



AP[®] Chemistry 2001 Sample Student Responses

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4A

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CHEMISTRY

Part B

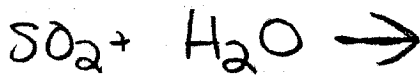
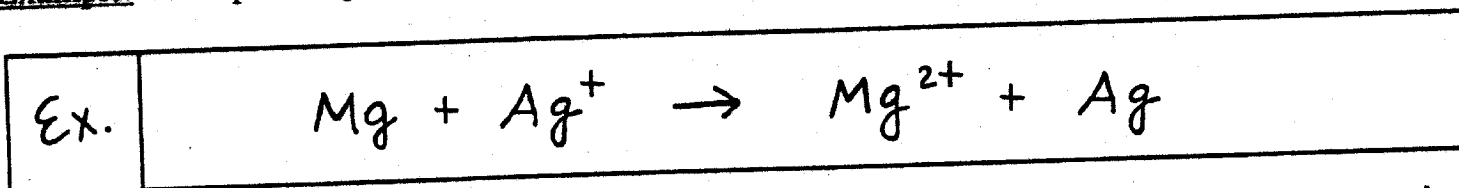
Time—50 minutes

NO CALCULATORS MAY BE USED FOR PART B.

Answer Question 4 below. The Section II score weighting for this question is 15 percent.

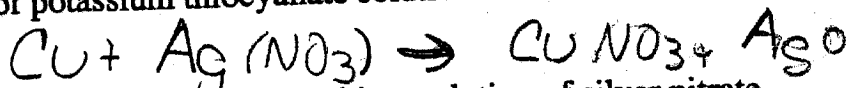
4. Write the formulas to show the reactants and the products for any FIVE of the laboratory situations described below. Answers to more than five choices will not be graded. In all cases, a reaction occurs. Assume that solutions are aqueous unless otherwise indicated. Represent substances in solution as ions if the substances are extensively ionized. Omit formulas for any ions or molecules that are unchanged by the reaction. You need not balance the equations.

Example: A strip of magnesium is added to a solution of silver nitrate.

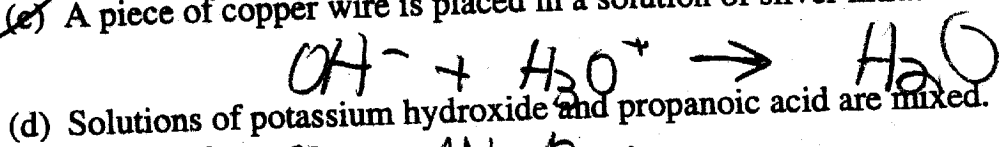


- (a) Sulfur dioxide gas is bubbled into distilled water.

- (b) A drop of potassium thiocyanate solution is added to a solution of iron(III) nitrate.

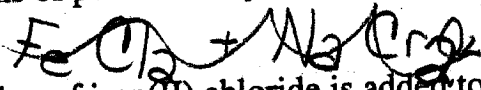


- (c) A piece of copper wire is placed in a solution of silver nitrate.

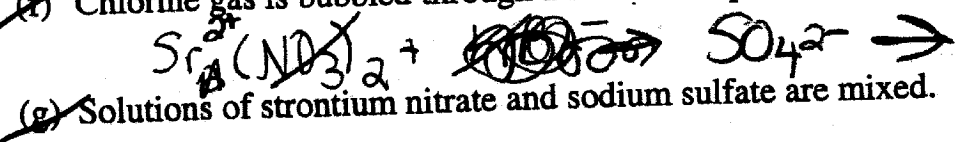


- (d) Solutions of potassium hydroxide and propanoic acid are mixed.

- (e) A solution of iron(II) chloride is added to an acidified solution of sodium dichromate.

