DATA SHEET

1. Observations related to the generation of carbon dioxide.

2. Observations related to the generation of oxygen.

3. Colors of the pH buffer solutions.

рН	3	4	5	6	7	8	9
Color							

4. Properties of carbon dioxide and oxygen.

pH of water prior to the introduction of carbon dioxide or oxygen._____

	Solution pH	Observation with Limewater	Observation Glowing Splint
Carbon dioxide			
Oxygen			

REVIEW QUESTIONS

- 1. Explain what you observed about the interaction of the gases with limewater.
- 2. Explain what you observed about the interaction of the gases with the glowing wood splint.
- 3. What is the general effect of the following gases on the acidity of water solutions?

a. oxygen

b. carbon dioxide

DATA SHEET

PREPARATION AND PROPERTIES OF ATMOSPHERIC GASES II

1. Observations related to the generation of sulfur dioxide.

2. Observations related to the generation of nitrogen dioxide.

3. Colors of the universal indicator solutions

рН	3	4	5	6	7	8	9
Color							

4. Properties of sulfur dioxide and NO/NO₂ solutions:

pH of water prior to the introduction of SO₂ or NO₂.

Solution pH of after the introduction of SO₂.

Solution pH of after the introduction of NO/NO₂.

REVIEW QUESTIONS

1. What pH value did you observe when you bubbled sulfur dioxide gas into the distilled water/universal indicator solution?

2. What pH value did you observe when you bubbled NO/NO₂ gas mixture into the distilled water/universal indicator solution?

3. Based on your observations and findings, why would SO₂ and NO/NO₂ be considered atmospheric pollutants?

4. What did you observe when NO and O_2 mixed?