

## **K-3-Illustrious Illusions: Secrets Revealed!**

### **After Image [Pre or Post]**

Description: Students will create their own optical illusion to see what an illusion looks like and, they will also learn about how our eyes see and process images.

#### Materials Needed:

- 2 pieces of white paper
- Colored markers (red, green, and blue)

#### Preparation/ Set-Up:

Make sure all materials are available and ready to use for students.

#### Procedure:

1. Draw a simple picture (like a circle) on a white piece of paper.
2. Color in the picture with a green marker.
3. Stare at the picture for about 30 seconds.
4. Quickly look at the other blank piece of white paper.

#### Background Information:

When you stare at the color green for about 30 seconds, the parts of your eye that detect green get “tired”. So when you look at white paper, the parts of your eye that detect other colors take over. They combine to give you a magenta (a mix of red and blue) afterimage. In a few moments, the magenta image fades as the parts of your eye that detect green begin working again. What color is the afterimage when you stare at the color red or at blue?

#### Activity Extensions:

- See what would happen if you tried other colors.
- What happens if you add a pattern like stripes?
- What happens if you change the amount of time you stare at the picture?
- Choose one thing to change and make a prediction.



## **National Standards**

### **NS.K-4.1 SCIENCE AS INQUIRY**

As a result of activities in grades K-4, all students should develop

Abilities necessary to do scientific inquiry

Understanding about scientific inquiry

### **NS.K-4.2 PHYSICAL SCIENCE**

As a result of the activities in grades K-4, all students should develop an understanding of

Properties of objects and materials.

### **NS.K-4.5 SCIENCE AND TECHNOLOGY**

As a result of activities in grades K-4, all students should develop

Abilities of technological design

Understanding about science and technology