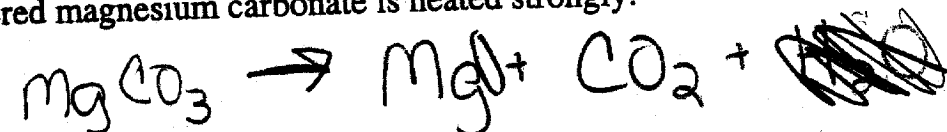


- (f) Chlorine gas is bubbled through a solution of potassium bromide.

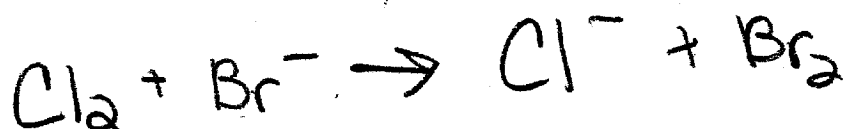


- (g) Solutions of strontium nitrate and sodium sulfate are mixed.

- (h) Powdered magnesium carbonate is heated strongly.

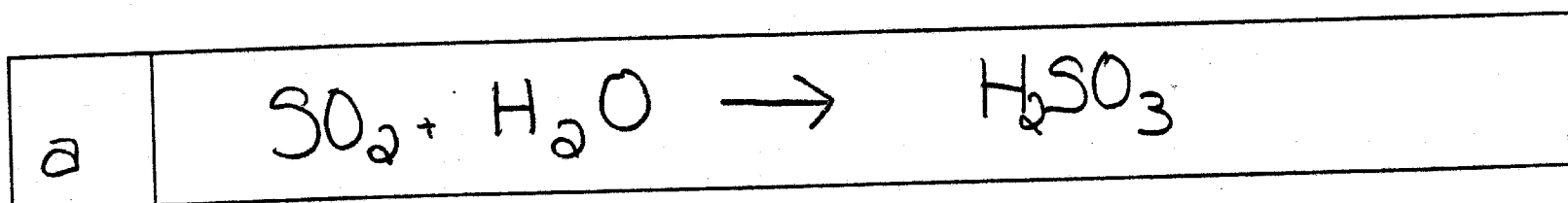
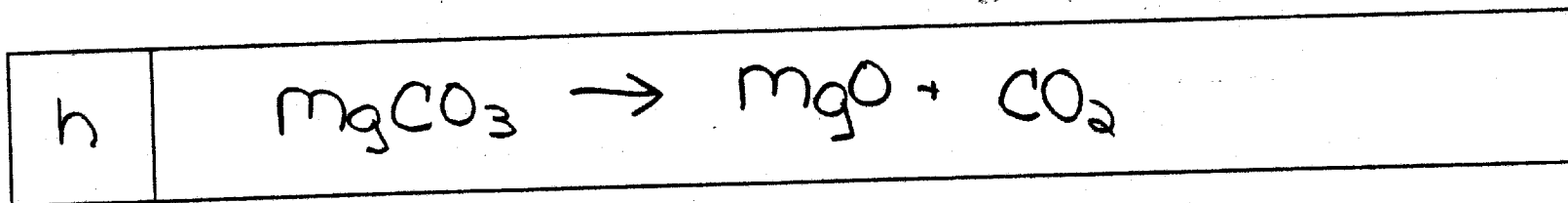
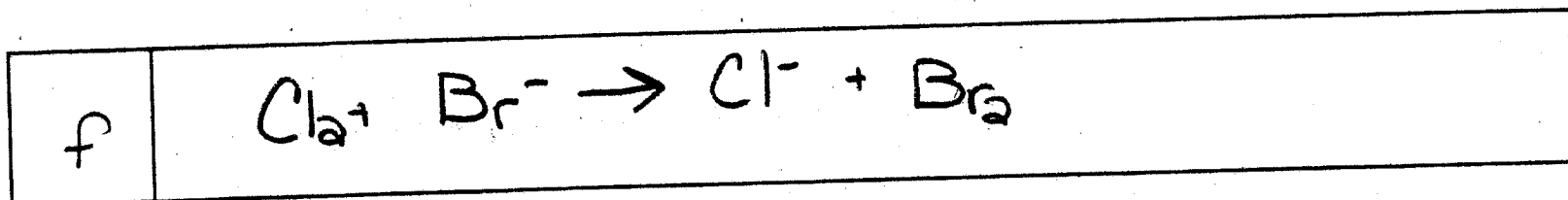
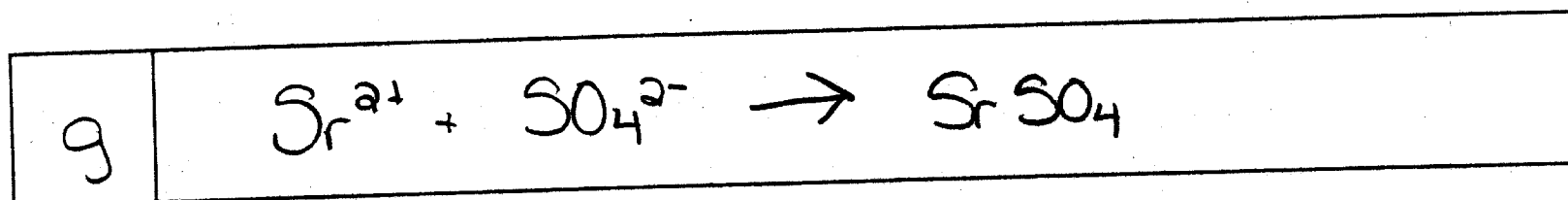
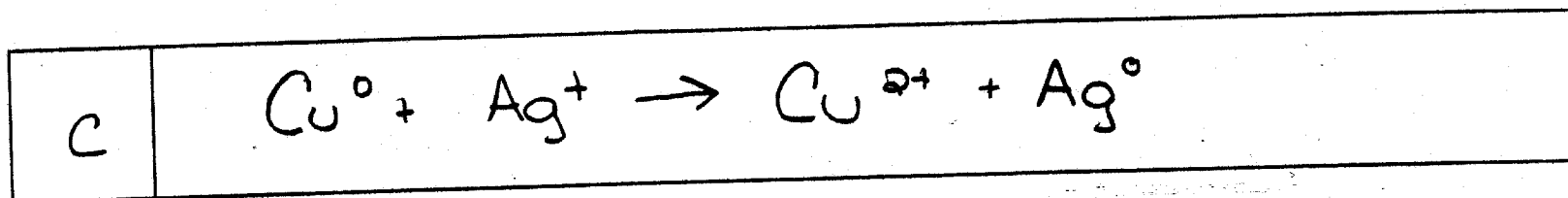


