

HOW TO:

Make an Optical Illusion

Items Needed:

4 long pipe cleaners of equal length
2 pipe cleaners should be the same color,
while the third and fourth pipe cleaners need
to be of different color.

Example: 2 red pipe cleaners, 1 green pipe
cleaner, and 1 blue pipe cleaner.

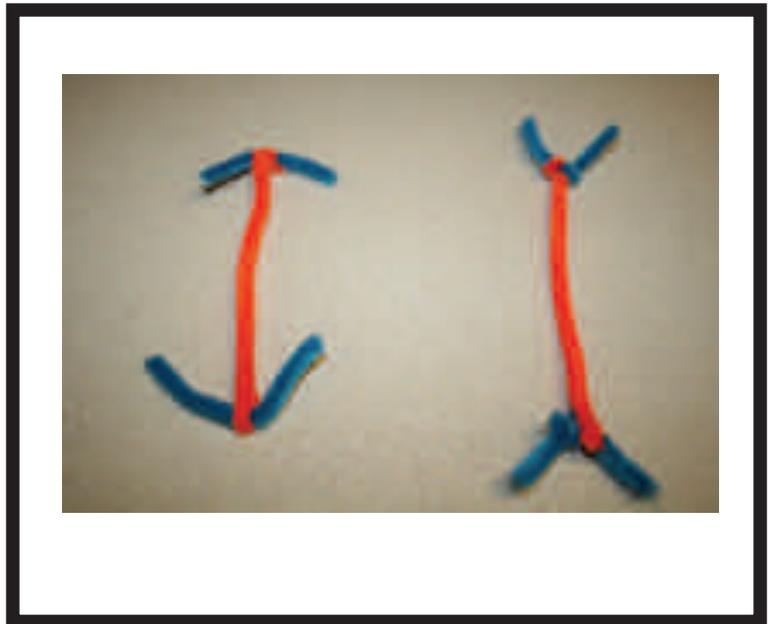
Scissors

Plenty of friends and family members to show
and explain your optical illusion!

Approximate time to complete: 1 minutes

Skill Level: Easy

Budget for materials: \$3.00



Project Instructions:

1. Take two pipe cleaners of the same length and the same color.
2. Next, cut two other pipe cleaners of different colors in half. You will use these different colored pipe cleaners to make the ends of your arrows.
3. Wrap the middle of one short pipe cleaner around the end of one long pipe cleaner. Then bend the short one in half so it looks like an arrow. Repeat this process on the other side using the other half of the short pipe cleaner.
4. Repeat steps 2-3 with the other colored pipe cleaner, but this time, your arrows on the ends will be turned in the opposite direction (an inverted arrow).
5. Hold up both arrows and slowly move them apart from each other. You now have created your very own optical illusion!
6. Ask friends and family: Which arrow is longer?

What's Happening:

Illusions trick us into perceiving something differently than it actually exists, resulting in what we see distort physical reality. Hence, the word illusion comes from the Latin verb illudere meaning, "To mock." Optical Illusions use light, patterns and color to create images that can mislead our brains. The information received by the eye is processed through the brain, creating a perception that in reality, does not match the true image. Perception refers to the interpretation of what we see through our eyes. Optical illusions occur because our brain is trying to interpret what we see and make sense of the world around us. Optical illusions simply trick our brains into seeing things which may or may not be real. In this optical illusion created, the eye trick brains into thinking that one arrow is longer than the other but in reality both arrows are of same length as we used the same length of pipe cleaners to create the arrows.

