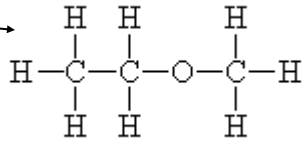
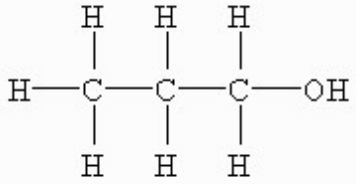
Answer Sheet for 100 Organic Questions

| | |
|---|---|
| A | 1 |
| D | 2 |
| C | 3 |
| B | 4 |
| C | 5 |
| | |
| C | 6 |
| D | 7 |
| B | 8 |
| D | 9 |
| ALKENE | 10 |
| | |
| A | 11 |
| B | 12 |
| B | 14 |
| 84g/mole | 15 |
| | |
| D | 16 |
| B | 17 |
| A | 18 |
| B | 19 |
| 10 | 20 |
| | |
| 4 + 6 | 21 |
| 5 + 9 | 22 |
| 8 | 23 |

| | |
|---|---|
| 1 + 7 | 24 |
| 3 | 25 |
| | |
| none | 26 |
| none | 27 |
| none | 28 |
| 5 | 29 |
| 9 | 30 |
| | |
| 2 | 31 |
| None | 32 |
| D | 33 |
| A | 34 |
| C | 35 |
| | |
| B | 36 |
| B | 37 |

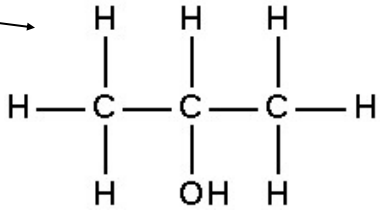
| | |
|---|---|
| ethyl methyl ether | 38 |
| 1-propanol or 2-propanol | 39 |
| $C_3H_8O$ is 60 g/mole | 40 |
| | |
| (at right) | 41 |
| 1-butene | 42 |
| far right | 43 |
| 1-heptanamine | 44 |
| hexanal | 45 |
| | |
| 2-pentanone | 46 |
| 3-pentanone | 47 |
| butanamide | 48 |
| Yes, no radial symmetry = polar | 49 |
| 1-pentanamine | 50 |
| | |
| addition | 51 |
| at right | 52 |
| halocarbon | 53 |
| You can't add halogens to a saturated hydro-carbons | 54 |
| C | 55 |
| C | 56 |