WRITE YOUR ANSWERS IN THE BOXES PROVIDED ON THE NEXT PAGE. YOU MAY USE THE SPACE ABOVE EACH BOX FOR SCRATCHWORK.



B B B B B B B B B B B B B

USE THIS PAGE FOR ANSWERING QUESTION 4.
PLEASE WRITE THE LETTER FOR THE REACTION IN THE SQUARE AT THE
LEFT END OF EACH BOX. ONLY THE ANSWERS IN THE BOXES WILL BE SCORED.



4B

B B B B B B B B B B B B B

CHEMISTRY

Part B

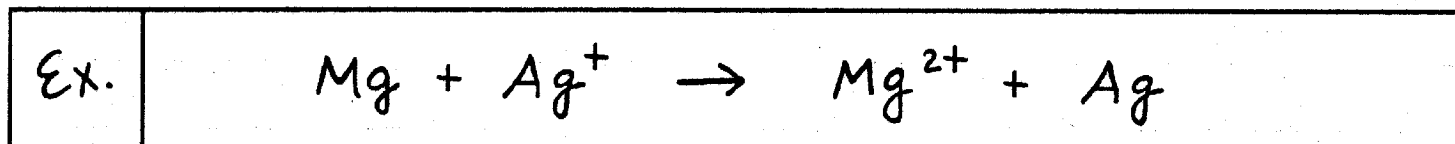
Time—50 minutes

NO CALCULATORS MAY BE USED FOR PART B.

