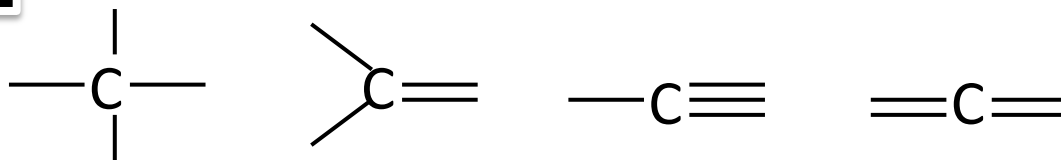


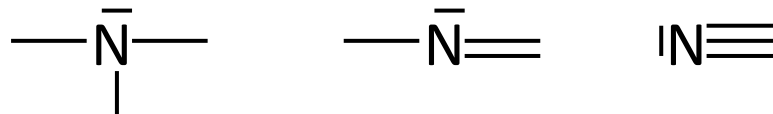
NOMENCLATURE en chimie organique

1- Rappels : liaisons et formules

Atome C : 4 liaisons



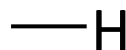
Atome N : 3 liaisons



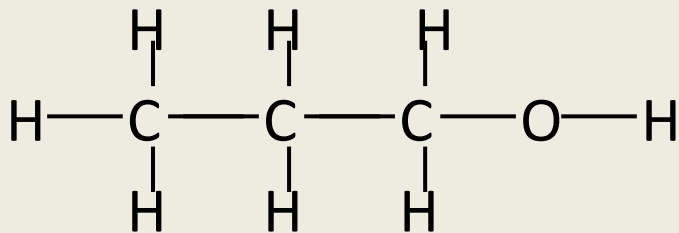
Atome O : 2 liaisons



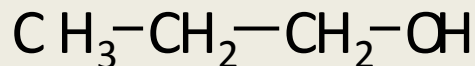
Atome H : 1 liaison



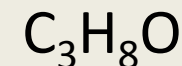
Formule développée



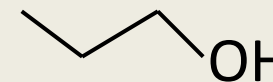
Formule semi-développée



Formule brute



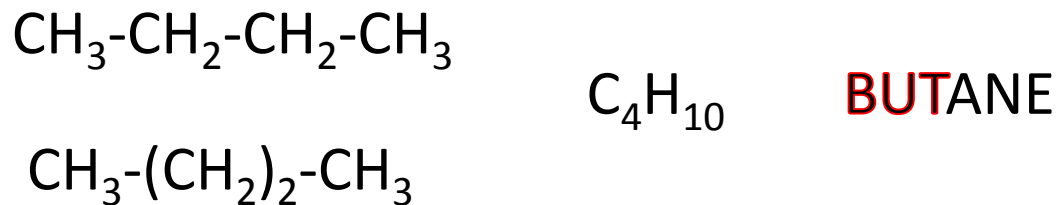
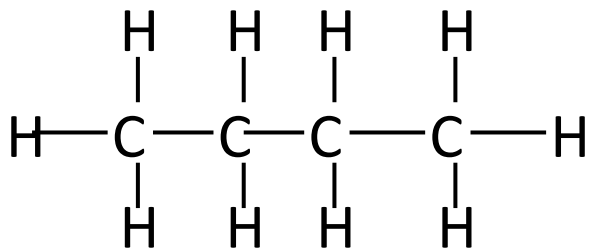
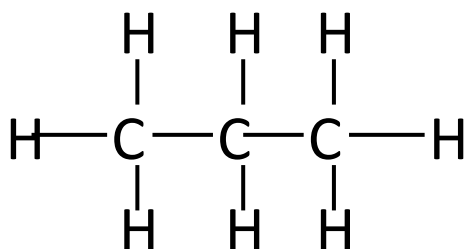
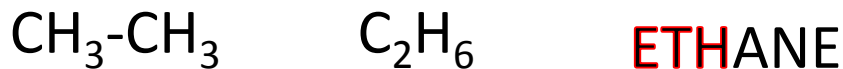
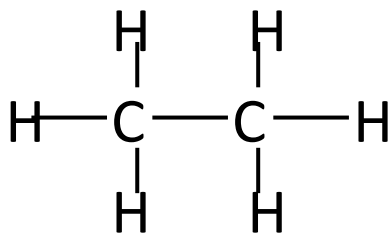
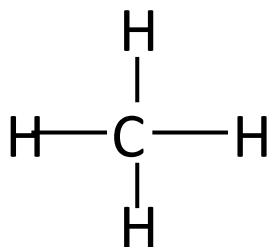
Formule topologique



