



Different chemicals  
affecting wood.

M3-11 CHEMISTRY

# Testable Question & Purpose

**Question**: If the ratio of water and vinegar are different how will it affect the rotting rate of wood. **Purpose**: My purpose of this experiment was to see if I could see what affects rotting rate so I know what to keep stuff made of wood away from.

# Abstract

In the beginning it took me about 2 days to get all the materials I needed to begin my experiment. Immediately after I got home I began to set up everything for my experiment. I made one batch with  $\frac{1}{4}$  vinegar  $\frac{3}{4}$  water and other batches of with different ratio's of water and vinegar. There way many different results form each one of them.

# Hypothesis

If the water and vinegar are in different ratio's then the solution that has no vinegar will rot the slowest.

# Materials

My materials for my project included:

- 100 plastic cups
- Vinegar
- Water
- 100 pieces of wood.
- And ratio's of vinegar and water

# Procedures

- ▶ 1. Fill the cups up with the right ratios
- ▶ 2. Place the wood in the cups
- ▶ 3. Place outside in the same temperature and the same amount of sunlight.
- ▶ 4. Record results daily.

# Variables

Variables:

Control -

Amount of sunlight

Amount of liquid per piece of wood

Temperature

Independent-

Type of liquid

Dependent-

Height of plant

# Results (Graph)

Days	$\frac{1}{4}$ water $\frac{3}{4}$ vinegar	$\frac{2}{4}$ water $\frac{3}{4}$ vinegar	$\frac{3}{4}$ water $\frac{1}{4}$ vinegar
1	No mildew or rott	No mildew or rott	No mildew or rott
2	No mildew or rott	No mildew or rott	No mildew or rott
3	No mildew or rott	Mildew signs of rott	Signs of mildew no rott
4	Signs of mildew no rot	Mildew signs of rott	Mildew little rott
5	Mildew no rott	Mildew and rott	Mildew and rott



# Results

*In my end results I have concluded that if your fence is covered with a little bit of vinegar and mostly water than your fence will rot at a much faster rate then normal. Also that if you do a little vinegar and a lot of vinegar it will rott a lot slower than normal.*

# Conclusion

So in conclusion my hypothesis was incorrect but, this could be very helpful in the future for learning how to stop the rotting of wood so we could build stuff out of wood and feel good that we are safe and the wood will no go bad right away