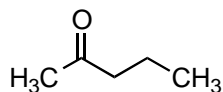
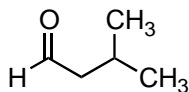


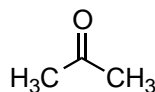
Based on their ^1H NMR spectra (links to online spectra provided), match Unknowns 1–6 to these structures:



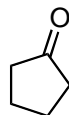
2-pentanone



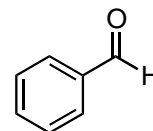
isovaleraldehyde
(3-methylpentanal)



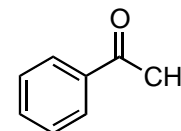
acetone



cyclopentanone



benzaldehyde



acetophenone

These are the possible unknowns from the Unknown Aldehyde or Ketone Laboratory Experiment.

Unknown 1

^1H NMR spectrum in CDCl_3

<http://www.sigmaaldrich.com/spectra/fnmr/FNMR001621.PDF>

Unknown 2

^1H NMR spectrum in CDCl_3

<http://www.sigmaaldrich.com/spectra/fnmr/FNMR009167.PDF>

Unknown 3

^1H NMR in CDCl_3

<http://www.sigmaaldrich.com/spectra/fnmr/FNMR009397.PDF>

Unknown 4

^1H NMR in CDCl_3

<http://www.sigmaaldrich.com/spectra/fnmr/FNMR009632.PDF>

Unknown 5

^1H NMR spectrum in CDCl_3

<http://www.sigmaaldrich.com/spectra/fnmr/FNMR011339.PDF>

Unknown 6

^1H NMR spectrum in CDCl_3

<http://www.sigmaaldrich.com/spectra/fnmr/FNMR001352.PDF>