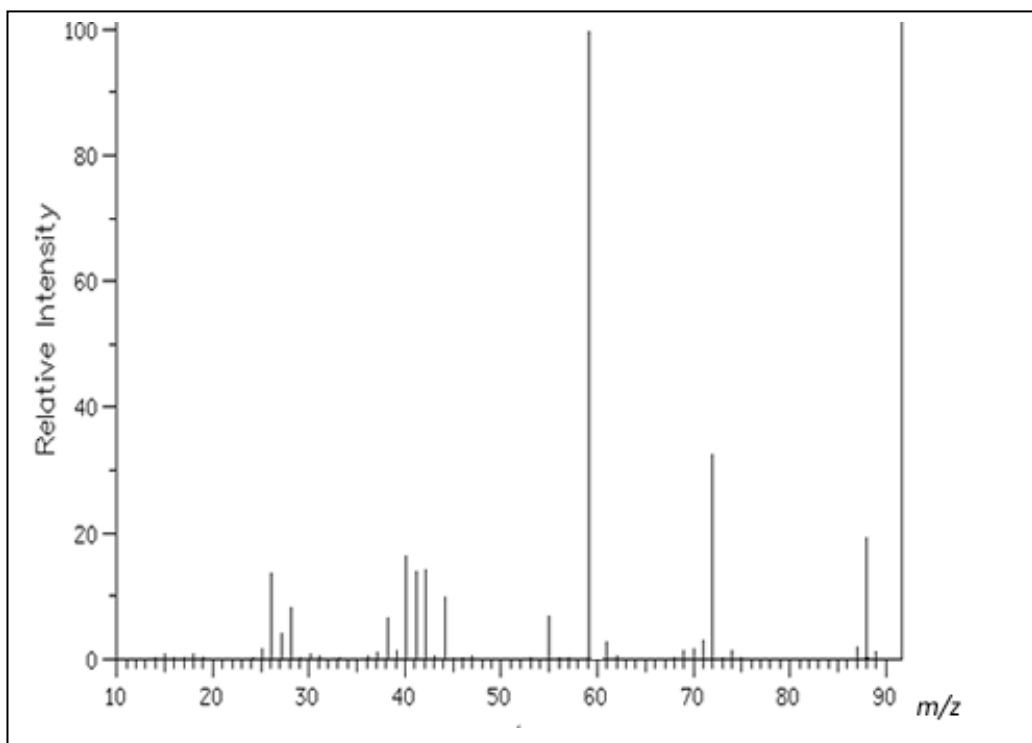
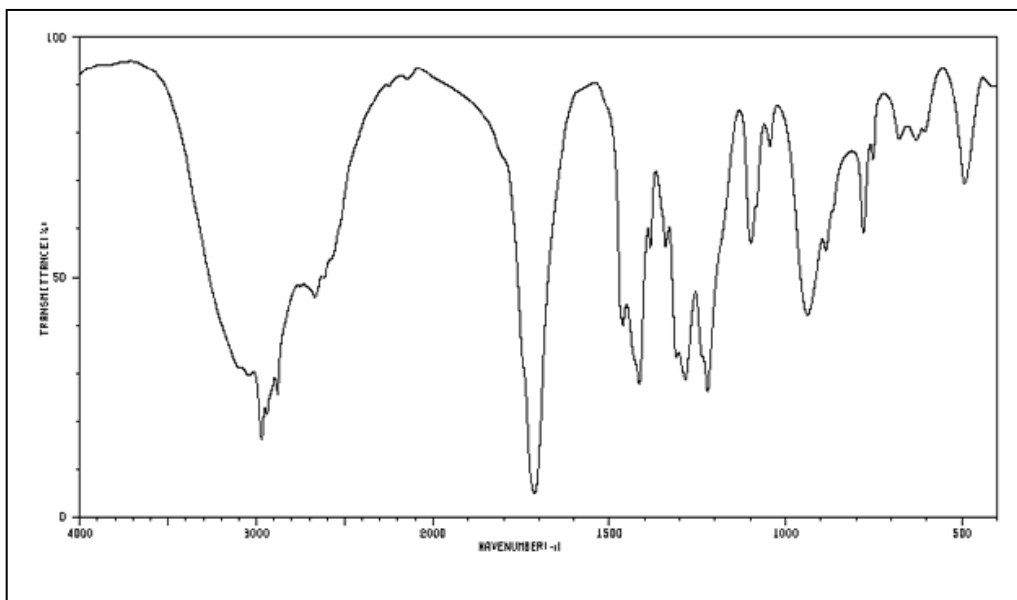


Friday Worksheet 4
Infrared Radiation (IR)

Name:

- 1) An organic molecule has the empirical formula of C_2H_4O . The IR spectrum and mass spectrum of this compound are shown below.



- What is the molecular formula for this compound.
- With reference to the IR spectrum, what strong signals, outside of the fingerprint region, exist. Give the wavelength and the possible functional group that is present in the molecule.
- What is the name of the compound.
- Draw the structural formula for this molecule.
- What fragment may have produced the peak at m/z 59?
- What caused the small peak at m/z 89?