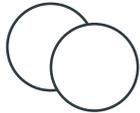




Thaumatrope are old-fashioned optical illusions, or “tricks of the eye,” that date back to the 1820s. Here’s how to make one for yourself!

Before starting: Grab your materials!

- 2 circles of white cardstock
- Markers
- Scissors



- Hole punch
- Tape
- String



**If you don't have a hole punch or string, you can swap them out for a straw or a stick.*

Step 1: Print and cut out the white cardstock circles on the following page or cut out your own circles if you don't have a printer, and draw one image on each circle. Pick two things that belong together, ie. a bird and a tree branch, the sun and the moon, an alien and their planet.

Step 2: Take one of your drawings, then flip it over vertically, and tape down the other image. When you flip the disc vertically, each image should be facing right side up.

If you don't have a hole punch, insert the end of a straw or stick between the two images and tape it so it stays secure. Rotate the straw/stick between your hands rapidly and watch the images blend together as the circles spin. Skip steps 3 and 4.

Step 3: Using the hole punch, make two holes in the disc: one on the left side and one on the right.

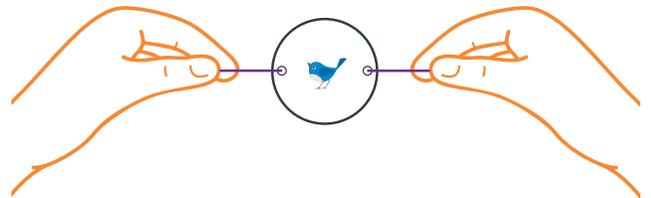
Step 4: Thread one piece of string through one of the holes, then tie the ends together in a knot. Repeat with the other side.

Hold the strings in each hand to spin and enjoy!

How does it work??

Thaumatrope work because of a scientific principle called Persistence of Vision. When we see an image, and then close our eyes or look away, we briefly retain that image in our memory as if we are still looking at it. So, if our eyes have to quickly switch between one image and another, the two will start to blend together to create one whole picture!

This is the same principle that makes other types of animation, i.e. zoetrope, flip books, come to life!



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