Les alcanes

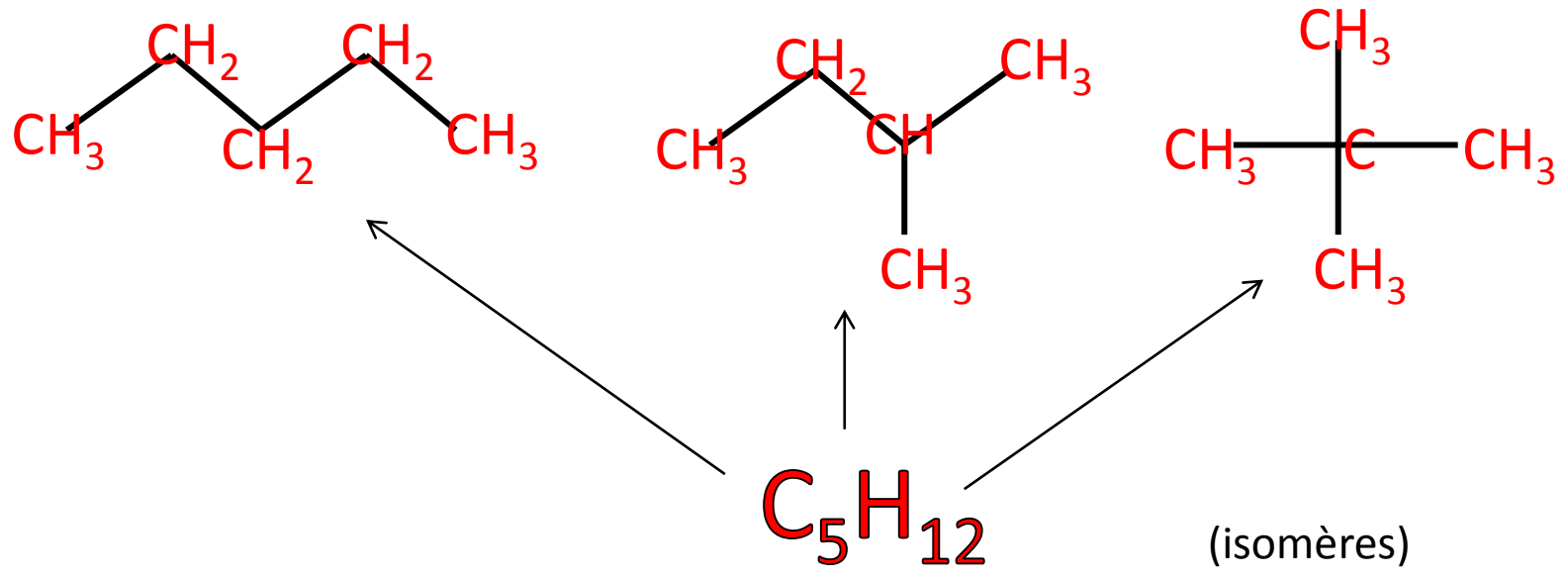
= Hydrocarbures à simples liaisons

1- chaînes linéaires



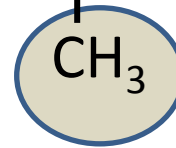
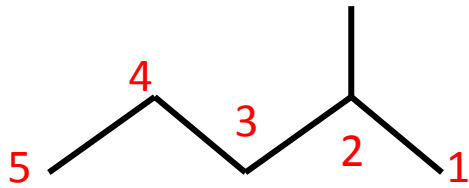
Pour les autres alcanes à chaîne linéaire, on utilise un **préfixe** grec indiquant le nombre d'atomes de carbone que l'on fait suivre du suffixe **ane**.