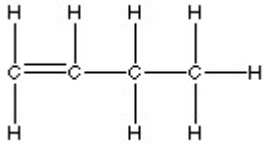


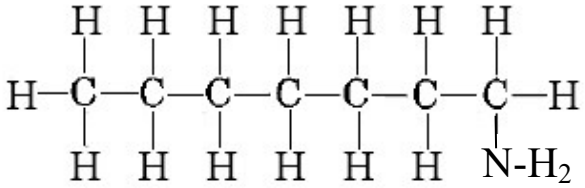


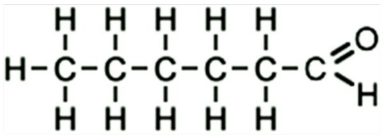
1

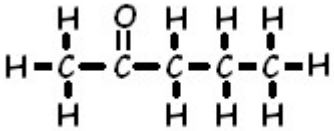
2

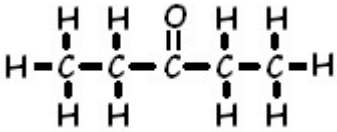


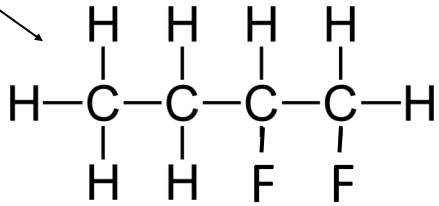




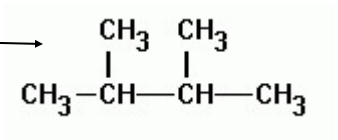



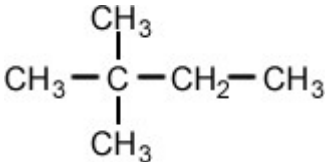


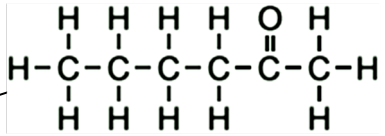


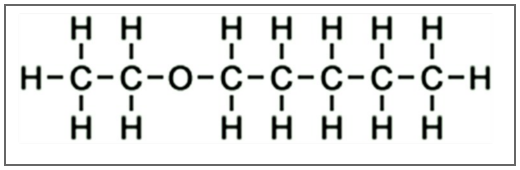


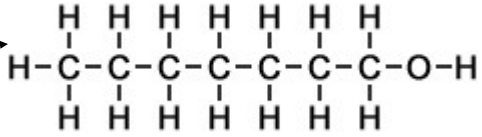
| | |
|---|---|
| 2,3 dimethyl butane | 57 |
| 2,2 dimethyl butane | 58 |
| alkynes | 59 |
| 3-hexanone | 60 |
| | |
| 2-hexanone | 61 |
| ethyl pentyl ether | 62 |
| Any 7 carbon alcohol | 63 |
| 1-pentanol | 64 |
| 2-pentanol | 65 |
| | |
| 3-pentanol | 66 |
| ☺ | |
| 2-butanamine | 67 |
| 1-butanamine | 68 |



