



**GCSE**

**Science A (4461)**

*Specification A*

**CHY1AP, CH1ASF & CH1ASH**

**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](http://www.aqa.org.uk)

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**GCSE**  
**SCIENCE A (4461)/CHEMISTRY (4421)**  
 Objective Test Answer Key  
**CHY1AP (Products from Rocks)**  
**November 2009**  
 Foundation Tier

Question	Key			
One	A	trees	1	
	B	vehicle exhaust gases	4	
	C	vehicle movements	2	
	D	wind	3	
Two	A	metal ore	1	
	B	reactive metal	4	
	C	transition metal	3	
	D	metal alloy	2	
Three	A	atoms	4	
	B	electrons	3	
	C	compounds	2	
	D	elements	1	
Four	A	diesel, steady speed	2	
	B	diesel, slowing down	1	
	C	petrol, accelerating	3	
	D	petrol, slowing down	4	
Five	A	Calcium (Ca)	2	
	B	Lithium (Li)	3	
	C	Gold (Au)	1	
	D	Iron (Fe)	4	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Six	2	4	2	4
Seven	3	3	2	4
Eight	3	3	1	2
Nine	4	3	2	1

**GCSE**  
**SCIENCE A (4461)/CHEMISTRY (4421)**  
 Objective Test Answer Key  
**CHY1AP (Products from Rocks)**  
**November 2009**  
 Higher Tier

Question	Key			
One	<b>A</b>	Calcium (Ca)	<b>2</b>	
	<b>B</b>	Lithium (Li)	<b>3</b>	
	<b>C</b>	Gold (Au)	<b>1</b>	
	<b>D</b>	Iron (Fe)	<b>4</b>	
Two	<b>A</b>	Formulae A (ZnCO <sub>3</sub> )	<b>2</b>	
	<b>B</b>	Formulae B (C )	<b>4</b>	
	<b>C</b>	Formulae C (CO <sub>2</sub> )	<b>3</b>	
	<b>D</b>	Formulae D (ZnO)	<b>1</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Three	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>
Four	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Five	<b>2</b>	<b>4</b>	<b>4</b>	<b>1</b>
Six	<b>3</b>	<b>3</b>	<b>4</b>	<b>2</b>
Seven	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>
Eight	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>
Nine	<b>2</b>	<b>1</b>	<b>1</b>	<b>4</b>

## Unit : CHY1AP CHEMISTRY UNIT 1A

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	Calcium (Ca)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1B	Lithium (Li)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1C	Gold (Au)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1D	Iron (Fe)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION TWO		1	2	3	4
2A	Formula A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2B	Formula B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2C	Formula C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2D	Formula D	<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	trees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1B	vehicle exhaust gases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1C	vehicle movements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1D	wind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION TWO		1	2	3	4
2A	metal ore	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2B	reactive metal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2C	transition metal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2D	metal alloy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION THREE		1	2	3	4
3A	atoms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3B	electrons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3C	compounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3D	elements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FOUR		1	2	3	4
4A	diesel, steady speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4B	diesel, slowing down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4C	petrol, accelerating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4D	petrol, slowing down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FIVE		1	2	3	4
5A	Calcium (Ca)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5B	Lithium (Li)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5C	Gold (Au)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5D	Iron (Fe)	<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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