| | πέντε | έξι | επτά | οκτώ | νέος | δέκα |
|-------------------|-------------|-------------|-------------|-------------|-------------|----------------|
| atomes de carbone | 5 | 6 | 7 | 8 | 9 | 10 |
| Formule brute | C_5H_{12} | C_6H_{14} | C_7H_{16} | C_8H_{18} | C_9H_{20} | $C_{10}H_{22}$ |
| préfixe | pent- | hex- | hept- | oct- | non- | déc- |
| nom | pentane | hexane | heptane | octane | nonane | décane |



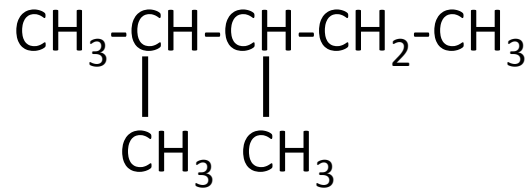
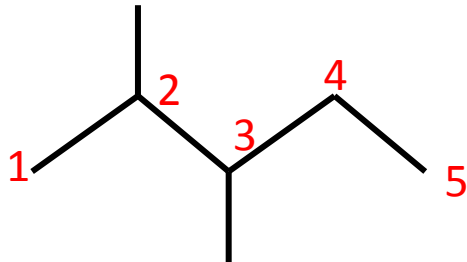
Les alcanes

2- chaines ramifiées

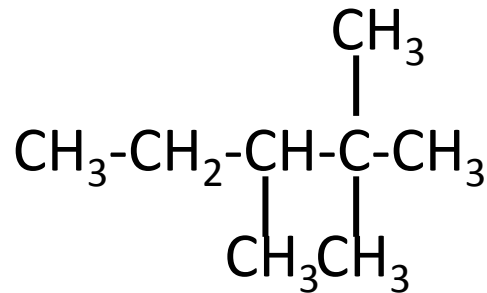
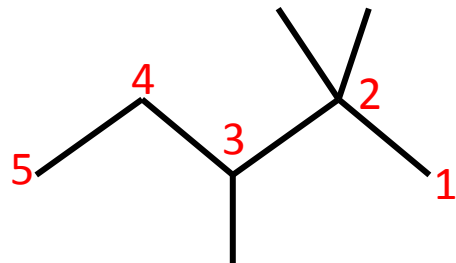


3-méthylpentane

Groupe METHYLE



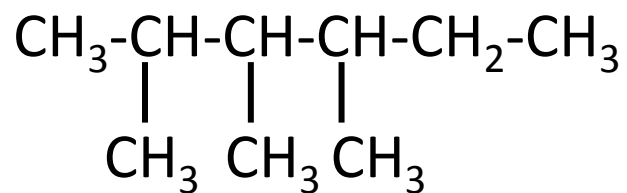
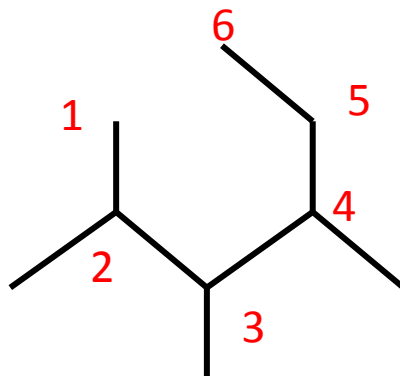
2,3-diméthylpentane



2,2,3-triméthylpentane

| | | | | | | |
|-------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|
| atomes de carbone | 5 | 6 | 7 | 8 | 9 | 10 |
| Formule brute | C ₅ H ₁₂ | C ₆ H ₁₄ | C ₇ H ₁₆ | C ₈ H ₁₈ | C ₉ H ₂₀ | C ₁₀ H ₂₂ |
| préfixe | pent- | hex- | hept- | oct- | non- | déc- |
| nom | pentane | hexane | heptane | octane | nonane | décane |

