



ST ANDREW'S SECONDARY SCHOOL

NAME

CLASS

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DATE

CHEMISTRY



19.2 Atmospheric Pollutants

Assessment for Learning

THE ATMOSPHERE AND ENVIRONMENT

1 Which gas is **not** formed when coal burns?

- A Carbon dioxide
- B Carbon monoxide
- C Methane
- D Sulfur dioxide

2 Which problem is **not** caused by acid rain?

- A Breathing difficulties
- B Dying trees
- C Erosion of statues
- D Lowered pH of lakes

3 Below are two statements about sulfur dioxide.

- 1 Sulfur dioxide is an acidic oxide and it is formed when fossil fuels burn.
- 2 Sulfur dioxide is one of the gases in air and is responsible for acid rain.

Which is correct?

- A Both statements are correct and statement 1 explains statement 2.
- B Both statements are correct but statement 1 does not explain statement 2.
- C Statement 1 is correct but statement 2 is incorrect.
- D Statement 2 is correct but statement 1 is incorrect.

4 Which process does **not** increase global warming?

- A Burning fossil fuels
- B Cattle farming
- C Decomposition of organic waste
- D Growing crops such as sugar cane

5 Which pollutant gas **cannot** be produced by the combustion of fossil fuels?

- A Carbon monoxide
- B Methane
- C Nitrogen dioxide
- D Sulfur dioxide

- 6 Carbon dioxide and methane are both greenhouse gases which contribute to climate change.

Which statement explains how greenhouse gases contribute to climate change?

- A They absorb heat radiation from the Earth.
- B They absorb heat radiation from the Sun.
- C They cause acid rain.
- D They reflect heat radiation from the Earth.

- 7 Carbon monoxide is an atmospheric pollutant.

Why is carbon monoxide considered to be an atmospheric pollutant?

- A It causes climate change.
- B It causes the corrosion of buildings.
- C It is a significant greenhouse gas.
- D It is poisonous.

- 8 Which of the following statements about sulfur dioxide are correct?

- 1 It dissolves in water to produce a solution with a pH of less than 7.
- 2 It is used as a food preservative.
- 3 It changes potassium permanganate from colourless to purple.
- 4 It is produced by the combustion of sulfur-containing fossil fuels.

- A 1, 2 and 3
- B 1, 2 and 4
- C 1, 3 and 4
- D 2, 3 and 4

- 9 Which row showing an atmospheric pollutant and its major source is **not** correct?

	Atmospheric pollutant	Major source
A	Carbon monoxide	Complete combustion of carbon fuels
B	Oxides of nitrogen	Car engines
C	Sulfur dioxide	Combustion of sulfur-containing fossil fuels
D	Unburned hydrocarbons	Car engines

- 10 Some atmospheric pollutants are listed.

- 1 Methane
- 2 Nitrogen dioxide
- 3 Sulfur dioxide
- 4 Unburned hydrocarbons

Which substances could be removed by reacting with limestone?

- A 1 and 2
- B 1 and 4
- C 2 and 3
- D 3 and 4