Distillation – GCSE specification statements

Education in Chemistry
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Specification	Specification statement
AQA GCSE Chemistry (8462)	4.1.1.2 Mixtures can be separated by physical processes such as filtration, crystallisation, simple distillation, fractional distillation and chromatography. These physical processes do not involve chemical reactions and no new substances are made. 4.1.1.2 Students should be able to describe, explain and give examples of the specified processes of separation 4.1.1.2 Student should be able to suggest suitable separation and purification techniques for mixtures when given appropriate information. 4.7.1.2 The many hydrocarbons in crude oil may be separated into fractions, each of which contains molecules with a similar number of carbon atoms, by fractional distillation. 4.7.1.2 Students should be able to explain how fractional distillation works in terms of evaporation and condensation. 4.10.1.12 If supplies of fresh water are limited, desalination of salty water or sea water may be required. Desalination can be done by distillation or by processes that use membranes such as reverse osmosis. These processes require large amounts of energy.
Edexcel GCSE (9-1) Chemistry	2.7 Explain the experimental techniques for separation of mixtures by: a) simple distillation; b) fractional distillation 2.11 Core Practical: Investigate the composition of inks using simple distillation and paper chromatography 2.12 Describe how: b) sea water can be made potable by using distillation 8.3 Describe and explain the separation of crude oil into simpler, more useful mixtures by the process of fractional distillation 9.34C Explain how to obtain a concentrated solution of ethanol by fractional distillation of the fermentation mixture
OCR GCSE (9-1) Gateway Chemistry A	C2.1f describe, explain and exemplify the processes of filtration, crystallisation, simple distillation,

	and fractional distillation (knowledge of the techniques of filtration, crystallisation, simple distillation and fractional distillation) C6.2j describe the separation of crude oil by fractional distillation C6.2k explain the separation of crude oil by fractional distillation C6.3g describe the principal methods for increasing the availability of potable water in terms of the separation techniques used (to including ease of treatment of waste, ground and salt water)
OCR GCSE (9-1) Twenty First Century Science Chemistry B	C1.4.1 describe the principal methods for increasing the availability of potable water, in terms of the separation techniques used, including the ease of treating waste, ground and salt water including filtration and membrane filtration; aeration, use of bacteria; chlorination and distillation (for salt water) C3.4.3 describe and explain the separation of crude oil by fractional distillation
WJEC Eduqas GCSE (9-1) Chemistry	1(e) describe, explain and exemplify the processes of filtration, crystallisation, simple distillation and fractional distillation 10(b) describe and explain the separation of crude oil by fractional distillation 12(i) describe the principal methods for increasing the availability of potable water in terms of the separation techniques used, including ease of treatment of waste water, ground water and salt water