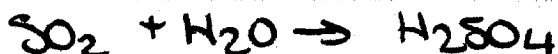
Answer Question 4 below. The Section II score weighting for this question is 15 percent.

4. Write the formulas to show the reactants and the products for any FIVE of the laboratory situations described below. Answers to more than five choices will not be graded. In all cases, a reaction occurs. Assume that solutions are aqueous unless otherwise indicated. Represent substances in solution as ions if the substances are extensively ionized. Omit formulas for any ions or molecules that are unchanged by the reaction. You need not balance the equations.

Example: A strip of magnesium is added to a solution of silver nitrate.

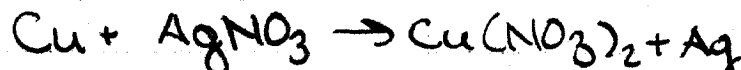


- (a) Sulfur dioxide gas is bubbled into distilled water.



- (b) A drop of potassium thiocyanate solution is added to a solution of iron(III) nitrate.

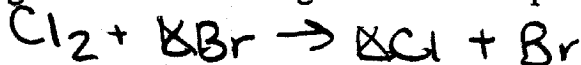
- (c) A piece of copper wire is placed in a solution of silver nitrate.



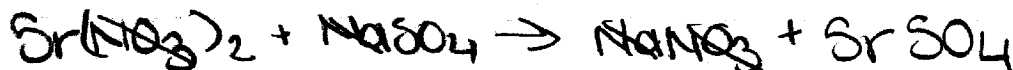
- (d) Solutions of potassium hydroxide and propanoic acid are mixed.

- (e) A solution of iron(II) chloride is added to an acidified solution of sodium dichromate.

- (f) Chlorine gas is bubbled through a solution of potassium bromide.



- (g) Solutions of strontium nitrate and sodium sulfate are mixed.



