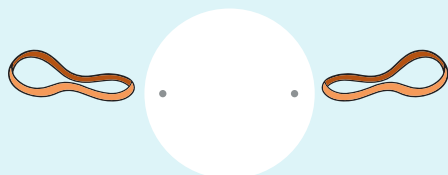


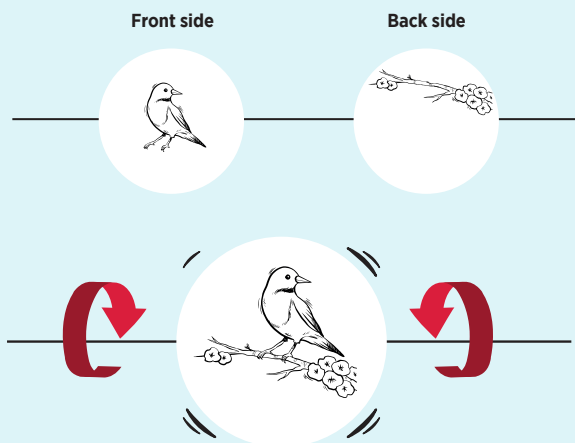
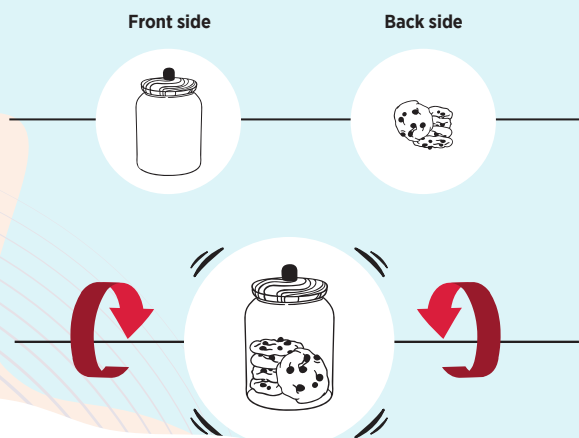
MAKE A Thaumatrope

Thaumatropes are popular optical toys from the 1800s. They work using the concept of **persistence of vision**. Thaumatropes provided animated entertainment until the development of modern cinema.

- Cut a piece of cardstock into a circular shape.
- Punch a hole on the two opposite sides of the circle.
- Thread an elastic band through one of the holes and create a knot by threading it through itself. Repeat with another elastic band for the second hole.



- It's now time to draw! Think of two images which would go well together when combined.
- Draw one of the images on one side, and another image on the other side.
- The tricky part is positioning the two images so that they line up correctly when you twirl the thaumatrope. The easiest way would be to draw both images in the centre of the page. The front image should be upright and the back image should be upside down.



- Now twirl! The faster the thaumatrope spins, the clearer the illusion.
- Share your creation with us on social media using the hashtag #esploramalta.

How does it work?

When you look at an image, your retina keeps seeing the image for a short time (about 1/30th of a second) after the image itself has been removed. If a new picture appears just before the previous one has faded away, your brain blends the two images together into one image.

Fun Fact:

A bird and cage thaumatrope was used in the Tim Burton movie **Sleepy Hollow**.