

Name _____

Noble Gases: The Quiet Heroes of the Periodic Table

Open-Ended Response Questions

1. Investigate the history of the discovery of noble gases and how their unique properties were first identified by scientists. Discuss the significance of this discovery in the field of chemistry.
2. Noble gases are often used in lighting technology, such as neon signs and fluorescent lamps. Explain the scientific principles behind the colorful glow emitted by noble gases when an electric current passes through them.
3. Analyze the environmental impact of using noble gases, particularly in applications like cooling systems and lighting. Are there any concerns or alternatives to consider?
4. Research the use of noble gases in medical and scientific research, particularly in magnetic resonance imaging (MRI) machines. Explain how noble gases, such as helium, play a crucial role in these technologies.