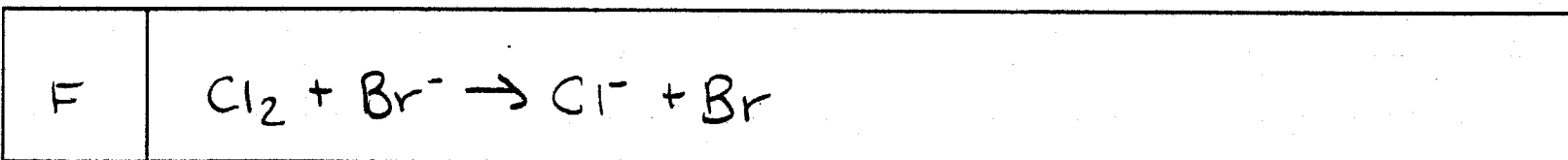
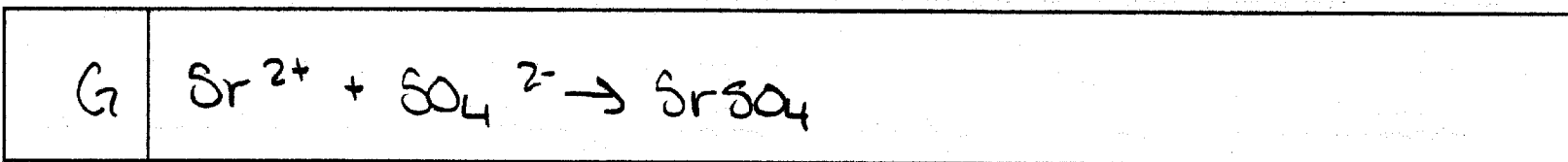
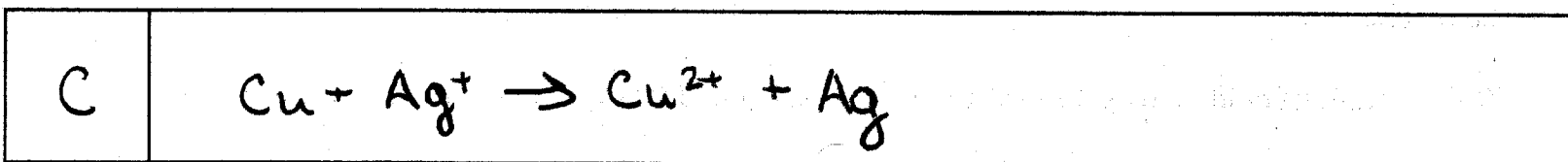
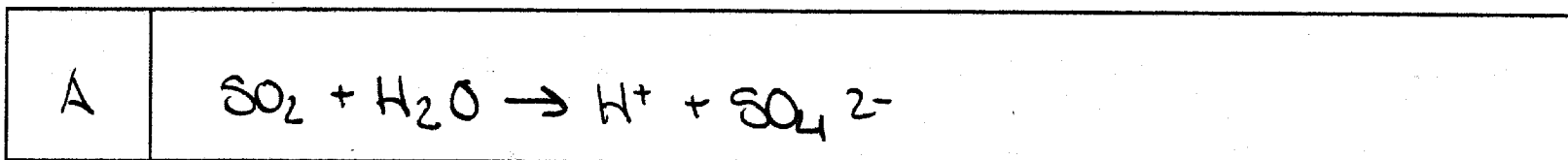
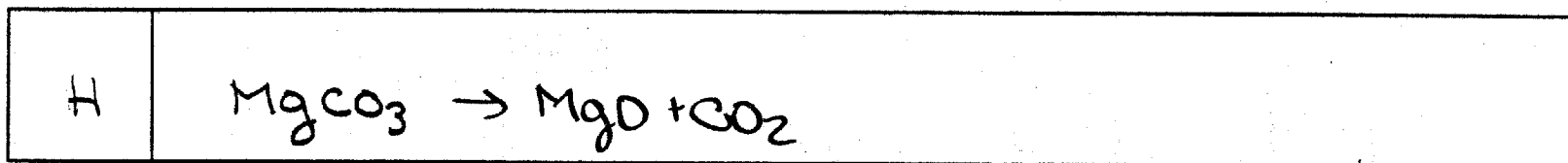
- (h) Powdered magnesium carbonate is heated strongly.

WRITE YOUR ANSWERS IN THE BOXES PROVIDED ON THE NEXT PAGE. YOU MAY USE THE SPACE ABOVE EACH BOX FOR SCRATCHWORK.

B B B B B B B B B B B B B

USE THIS PAGE FOR ANSWERING QUESTION 4.

PLEASE WRITE THE LETTER FOR THE REACTION IN THE SQUARE AT THE LEFT END OF EACH BOX. ONLY THE ANSWERS IN THE BOXES WILL BE SCORED.



4c

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CHEMISTRY

Part B

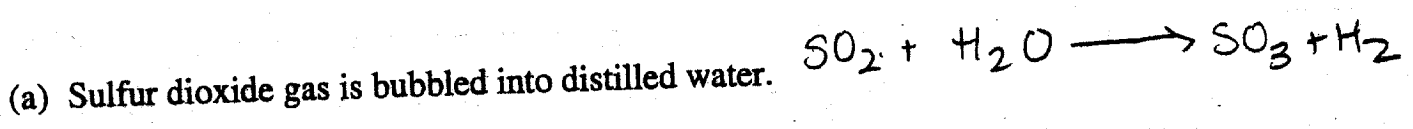
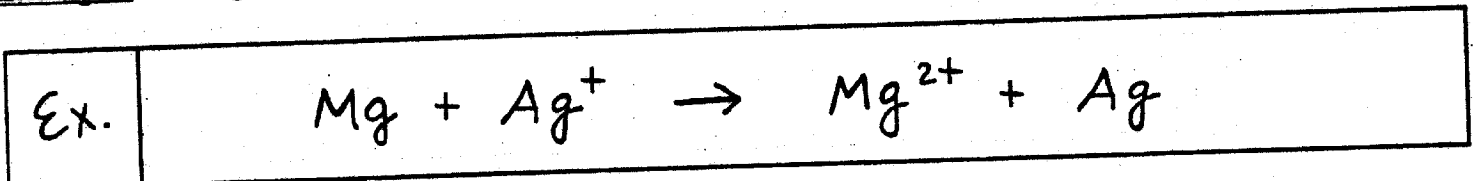
Time—50 minutes

