GCSE Chemistry Organic Chemistry Checklist

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| Lesson and success criteria | | Learned in lesson | Revised | Confident |
| **Lesson 1: Fractional distillation** | |  |  |  |
| **OC1** | Describe crude oil |  |  |  |
| **OC2** | Identify the chemical fractions within a fractionating column |  |  |  |
| **OC3** | Examine the properties of the different fractions |  |  |  |
| **OC4** | Summarise how fractional distillation works |  |  |  |
| **Lesson 2: Alkanes** | |  |  |  |
| **OC5** | Describe alkanes |  |  |  |
| **OC6** | Name and identify the first 4 alkanes |  |  |  |
| **OC7** | Sketch alkanes using the displayed formula |  |  |  |
| **OC8** | Illustrate why alkanes are described as saturated |  |  |  |
| **Lesson 3: Burning Fuels** | |  |  |  |
| **OC9** | Define complete combustion and incomplete combustion |  |  |  |
| **OC10** | Complete word equations for complete and incomplete combustion |  |  |  |
| **OC11** | Evaluate the risks associated with incomplete combustion |  |  |  |
| **Lesson 4: Alternative fuels** | |  |  |  |
| **OC12** | Define the term biofuel |  |  |  |
| **OC13** | Articulate how ethanol is made (2 ways) Chem only |  |  |  |
| **OC14** | Evaluate the use of using biofuels |  |  |  |
| **Lesson 5: Cracking** | |  |  |  |
| **OC15** | Identify the two main products of cracking |  |  |  |
| **OC16** | Articulate, using examples why cracking is a necessary process |  |  |  |
| **OC16** | Summarise, using an equation, what happens during the cracking process |  |  |  |
| **Lesson 6: Alkenes** | |  |  |  |
| **OC17** | Define alkene |  |  |  |
| **OC18** | Name and identify the first 4 alkenes |  |  |  |
| **OC19** | Represent alkenes using the displayed formula |  |  |  |
| **OC20** | Summarise the results of the bromine water test in terms of saturation - Chem only |  |  |  |
| **Lesson 7: Making polymers** | |  |  |  |
| **OC21** | Define monomer and polymer |  |  |  |
| **OC22** | Describe addition polymerisation |  |  |  |
| **OC23** | Represent polymers using conventions |  |  |  |
| **Lesson 8: Properties of polymers** | |  |  |  |
| **OC24** | Define thermosetting and thermosoftening polymers |  |  |  |
| **OC25** | Examine how reaction conditions affect the properties of polymers |  |  |  |
| **OC26** | Compare the difference between thermosetting and thermosoftening polymers |  |  |  |
| **Lesson 9: New polymers** | |  |  |  |
| **OC27** | Define smart polymer |  |  |  |
| **OC28** | Consider some properties of new and useful polymers |  |  |  |
| **OC29** | Evaluate the importance of new and useful polymers |  |  |  |
| **Lesson 10: Plastic waste** | |  |  |  |
| **OC30** | Define biodegradable polymer |  |  |  |
| **OC31** | Discuss how polymers can be made to be biodegradable |  |  |  |
| **OC32** | Evaluate the use of old and new polymers |  |  |  |
| **Lesson 11: Alcohols** | |  |  |  |
| **OC33** | Define alcohols in terms of their functional group |  |  |  |
| **OC34** | Name and identify the first 3 alcohols |  |  |  |
| **OC35** | Sketch the alcohols using the structural formula |  |  |  |
| **OC36** | Justify the uses of alcohols in terms of their properties |  |  |  |
| **Lesson 12: Reactions of alcohols** | |  |  |  |
| **OC37** | Make careful observations |  |  |  |
| **OC38** | Distinguish between the reactions of alcohols with oxygen, sodium and an oxidising agent |  |  |  |
| **Lesson 13: Carboxylic Acids** | |  |  |  |
| **OC39** | Define carboxylic acids in terms of their functional group |  |  |  |
| **OC40** | Name and identify the first 3 carboxylic acids |  |  |  |
| **OC41** | Sketch the carboxylic acids using the structural formula |  |  |  |
| **OC42** | Evaluate some uses of carboxylic acids |  |  |  |
| **Lesson 14: Carboxylic acids as weak acids** | |  |  |  |
| **OC43** | Carry out an experiment to compare ethanoic acid and hydrochloric acid |  |  |  |
| **OC44** | Make detailed observations |  |  |  |
| **OC45** | Evaluate why carboxylic acids are called weak acids |  |  |  |
| **OC46** | Formulate an explanation of the observations you made during your experiment |  |  |  |
| **Lesson 15: Esters (chemistry only)** | |  |  |  |
| **OC47** | Define esters in terms of their functional group |  |  |  |
| **OC48** | Name and identify the first 3 esters |  |  |  |
| **OC49** | Sketch the esters using the structural formula |  |  |  |
| **OC50** | Summarise how esters can be made from alcohols and carboxylic acids |  |  |  |