

Review Chapter 22 - Organic Chemistry

1. What is a hydrocarbon?
2. What is the difference between a saturated and an unsaturated hydrocarbon?
3. What is a structural isomer?
4. Be able to name any alkane up to 10 carbons long
5. Be able to properly name alkanes with various branch points
6. What are the differences between *sec*-butyl, isobutyl, and *tert*-butyl groups?
7. What are the major reactions of alkanes
8. Be able to properly name cyclic alkane molecules
9. What are alkenes and alkynes?
10. Be able to properly name alkenes and alkynes.
11. What is *cis-trans* isomerism
12. Be able to properly name compounds containing *cis*- or *trans*- bonds.
13. What are the major reaction of alkenes and alkynes
14. What are aromatic hydrocarbons?
15. Be able to properly name constituents placed on a benzene ring either using number or the *o*-, *m*-, or *p*- formalism.
16. What are the major reactions of aromatic hydrocarbons?
17. Where do petrochemicals come from. What is cracking? reforming?
18. Be able to recognize the all of the functional groups given on Table 22.5 of your text. Which of these groups are polar? Acids? Bases? Given a name of a hydrocarbon derivative with a functional group, be able to draw its structure.
19. What are polymers?, monomers?