Using the molecular model kit make each of the following molecules. Draw the Lewis Structures on the chart below. After you have drawn all the structures, use the flow-chart given to determine the shape of the compound.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Formula** | **Lewis Structure** | **Shape** |
| Chlorine gas | Cl2 |  |  |
| Boron trichloride |  |  |  |
| Methane (carbon tetrahydride) |  |  |  |
| Ethylene | C2H4 |  |  |
| Ammonia (nitrogen trihydride) |  |  |  |
| Hydrogen sulfide |  |  |  |
| Sulfur trioxide |  |  |  |
| Water |  |  |  |
| Acetylene | C2H2 |  |  |
| Carbon tetrachloride |  |  |  |
| Hydrogen cyanide |  |  |  |
| Phosphorous trichloride |  |  |  |
| Formaldehyde | H2CO |  |  |
| Nitrogen gas | N2 |  |  |