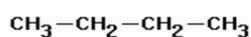


## Chapter 20: Organic Chemistry Review Worksheet ANSWERS

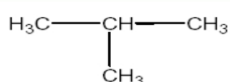


Remember practice tests are available online at [http://college.hmco.com/chemistry/general/zumdahl/world\\_of\\_chem/le/students/ace/index.html](http://college.hmco.com/chemistry/general/zumdahl/world_of_chem/le/students/ace/index.html) (although we did not complete all of chapter 20 for this unit)

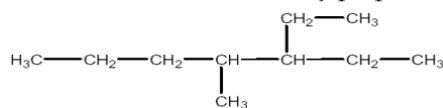
- 1) The study of carbon containing compounds and their chemistry is called *Organic Chemistry*
- 2) Hydrocarbons that only contain single bonds are called *Alkanes*
- 3) The chemical formula for an alkane with 20 carbons is  $C_{20}H_{42}$
- 4) When one or more hydrogens in an alkane are replaced, this is an example of *A substitution reaction*
- 5) Hydrocarbons with triple bonds are called *Alkynes*
- 6) When mixtures of hydrocarbons are separated, some compounds are released called *aromatic hydrocarbons* that contain benzene rings
- 7) When an  $-OH$  is attached to a hydrocarbon this is an example of *alcohol*, a type of functional group
- 8) When an  $C=O$  is attached to a hydrocarbon this is an example of *ketone*, a type of functional group
- 9) Name the alkane



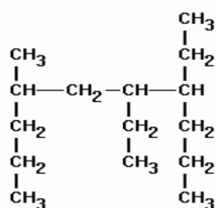
a. *n-butane*



b. *2-methylpropane*



c. *3-ethyl-4-methylheptane*

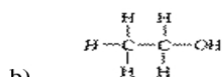


d. *4,5-diethyl-7-methyldecane or 6,7-diethyl-4-methyldecane*

10) What type of functional groups is each of the following?



*Aldehyde*



*alcohol*