AQA GCSE Chemistry | 8462

SPECIFICATION POINT 4.9.2.4

The carbon footprint and its reduction

Mark schemes and examiner comments

Tier	**Foundation**
Question groups	**5**
Available paper years	**2007–2013**

Using this booklet

1. Booklet answer numbers match the question booklet.
2. Use the original question number within marking tables.
3. Examiner comments are included where available.

Name: _____ **Date:** _____

Where a precise marking extract is unavailable, the full source document is included in an appendix. Any missing mark scheme is explicitly identified.

4.9.2.4 The carbon footprint and its reduction

Answer 01 · Mark scheme

November 2007 | CHY1B | Original Q9 | Legacy

Nine	**1**	**2**	**1**	**2**

Answer 02 · Mark scheme

June 2009 | CHY1AP | Original Q7 | Legacy

Seven	**1**	**1**	**2**	**3**

Answer 03 · Mark scheme

June 2009 | CHY1BP | Original Q8 | Legacy

Eight	**4**	**2**	**3**	**3**

4.9.2.4 The carbon footprint and its reduction

Answer 04 · Mark scheme

June 2012 | CH1FP | Original Q5 | Legacy

Question 5

question	answers	extra information	mark
5(a)(i)	Olive oil does not dissolve in vinegar		1
5(a)(ii)	(the mustard is) an emulsifier	accept an emulsion has formed	1
5(b)(i)	double		1
5(b)(ii)	add bromine water – turns colourless		1
5(c)(i)	because the (olive) trees/plants/crops/leaves/fruit absorb/use carbon dioxide	allow carbon for carbon dioxide allow carbon dioxide is used in photosynthesis	1
5(c)(ii)	any **one** from: • olive oil is a food • olives are slow-growing • olives require a lot of land • not enough olive trees / oil • olive oil dense / viscous / high boiling point	ignore habitats ignore gives off carbon dioxide	1
Total			**6**

4.9.2.4 The carbon footprint and its reduction

Answer 04 · Mark scheme

June 2012 | CH1FP | Original Q5 | Legacy

CH1FP

4.9.2.4 The carbon footprint and its reduction

Answer 05 · Mark scheme

January 2013 | CH1FP | Original Q4 | Legacy

question	answers	extra information	mark
4(a)(i)	Positive impact any **one** from: • provides employment **or** • improves local economy • improved transport - new roads are built, new rail links • after use the quarry could provide recreation facilities Negative impact any **one** from: • destruction of animal habitats • fewer plants and trees to absorb carbon dioxide • visual pollution **or** noise pollution **or** atmospheric / air pollution • more traffic • uses non-renewable resources	 allow dust pollution allow pollutants from burning diesel	1 1
4(a)(ii)	economical		1
4(b)	carbon / coke burns (in oxygen / air)	accept carbon / coke reacts with oxygen / air	1
4(c)(i)	iron oxide (reactant) carbon dioxide (product)	must be words	1 1
4(c)(ii)	reduction		1

4.9.2.4 The carbon footprint and its reduction

Answer 05 · Mark scheme

CH1FP

question	answers	extra information	mark
4(d)(i)	oxygen reacts with carbon **or** oxygen and carbon produce carbon dioxide / carbon monoxide carbon dioxide / carbon monoxide is a gas **or** the carbon is removed as a gas		1 1
4(d)(ii)	much harder		1
4(e)	Advantage: less carbon dioxide is produced Disadvantage: there are different types of steel which must be sorted		 1 1
Total			12

4.9.2.4 The carbon footprint and its reduction

Answer 05 · Mark scheme

January 2013 | CH1FP | Original Q4 | Legacy

CH1FP