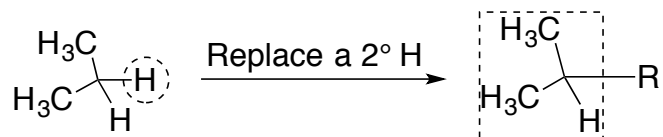


6 Special groups:

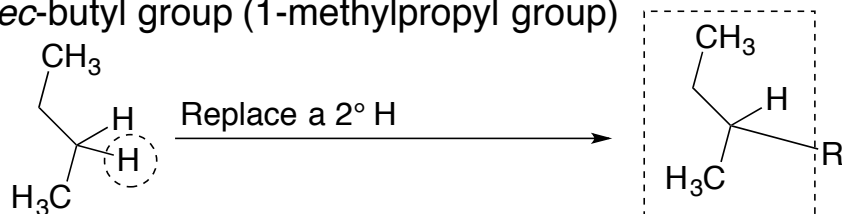
9/14/2016

1) isopropyl group (1-methylethyl group)



i-propyl group or *i*propyl group (*i*pr)

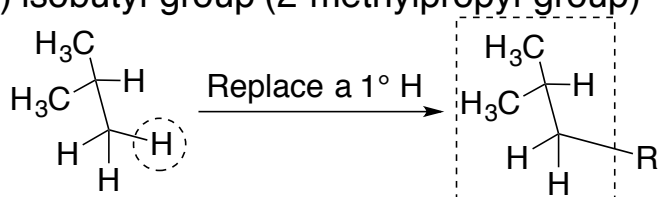
2) *sec*-butyl group (1-methylpropyl group)



butane

s-butyl group or ^{*s*}butyl group (*s*-bu or ^{*s*}bu)

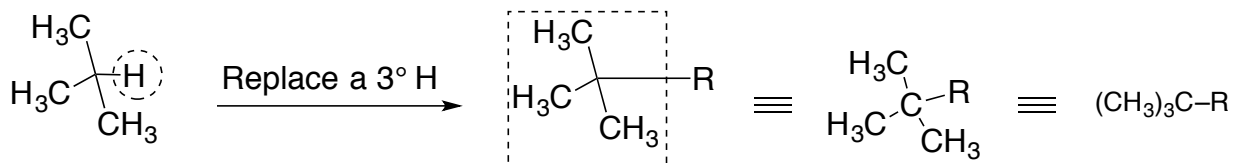
3) isobutyl group (2-methylpropyl group)



isobutane

i-butyl group or *i*butyl group (*i*-bu or *i*bu)

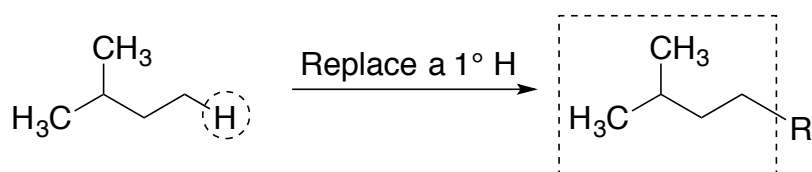
4) *tert*-butyl group (1,1-dimethylethyl group)



isobutane

t-butyl group or *t*butyl group (*t*-bu or *t*bu)

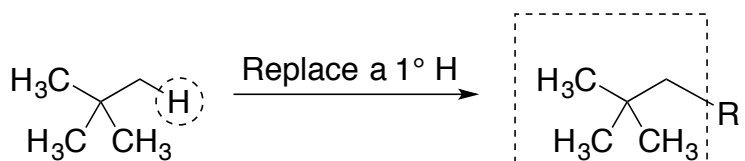
5) isopentyl group (aka. isoamyl group--old name)



isopentane

i-pentyl group or *i*pentyl group

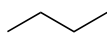
6) *neopentyl* group



neopentane

neopentyl group

C₄H₁₀ Two Constitutional Isomers:



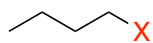
n-butane or
*n*butane or
butane



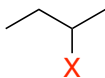
isobutane
2-methylpropane

When these groups are attached to another group we can attach each of them two different ways

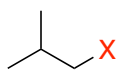
Examples:



replace a 1° H
n-butyl group



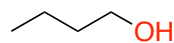
replace a 2° H
sec-butyl group (*s*-butyl)



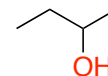
replace a 1° H
isobutyl group



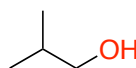
replace a 3° H
tert-butyl group (*t*-butyl)



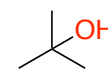
butan-1-ol



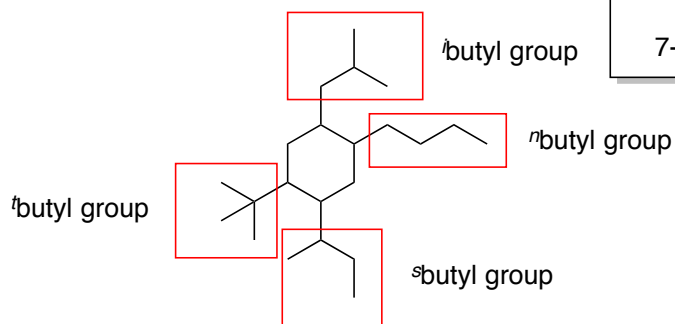
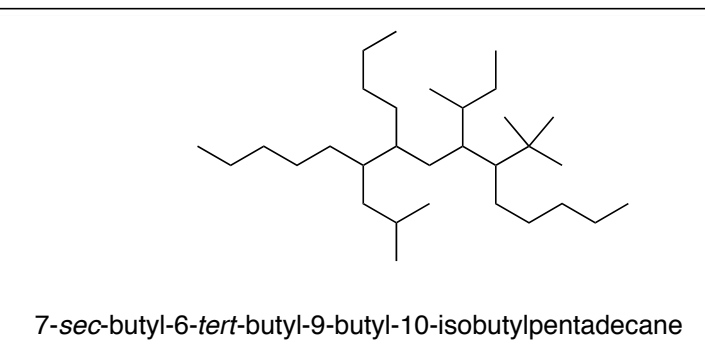
s-butanol
butan-2-ol



isobutanol



tert-butyl alcohol
t-butanol
2-methylpropan-2-ol



2-*sec*-butyl-1-*tert*-butyl-4-butyl-5-isobutylcyclohexane

or

2-(1-methylpropyl)-1-(1,1-dimethylethyl)-4-butyl-5-(2-methylpropyl)cyclohexane

This is called a complex name. These are easier to convert to a structure than to actually generate