

Exchange Activity Summary

Name: _____ Class Period: _____

- a. Total number of cups: _____
- b. Number of cups with alkaline (NaOH) solution at the beginning : 3
- c. Number of cups with alkaline (NaOH) solution after exchanging liquids: _____

1. Use the numbers recorded above and calculate the percentage of the number of cups with liquids that became alkaline after three exchanges. Show your calculation.

2. The exchange activity is a simulation of how an infectious germ can spread quickly from person to person without his or her knowing. If sodium hydroxide (NaOH) represents an infectious germ, what do other parts of the activity represent? Record your answers in the chart below? [Hint: Think about the words and questions discussed at the beginning of the class.]

Exchange Activity	Representation in real life
Sodium hydroxide (NaOH)	An infectious germ
Cup with liquid	
Exchanging liquid between cups	
Clear color of the liquid	
Pink color of the liquid	
Phenolphthalein (C ₂₀ H ₁₄ O ₄)	

3. What are some infectious diseases that the exchange activity simulates? List three.

4. How would you prevent the spread of the disease, represented by NaOH during the activity? How would you change the activity to prevent or minimize the transmission of the disease among students? List at least two changes.

5. How can we protect the rights of those who are infected and still prevent the spread of disease?