

Name _____

Noble Gases: The Quiet Heroes of the Periodic Table

Short Answer

1. Explain why noble gases are considered chemically inert and why they do not readily react with other elements.
2. How do noble gases satisfy the octet rule, and why does this make them less reactive?
3. Discuss one practical application of noble gases and explain why a specific noble gas is chosen for that application.
4. Compare and contrast the chemical behavior of noble gases with that of halogens (Group 17 elements).
5. Imagine you are explaining noble gases to a younger sibling. How would you describe their characteristics and why they are used in helium-filled balloons?