NO CALCULATORS MAY BE USED FOR PART B.

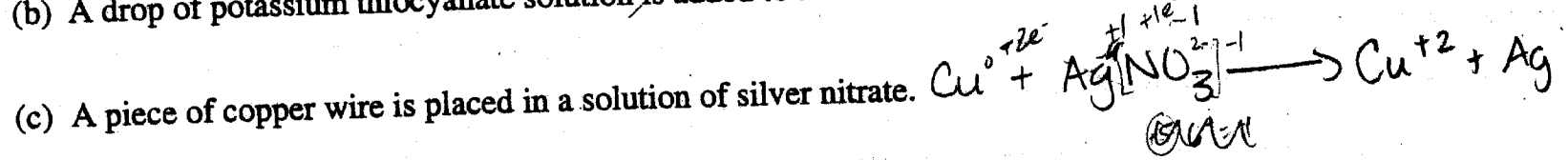
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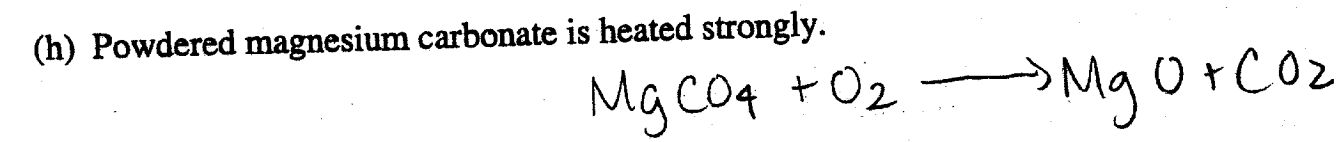
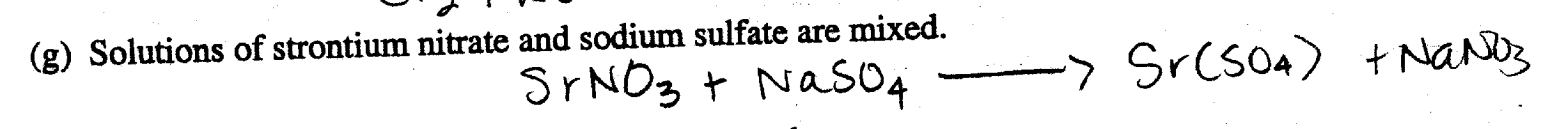
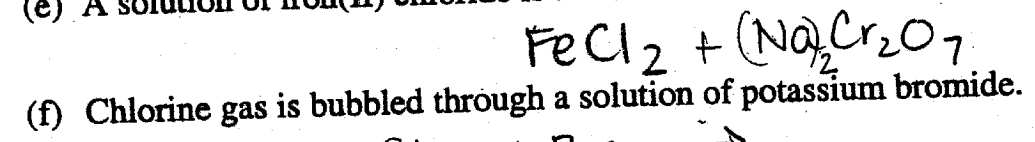


(b) A drop of potassium thiocyanate solution is added to a solution of iron(III) nitrate.



(d) Solutions of potassium hydroxide and propanoic acid are mixed.

(e) A solution of iron(II) chloride is added to an acidified solution of sodium dichromate.



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B B B B B B B B B B B B B

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PLEASE WRITE THE LETTER FOR THE REACTION IN THE SQUARE AT THE
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