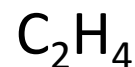
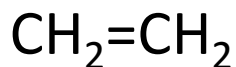
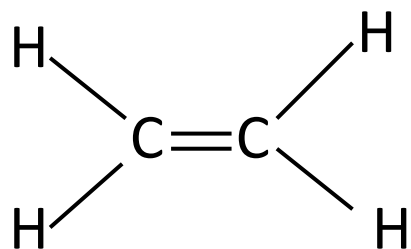
exemple



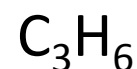
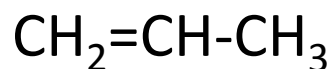
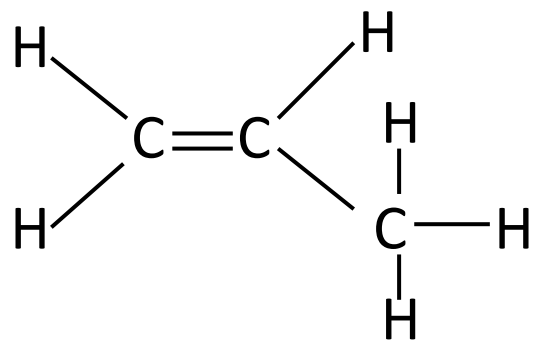
2,3,4-triméthylhexane

Les alcènes

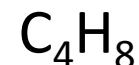
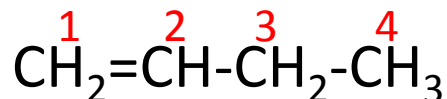
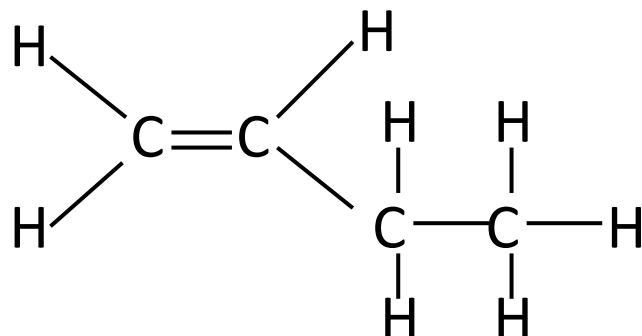
Les alcènes sont des hydrocarbures insaturés, caractérisés par la présence d'au moins une double liaison covalente entre deux atomes de carbone.



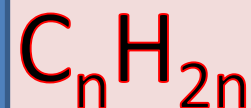
ETHÈNE (ETHYLENE)



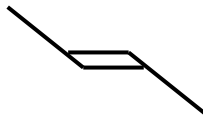
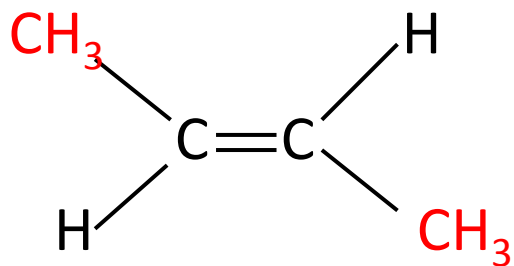
PROPÈNE



BUT-1-ÈNE

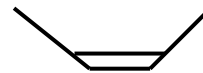
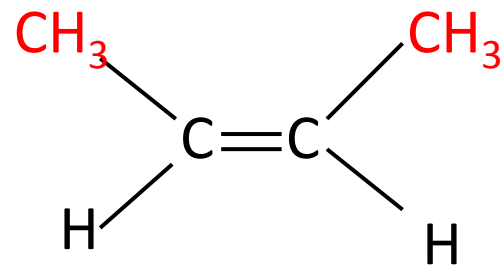


ISOMERIE Z et E due à la non rotation autour de la double liaison



(E) but-2-ène

E = Entgegen



(Z) but-2-ène

Z = zusammen