



GCSE

Science A (4461)

Specification A

CHY1BP, CH1BSF & CH1BSH

Mark Scheme

2009 Examination – November Series

The blank answer sheet for this component can be found at the end of this document.

This component is an objective test for which the following list indicates the correct answers used in marking the candidates' responses.

Further copies of this Mark Scheme are available to download from the AQA Website: www.aqa.org.uk

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GCSE
SCIENCE A (4461)/CHEMISTRY (4421)
 Objective Test Answer Key
CHY1BP (Oils, Earth and Atmosphere)
November 2009
 Foundation Tier

Question	Key			
One	A	Vegetable oil A	1	
	B	Vegetable oil B	3	
	C	Vegetable oil C	4	
	D	Vegetable oil D	2	
Two	A	oxygen	3	
	B	nitrogen	1	
	C	carbon dioxide	4	
	D	helium	2	
Three	A	Crust	4	
	B	Mantle	1	
	C	Outer core	3	
	D	Inner core	2	
Four	A	a preservative	3	
	B	a colouring	4	
	C	an emulsifier	2	
	D	a vegetable oil	1	
Five	A	condenses	3	
	B	boils	1	
	C	evaporates	2	
	D	floats	4	
	A	B	C	D
Six	3	1	3	1
Seven	1	1	3	2
Eight	2	1	1	3
Nine	1	3	3	2

GCSE
SCIENCE A (4461)/CHEMISTRY (4421)
 Objective Test Answer Key
CHY1BP (Oils, Earth and Atmosphere)
November 2009
 Higher Tier

Question	Key			
One	A	condenses	3	
	B	boils	1	
	C	evaporates	2	
	D	floats	4	
Two	A	polymerisation	4	
	B	thermal decomposition	1	
	C	unsaturation	2	
	D	hydration	3	
	A	B	C	D
Three	2	1	1	3
Four	1	3	3	2
Five	2	3	2	3
Six	2	3	4	3
Seven	2	1	1	2
Eight	1	3	3	2
Nine	2	1	4	3

Unit : CHY1BP CHEMISTRY UNIT 1B

Centre :

Candidate Number :

UCI :

Series : BG09

Candidate Name :

19-NOV-09

For completion by the Examination Invigilator. Please fill this circle if the candidate is absent:

HIGHER TIER

Instructions on how to complete this answer sheet are given on the question paper. Please make sure you follow them carefully.

Questions ONE to NINE Choose one response 1 - 4 for each of the parts A - D

QUESTION ONE

1 2 3 4

- | | | | | | | |
|----|------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
| 1A | condenses | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |
| 1B | boils | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |
| 1C | evaporates | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |
| 1D | floats | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |

QUESTION TWO

1 2 3 4

- | | | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
| 2A | polymerisation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |
| 2B | thermal decomposition | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |
| 2C | unsaturation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |
| 2D | hydration | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | . |

QUESTION THREE

1 2 3 4

- | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 3A | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3B | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3C | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3D | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

QUESTION FOUR

1 2 3 4

- | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 4A | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4B | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4C | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4D | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

QUESTION FIVE

1 2 3 4

- | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 5A | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5B | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5C | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5D | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

QUESTION SIX

1 2 3 4

- | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 6A | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6B | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6C | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6D | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

QUESTION SEVEN

1 2 3 4

- | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 7A | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7B | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7C | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7D | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

QUESTION EIGHT

1 2 3 4

- | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 8A | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8B | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8C | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8D | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

QUESTION NINE

1 2 3 4

- | | | | | |
|----|-----------------------|-----------------------|-----------------------|-----------------------|
| 9A | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9B | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9C | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9D | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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FOUNDATION TIER

Instructions on how to complete this answer sheet are given on the question paper. Please make sure you follow them carefully.

Questions ONE to NINE Choose one response 1 - 4 for each of the parts A - D

QUESTION ONE		1	2	3	4
1A	Vegetable oil A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1B	Vegetable oil B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1C	Vegetable oil C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1D	Vegetable oil D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION TWO		1	2	3	4
2A	oxygen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2B	nitrogen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2C	carbon dioxide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2D	helium	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION THREE		1	2	3	4
3A	Crust	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3B	Mantle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3C	Outer core	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3D	Inner core	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FOUR		1	2	3	4
4A	a preservative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4B	a colouring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4C	an emulsifier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4D	a vegetable oil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FIVE		1	2	3	4
5A	condenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5B	boils	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5C	evaporates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5D	floats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION SIX		1	2	3	4
6A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION SEVEN		1	2	3	4
7A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION EIGHT		1	2	3	4
8A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION NINE		1	2	3	4
9A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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