

Name _____

Safety First: Neutralizing Acid and Base Spills on Skin and Clothing

Open-Ended Response Questions

1. Investigate and discuss the potential long-term consequences of improper handling or delayed response to acid or base spills on the skin. How can early and appropriate action prevent severe damage?
2. Imagine you are a laboratory instructor responsible for teaching students about safety protocols when working with acids and bases. Describe a practical demonstration you would conduct to educate them on the correct procedures for neutralizing spills on the skin.
3. Research and explain the chemical reactions that occur when a weak acid solution, such as diluted vinegar, is used to neutralize a base spill. How does this process work to minimize harm?
4. Explore the importance of safety gear, such as safety goggles, gloves, and lab coats, in preventing accidents and minimizing the risks associated with acid and base spills. Provide real-life examples of how these precautions have saved lives.

