Examples for determining the ideal shapes.

Molecules with lone pairs or multiple bonds
Lone pairs have a greater repulsive force than shared pairs.

<table>
<thead>
<tr>
<th>Lone pairs</th>
<th>Molecular shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>One lone pair</td>
<td>NH₃</td>
</tr>
<tr>
<td>Two lone pairs</td>
<td>H₂O</td>
</tr>
<tr>
<td>Multiple bonds</td>
<td>CO₂</td>
</tr>
</tbody>
</table>

**FIVE IDEAL SHAPES**

- **Trigonal planar**
  - AX₃
  - E.g. BeF₃

- **Tetrahedral**
  - AX₄
  - E.g. CCl₄; CH₄

- **Linear**
  - AX₂
  - E.g. HCl; BeF₂

- **Trigonal bipyramidal**
  - AX₅
  - E.g. PF₅; PCl₅

- **Octahedral**
  - AX₆
  - E.g. SF₆; SCℓ₆