

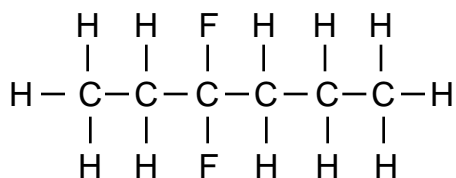
Alkanes 2 : Notes/W.S. - 50

Other groups with a combining capacity of 1 can replace hydrogen in an alkane.

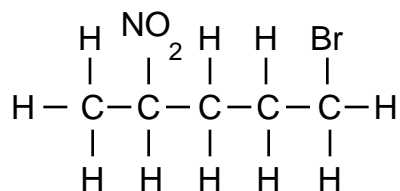
These are, the halides; F (fluoro), Cl (chloro), Br (bromo), and I (iodo); and also, the groups; NO₂ (nitro), NH₂ (amino) and OH (hydroxy).

Examples of alkanes with these groups attached are shown below.

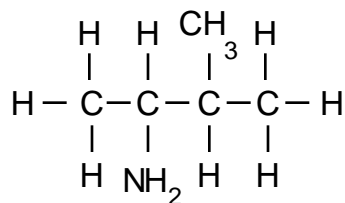
3,3-difluorohexane



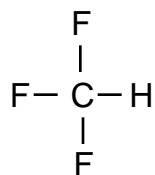
1-bromo-4-nitropentane



2-amino-3-methylbutane

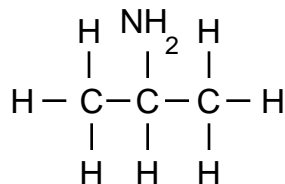


trifluoromethane



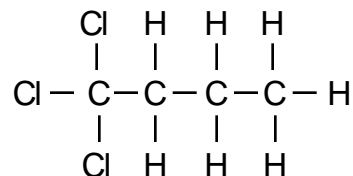
Name the following alkanes.

1)

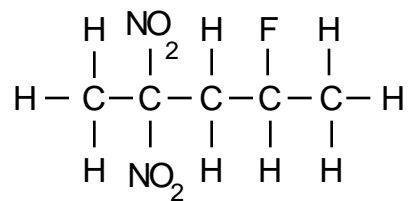
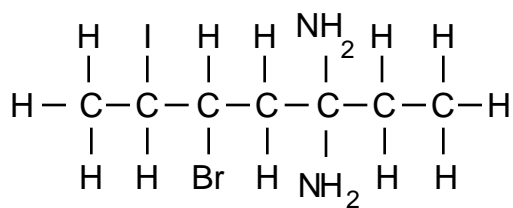


3)

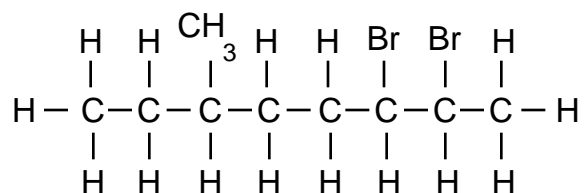
2)



4)



5)



6) Draw diagrams for the following:

a) 2-amino-4-fluoropentane

b) 3,3-diethyl-5-nitroheptane

c) tetrabromomethane

d) 5,5-dichloro-4-propylnonane

e) 2-bromo-3-iodobutane

Answers:

1) 2-aminopropane, 2) 1,1,1-trichlorobutane,

3) 5,5-diamino-3-bromo-2-iodoheptane,

4) 4-fluoro-2,2-dinitropentane, 5) 2,3-dibromo-6-methyloctane.

6)

