Blinking
Purpose: To demonstrate persistence of vision.
Materials:
- Scissors
- Pencil
- Ruler
- Cellophane tape
- Paper

Procedure

• Cut two strips of paper 2 x 4 inches (5 x 10 cm).
• Draw lines across one of the paper strips 1 inch (2.5 cm) from each end.
• Tape the top and bottom of this strip to a table.
• Between the lines and in the center of this strip, draw a face with one eye open and one eye closed.
• Lay the second paper strip on top of the first strip, with the edges of the strips lined up.
• Tape the top edge of this strip to the table.
• Trace the face on the top strip, but draw both eyes open.
• Tape a pencil to the bottom edge of the top strip and roll the pencil up to the line drawn on the strip as shown.
• Place your hands on the ends of the pencil.
• Roll the pencil back and forth quickly between the two lines on the strip several times.

Results: The eye appears to open and close, as if winking.

Why? Rolling the paper strip back and forth allows you to see each face for only a fraction of a second. Your brain holds on to each image for about 1/16 of a second. This retention of the image is called persistence of vision. When the next image appears in less than 1/16 of a second, your brain doesn't register the transition. Because one of the eyes is in a different position in the two drawings, the overlapping of the images of the face gives you the illusion that the eye is blinking.

A Cut-Out Blinking Eye Flip Book Is on the Next Page