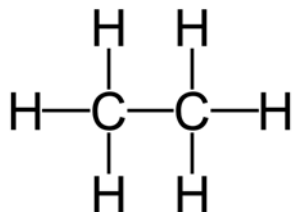


## CHAPTER 3

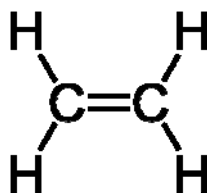
### ALKENES

#### 3.1 Introduction.

Alkenes are molecules containing a C=C double bond. They are also sometimes referred to as olefins or as **unsaturated** compounds. They called unsaturated because the C atoms in a C=C double bond don't have as many hydrogens bonded to them as an alkane does. Molecules with one double bond are called **monounsaturated**. Molecules with multiple double bonds are called **polyunsaturated**. In contrast, alkane molecules with no double bonds are **saturated**.



Ethane (saturated)



Ethene (unsaturated)

When we discuss the chemical reactions of alkenes, we will see that the primary site of reaction is the double bond and the most common type of reaction is the addition of atoms to the double bond to make a saturated molecule.