

# When BLUE Is Not BLUE



Ever buy a jacket and then try to find a pair of pants or skirt that matches its color exactly? Or, do you have a jacket and pants that you bought as a set, but, after months or years, the two pieces are now two different colors. Wonder why?

The reasons are many and varied. For example, the dyes may have been produced by different companies or by the same company but at different times. Or, one item may have been washed more than the other or exposed to more sunlight.

To see this principle for yourself, try these two experiments:

## YOU NEED:

- 3 containers of blue paint that are labeled royal blue or navy blue—each made by a different company
- pen
- 3 pieces of paper
- 3 small paint brushes
- small container
- plenty of sunlight

## PROJECT A

### Directions

- 1 Label the paint containers #1, #2, #3. Label the pieces of paper #1, #2, #3.
- 2 With one brush, use the paint in the jar labeled #1 to paint the piece of paper labeled #1. Do the same with #2 and #3.
- 3 Are there any differences in the colors? Make notes on each paper about its "blue."
- 4 Place the three papers in the direct sunlight for one week.
- 5 What color/shading differences do you notice?



# PROJECT B

## Directions

- 1 Wash and scrub one article of clothing or a napkin in soap and water every day for two weeks.
- 2 Place the washed article next to the unwashed item.
- 3 What color differences do you detect?

YOU NEED:  
• 2 articles of washable clothing or cloth napkins (ALL THE SAME COLOR.)  
• soap  
• water

