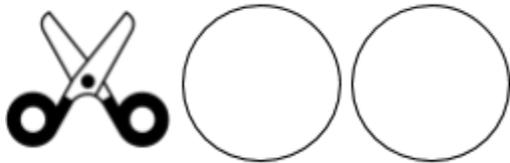


Thaumatrope: Optical toy that combines 2 images into 1

How to make one:

Get scissors, glue, pencil, Sharpie, 2 rubber bands

1. Cut out 2 circle templates



2. Pick out a picture you want to combine or make up your own.

3. Draw the 2 sides of the image on separate circles.



4. Glue the two circles together back to back, one upside down from the other.



5. Punch two holes on opposite sides of the circles.



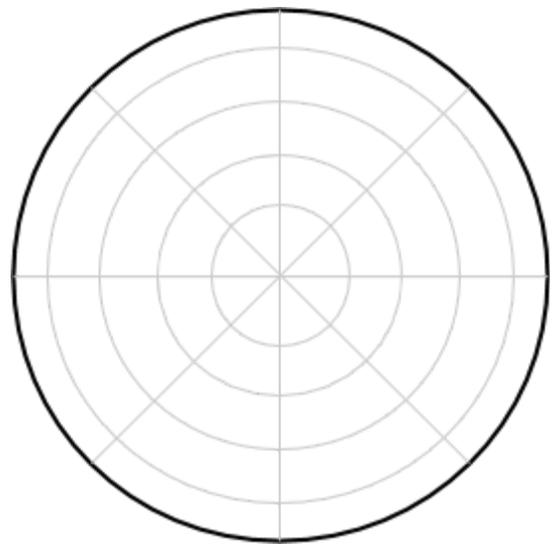
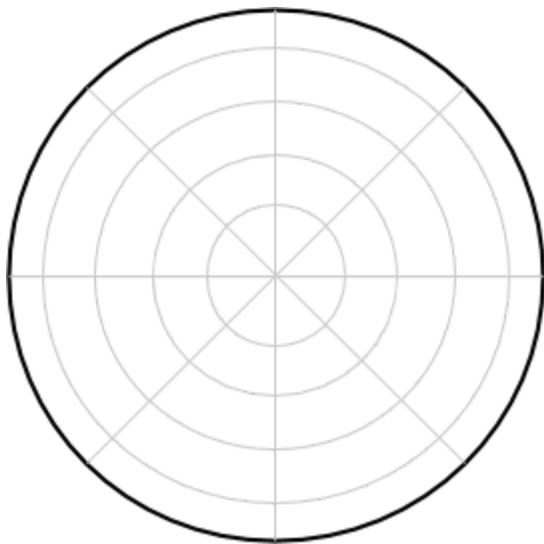
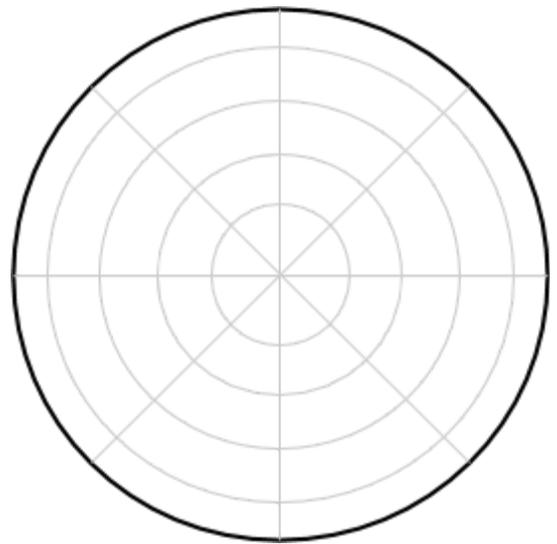
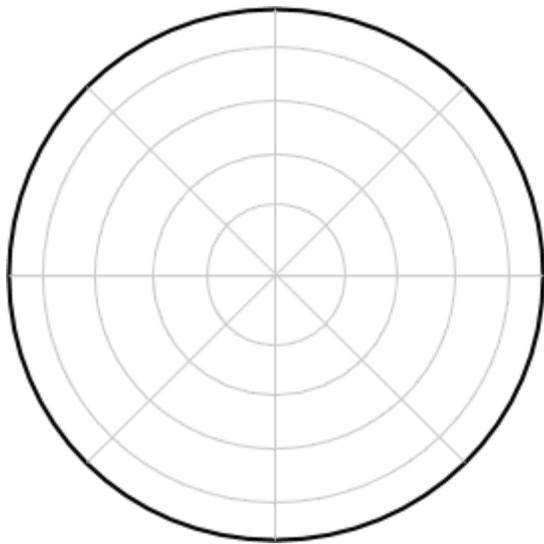
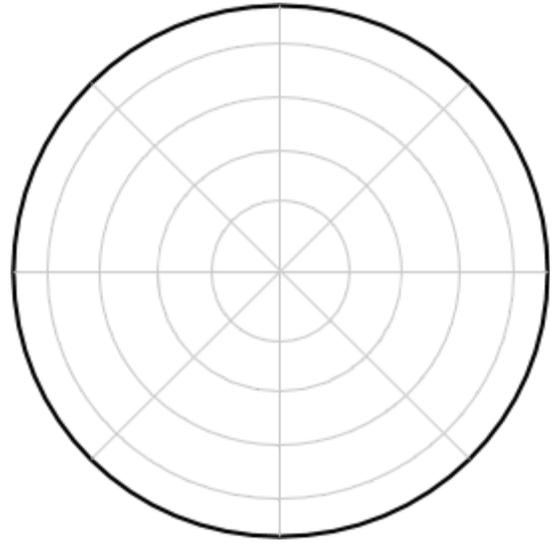
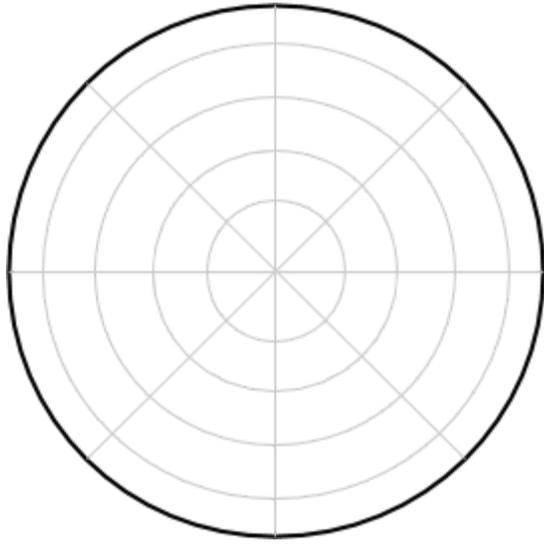
6. Loop a rubber band through each hole.



7. Twist both of the rubber bands quickly and watch the 2 images blend into one.

Side One	Side Two	combined

Thaumatrope Templates



Teacher Notes

A popular toy in the 1800s was a thaumatrope. It creates an optical illusion that combines two images. Two images are drawn on either side of a disk and when the disk is twirled quickly, it looks like the two images combine to create one image. If the two images are different versions of the same image, such as the wings of a butterfly in the up and down positions then it will look like the butterfly is flying.

Tips for creating thaumatropes:

1. Print out the thaumatrope templates on cardstock. Otherwise, the thaumatrope won't be stiff enough to spin. Another option is to glue an index card between the two circles.
2. The grid lines on the thaumatrope templates can be used to help line up the two images and for punching the holes in the disks.
3. Students should draw the two images in pencil first and then use a Sharpie to ink in the drawing after gluing the two circle templates together.
4. You can use yarn or string in place of rubber bands.
5. You can tape the two circle templates together instead of gluing them.