

Tougher Nails



Introduction

When did people start using nail polish?

Nail polish originated in **China as early as 3000 BC.**

Introduction

What was in nail polish back then?

The ingredients included beeswax, egg whites, gelatin, and vegetable dyes. In Ancient Egypt, nail polish was even used to signify class rankings: The lower class often wore light colors, while high society painted their nails red.

Introduction

Does nail polish really help protect nails?

Nail polish prevents water from being absorbed and therefore can be protective

Question and Prediction

Question: Which nail polishes actually help nails be stronger?

Prediction: If we paint eggshells with different brands of nail polishes, we can test to see which shells break easier than others.

Materials

- Eggshells cut in half
- 5 different nail polish brands

Step-by-Step

1. **Paint each eggshell with one brand of nail polish.**
2. **Let dry.**
3. **Add three more coats.**
4. **Drop each eggshell 3 feet from the floor (classroom has vinyl floor).**
5. **If eggshell breaks, count how many pieces.**
6. **The fewest pieces means the strongest nail polish.**



Results and Data

Kleancolor Nail Laquer - black - broke into 8 pieces.

Colorstay Gel Envy - blue - broke into 10 pieces

Sally Hansen Extreme Wear - blue - broke into 11 pieces

LA Colors color craze with hardening - burgundy - broke into 10 pieces

Poparazzi - green - broke into 6 pieces

According to this experiment, the fewest pieces is probably the strongest nail polish for nails.

Future Research - How would you improve this project?

Grow my own nails and test a different nail polish on each nail.

Get nail polish that says it will protect your nails (we used regular polish).