

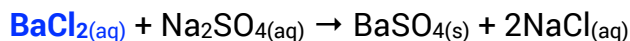
0	1
---	---

Barium chloride can react with sodium sulfate to produce barium sulfate and sodium chloride.

Barium and chloride ions make barium chloride. In the space provided below, write the formula for barium chloride.

[1 mark]

Use the Chemistry data sheet to help you.



0	1	.	1
---	---	---	---

What does (aq) mean?

[1 mark]

aqueous / solution

.....

0	2
0	2

1
---

An unknown solution, Y, was tested with acidified silver nitrate solution.

Which acid was used to acidify the solution?

[1 mark]

nitric acid

.....

0	2	.	2
---	---	---	---

Why is it necessary to add an acid to solution Y before adding silver nitrate?

[1 mark]

to remove any (carbonate) impurities that may be present in the solution

.....

0	2	.	3
---	---	---	---

Solution Y contains iodide (I<sup>-</sup>) ions.

What would the student observe?

[2 marks]

yellow [1]      precipitate/solid [1]

.....

0	3
---	---

Some students added a solution of ethanoic acid to an unknown compound, Z. A gas was produced which turned limewater milky.

0	3	.	1
---	---	---	---

Name the anion present in the unknown compound (Z) and give a reason for your answer.

[2 marks]

carbonate ion / CO<sub>3</sub><sup>2-</sup> [1]  
 carbonates react with acids to form carbon dioxide [1] (which turns limewater milky)

.....

(Total 8 marks)

End