

## Neutralizing acids and bases

### How can you return the color of red cabbage indicator solution back to blue?

#### Procedure

1. Follow your teacher's directions to make red cabbage indicator solution.
2. Label 3 empty clear plastic cups **indicator + detergent**, **indicator + cream of tartar**, and **control**.
3. Carefully pour 2 tablespoons of indicator solution into each cup and place the cups on a white piece of paper.
4. Use the flat end of a toothpick to scoop up a small amount of cream of tartar. Add the cream of tartar to the *indicator + cream of tartar* cup. Gently swirl to mix.
5. Use the flat end of a toothpick to scoop up a small amount of laundry detergent. Add the detergent to the *indicator + detergent* cup. Gently swirl to mix.



1. It is possible to get the pink indicator solution and the green indicator solution to both return to blue. How do you think you could do this? *Hint*: Acids and bases are like chemical opposites.

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Try to make both solutions return to blue.	Initial color	Describe what you did to get this solution to return to blue.
Indicator + Cream of Tartar	Pink	
Indicator + Laundry Detergent	Greenish-blue	

2. What is the purpose of a control in this experiment?

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