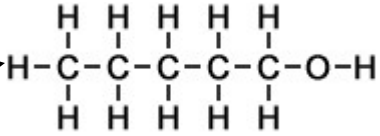


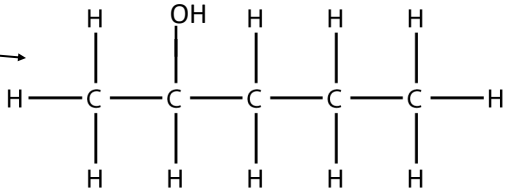


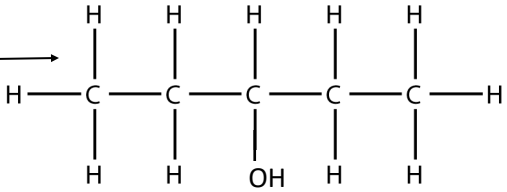


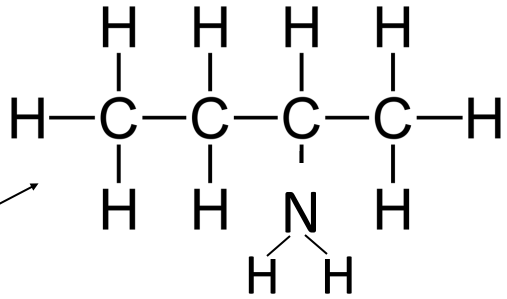


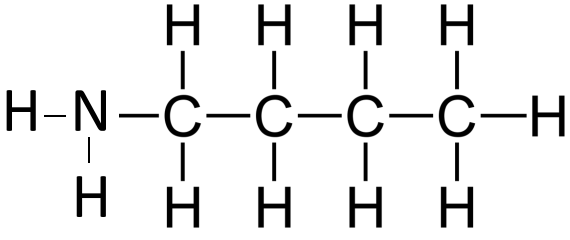
This is 1-heptanol



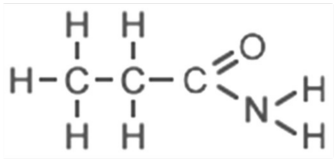


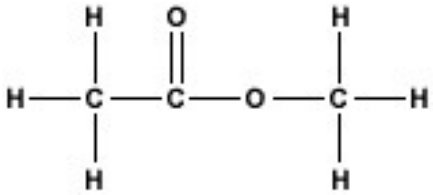


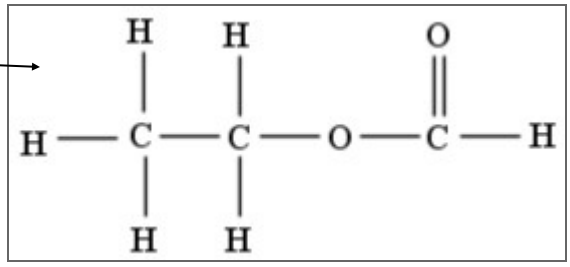


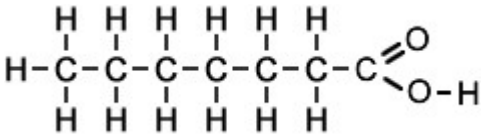


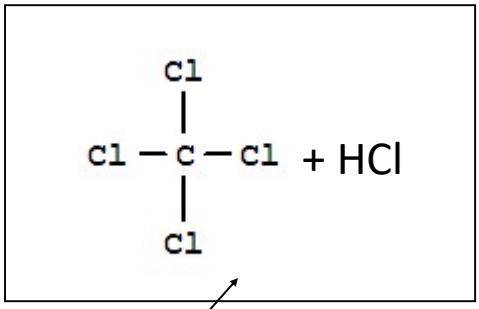
| | |
|---|---|
| propanamide | 69 |
| | |
| methyl ethanoate | 70 |
| ethyl methanonate | 71 |
| heptanoic acid | 72 |
| AQUEOUS NaOH or KOH or $Mg(OH)_2$ or $NH_3$ | 73 |
| ALKENES | 74 |
| ALDEHYDES | 75 |
| | |
| METHANAL | 76 |
| ALDEHYDES | 77 |
| A | 78 |
| You need an "R" group on each side of the –O- | 79 |
| That's butanal, an aldehyde | 80 |
| | |
| Carbon only makes 4 bonds, it can't make 5 | 81 |
| $CCl_4 + HCl$ | 82 |
| hexyl propanaoate + HOH | 83 |
| propyl hexanoate + HOH | 84 |



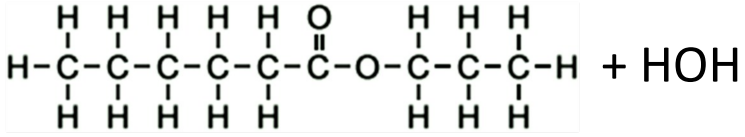




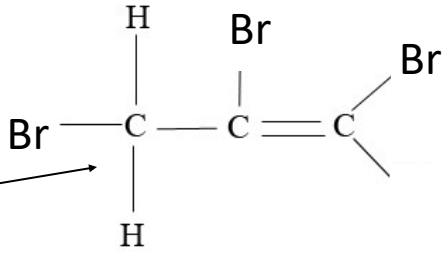


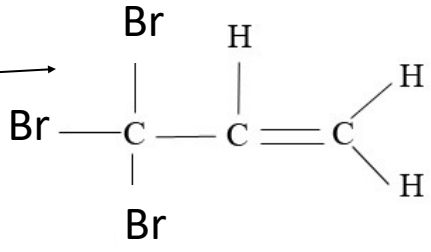


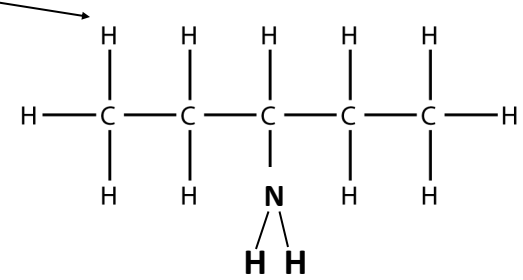


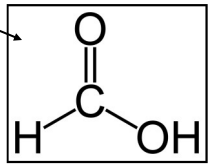


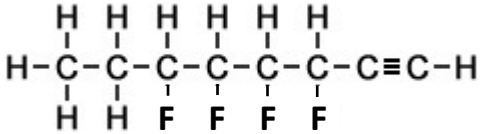
| | |
|---|---|
| SOAP | 85 |
| CONTAINS A TRIPLE –OH GROUP | 86 |
| 1,2,3 tribromo propene | 87 |
| 1,1,1 tribromo propene | 88 |
| 3-pentanamine | 89 |
| methanoic acid | 90 |
| | |
| ethanoic acid or acetic acid | 91 |
| $CH_3(CH_2)_4CH_3$ | 92 |
| $CH_3(CH_2)_3CH_2NH_2$ | 93 |
| BELOW | 94 |

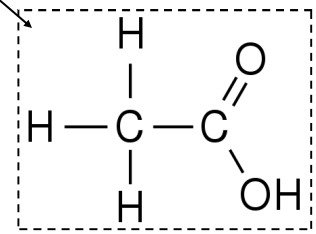












95. ISOMER: different organic molecules with the same molecular (chemical formula) but different structures, thereby giving different properties. The compounds are not related. Examples are ethers are isomers with acids. Dimethyl ether ($C_2H_6O$) and ethanol ($C_2H_5OH$) Different structures, the same molar mass. Isomers are different classes of compounds.

96. ALLOTROPE: pertains to chemically pure elements with different bonding design. Such as graphite, diamond, and Buckminster fullerenes are all pure carbon. Also, oxygen and ozone are pure oxygen but have different properties and different bonding schemes.

97. ISOTOPE: chemically identical atoms, but with different masses due to different numbers of neutrons. The mass differences do not make the atoms chemically different, but they do have different masses. These isotopes give rise to the "weird" non whole number atomic masses on the periodic table. There are about 118 types of elements but over 1000 isotopes

98. Carbon

99. Polymerization. Many mers convert to long chains of "poly" mers, or plastics.

100. It's an ester, methyl hexanoate.