text{Al} + 3\text{Cl}_2$
39	Trigonal planar, nonpolar, 120, London Dispersion
40	London dispersion, dipole dipole, hydrogen bonding, covalent, ionic; as the boiling point increases, the IMF increases.