



DISAPPEARING COLOR

SCIENCE SAFETY

PLEASE follow these safety precautions when doing any science experiment.

- **ALWAYS** have an adult present.
- **ALWAYS** wear the correct safety gear while doing any experiment.
- **NEVER** eat or drink anything while doing any experiment.
- **REMEMBER** experiments may require marbles, small balls, balloons, and other small parts. Those objects could become a CHOKING HAZARD. Adults are to perform those experiments using these objects. Any child can choke or suffocate on uninflated or broken balloons. Keep uninflated or broken balloons away from children.

INGREDIENTS

- Two Clear Drinking Glasses
- Water
- Red Food Coloring
- Bleach
- Spoon

INSTRUCTIONS

STEP 1: Fill each clear drinking glass with water. Describe and classify the water by its observable properties.

STEP 2: Mix two drops of the red food color into each drinking glass. Describe and classify the water, with red food coloring, by its observable properties.

STEP 3: Add three tablespoons of bleach to one of the clear drinking glasses, with red food coloring, mix, and observe. What happens? Describe and classify the water, with red food coloring and bleach, by its observable properties. Did adding the bleach to the water, with red food coloring, result in a new substance?

EXPLANATION

The water contains chromophores, which makes the water appear red. The bleach changes the chromophores, so they no longer are able to absorb or reflect light the same way, making the color disappear.



SCIENCE BACKGROUND

Matter is anything that has mass and takes up space. Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. Measurements of a variety of properties can be used to identify materials. When two or more different substances are mixed, a new substance with different properties may form. This is considered a chemical reaction, which is a change that results in one or more new substances. A physical reaction does not result in a new substance.

I CAN STATEMENT

- ✓ I can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- ✓ I can conduct an investigation to determine whether the mixing of two or more substances results in a new substance.

NEXT GENERATION SCIENCE STANDARDS CONNECTION

2 – Structure and Properties of Matter | Patterns
5 – Structure and Properties of Matter | Cause and Effect