



## Organic Chemistry - Quick Fire Questions

This worksheet is fully supported by a video tutorial; <https://youtu.be/sE2DP0x48kE>

1. Define hydrocarbon.
2. What is crude oil made up from?
3. What is the general formula for alkanes?
4. Draw methane.
5. Draw ethane.
6. Draw propane.
7. Draw butane.
8. Why do we need to separate crude oil into fractions?
9. How does boiling point change with chain length?
10. How does viscosity change with chain length?
11. How does flammability change with chain length?
12. Write the word equation for complete combustion.
13. Why do we need to crack long hydrocarbons?
14. How do we test for alkenes?

### Chemistry Only

15. What is the general formula for alkenes?
16. What does unsaturated mean?
17. Draw ethene.
18. Draw propene.
19. Draw butene.
20. Draw pentene.
21. What is the word equation for incomplete combustion?
22. What is the difference between complete and incomplete combustion?
23. Describe the reaction of an alkene with a halogen.
24. Describe the reaction of an alkene with water.
25. Describe the reaction of an alkene with hydrogen.
26. What is the functional group for alcohol?
27. Draw methanol.
28. Draw ethanol.
29. Draw propanol.
30. Draw butanol.
31. What is the main use of alcohol?
32. What happens when alcohol reacted oxygen?



33. What are the conditions needed for fermentation?
34. Draw the functional group for a carboxylic acid.
35. Draw methanoic acid.
36. Draw ethanoic acid.
37. Draw propanoic acid.
38. Draw butanoic acid.
39. What are the uses for carboxylic acids?
40. What happens when a carboxylic acid reacts with a carbonate?
41. What happens when a carboxylic acid reacts with water?
42. What happens when a carboxylic acid reacts with alcohol?
43. Draw ethyl ethanoate.
44. Define monomer.
45. Define polymer.
46. Describe polymerisation.
47. What is condensation polymerisation?
48. What is the structure of DNA?
49. How does DNA relate to amino acids?
50. Draw the basic structure of an amino acid.