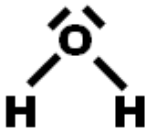
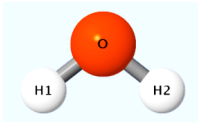
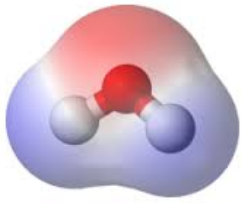
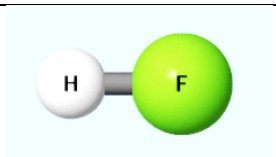
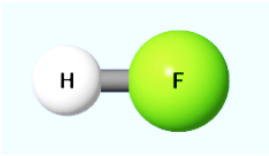
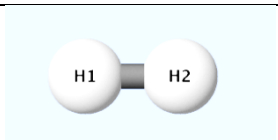
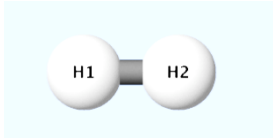
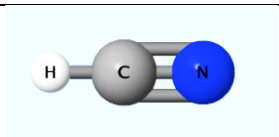
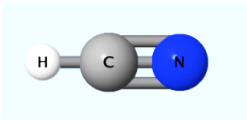
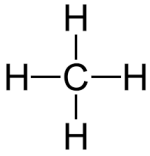
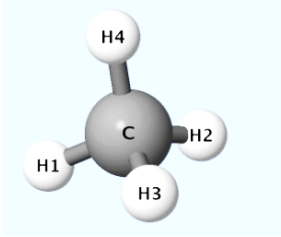
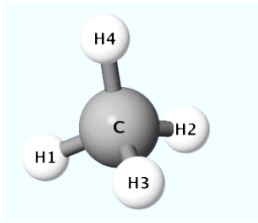
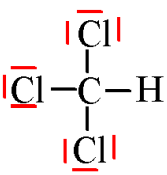
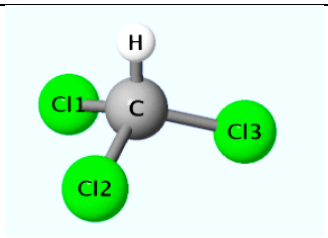
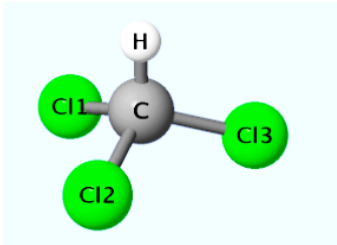
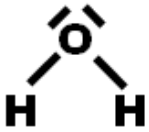
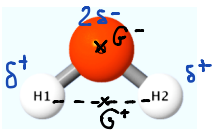
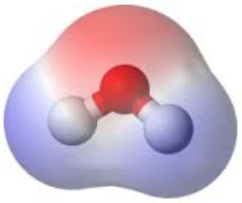
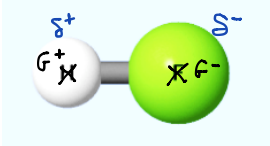
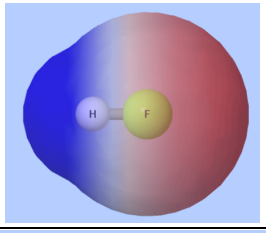
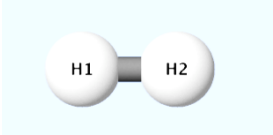
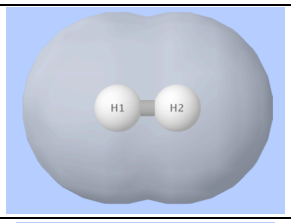
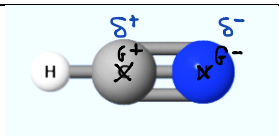
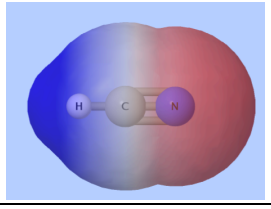
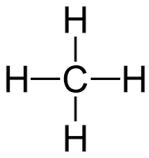
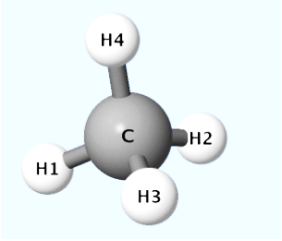
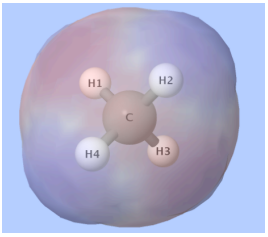
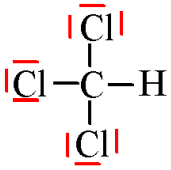
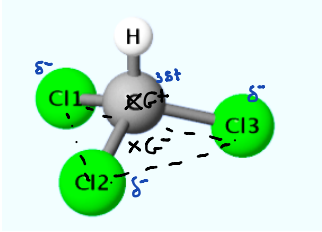
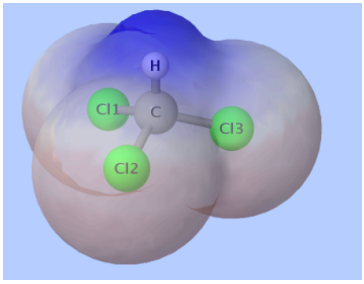
| Chapitre 3 Comprendre | Activité n°1 | Les molécules polaires et apolaires (capsule n°18) |
|---|---|---|

