ANSWERS: **Shapes of molecules (level 3)**

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| --- | --- | --- |
| ClF5    **octahedral – square pyramid**  **90**° and slightly smaller and larger than 90° | SF3-    **trigonal bipyramidal – t-shaped**  **90**° |  |
| PCl6-  ass91390aQ1c2octahedral  90° | SiF62–    octahedral  90° | **I3-**    **trigonal bipyramidal - linear**  **90**° **and 120**° |
| ICl2­–    **trigonal bipyramidal – linear**  **180**° | IF5    **octahedral – square pyramid**  **90**° and slightly smaller and larger than 90° | **PCl3**    **trigonal pyramidal**  **107**° |
| **PCl5**  **shapepf51**  **trigonal bipyramidal**  **90**° and 120° | **SF6**  **shapesf61**  **octahedral**  **90**° | **SF4**    **trigonal bipyramidal – seesaw**  **90**° and 120° |

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| **ClF3**    **trigonal bipyramidal – t-shape**  **90**° | **AsF5**    **trigonal bipyramidal**  **90**° and 120° | | | **IF3**    **trigonal bipyramidal – t-shape**  **90**° | | | | |
| **NF3**    **trigonal pyramidal**  **107**° | | | | **XeF4**  http://www.uwplatt.edu/%7Esundin/images/vsprxef4.gif  **octahedral – square planar**  **90**° | | | **BrF3**    **trigonal bipyramidal –**  **t-shaped**  **90**° | |
| **BrF4-**    **octahedral – square planar**  **90**° | | | | **BrF5**    **octahedral – square pyramid**  **90**° and slightly smaller and larger than 90° | | | **AsF3**    **trigonal pyramidal**  **107**° | |
| **BF3**  **shapebf31**  **trigonal planar**  **120**° | | | | **PF3**    **trigonal pyramidal**  **107**° | | | **ICl4-**    **octahedral – square planar**  **90**° | |

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