

# Oxidation in apples

M1-6 CHEMISTRY

# Question

- Which wrap, plastic wrap, aluminum foil, or no wrap at all, prevents oxidation in apples the best?

# Rationale

- A lot of moms pack apple slices for their kids. But what they don't realize is that kids think that the apples are bad because they are brown, so they often get thrown away. The purpose of this experiment is to see if there is a solution to the problem of the apples oxidizing. The research simply explains how oxidation works, and what the two popular wraps are.

# Hypothesis

- If I wrap the apples in plastic wrap, then they will stay fresher for longer because you can pull the air out of the plastic wrap.

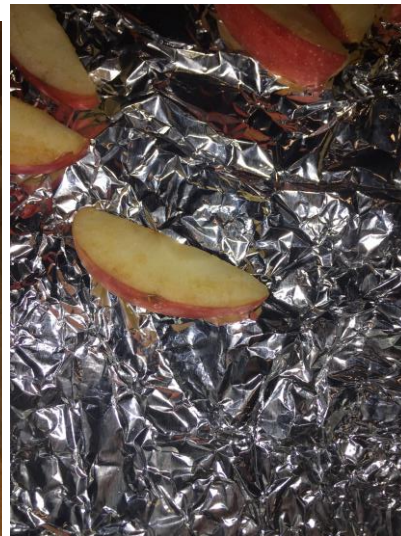
# Materials

- 1. Apple
- 2. Knife/Apple cutter
- 3. Plastic wrap
- 4. Aluminum foil
- 5. Air
- 6. Timer

# Procedure

- 1. First, tear or cut off the portion of foil & plastic wrap needed. In this case I am cutting them into squares just big enough to go all the way around each slice set.
- 2. Place all of the squares in a neat orderly fashion on a counter, table, or even the ground.
- 3. Cut the apples and place them all in their respective squares. Keep the ones that are not being wrapped on the surface , unwrapped.
- 4. Wait 10 minutes and unwrap the apples. And compare them to the ones that are unwrapped, and the ones in the opposite wrap.
- 5. Write down the results of which apples were the least brown.

# Pictures



# Results

The apples in the plastic wrap oxidized the least.



# Conclusion

- The plastic wrap was the best way to prevent oxidation in apples. It sealed out the air and kept them fresher than the aluminum foil and the open air.

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