1. Indiquer le nom de la géométrie (utiliser l'animation, vous pouvez faire pivoter la molécule).
2. Indiquer la charge partielle δ+ et δ- sur les atomes de chaque liaison polarisée sur le modèle moléculaire.
3. Indiquer où se situe le centre de charges positives G+ et le centre des charges négatives G- sur le modèle moléculaire.
4. Conclure sur la nature de la molécule : polaire ou apolaire
5. Représenter en couleur le nuage électronique de la molécule (cocher potentiel électrostatique sur l'animation pour vérifier).

| Electronégativité des atomes | | | | | | |
|---|---|---|---|---|---|---|
| H | B | C | N | O | F | Cl |
| 2,1 | 2,0 | 2,5 | 3,0 | 3,5 | 4,0 | 3,0 |

| Nom de la Molécule | Représentation de Lewis | Modèle moléculaire | Molécule polaire ou apolaire ? | Nuage électronique de la molécule *(bleu : charge positive et rouge charge négative)* |
|---|---|---|---|---|
| **Eau** |  |  *Géométrie Coudée* | Molécule polaire |  |
| **Fluorure d'hydrogène** | $H - F$ |  *Géométrie : .....* | |  |
| **Dihydrogène** | $H - H$ |  *Géométrie : .....* | |  |
| **Cyanure d'hydrogène** | H—C≡N\| |  *Géométrie : .....* | |  |
| **Méthane** |  |  *Géométrie : .....* | |  |
| **Chloroforme** |  |  *Géométrie : .....* | |  |

| Nom de la Molécule | Représentation de Lewis | Modèle moléculaire | Molécule polaire ou apolaire ? | Nuage électronique de la molécule *(bleu : charge positive et rouge charge négative)* |
|---|---|---|---|---|
| **Eau** |  |  *Géométrie Coudée* | Molécule polaire |  |
| **Fluorure d'hydrogène** | $H - F$ |  *Géométrie : linéaire* | Molécule polaire |  |
| **Dihydrogène** | $H - H$ |  *Géométrie : linéaire* | Molécule apolaire |  |
| **Cyanure d'hydrogène** | $H-C\equiv N$ |  *Géométrie : linéaire* | Molécule polaire |  |
| **Méthane** |  |  *Géométrie : tétraédrique* | Molécule apolaire |  |
| **Chloroforme** |  |  *Géométrie : tétraédrique* | Molécule polaire |  |