



## Toon Club Freebies

### Thaumatrope

#### History

The invention of the Thaumatrope (or "turning marvel" or "wonder turner") has often been credited to the astronomer *Sir John Herschel*. However, it was a well-known London physicist, *Dr. John A. Paris*, who made this toy popular in the year 1825. Thaumatrope were the first of many optical toys, simple devices that continued to provide animated entertainment until the development of modern cinema.

#### Material needed

- A cardboard disk of approx 5" diameter
- Punch
- Fevicol
- Woolen strings
- Pencil, eraser and colours

#### How to make your Thaumatrope

1. Download and print the template. Cut out the two circles and stick them on either side of a circular cardboard disk of the same size.
2. Punch two holes directly opposite each other near the edge of the disc. (indicated)
3. Thread a length of string through each hole and tie firmly.
4. To work the Thaumatrope 'wind it up' by twisting the two lengths of string until they begin to curl up. Hold the Thaumatrope at eye level with a length of string in each hand and gently pull outwards. What can be seen?
5. If the boat fit exactly under your sails, then your Thaumatrope works.
6. Now try out your own Thaumatrope- try duck in the water, flower in a pot or be a little more adventurous and try putting a koala bear on a tree and wheels under a racing car.

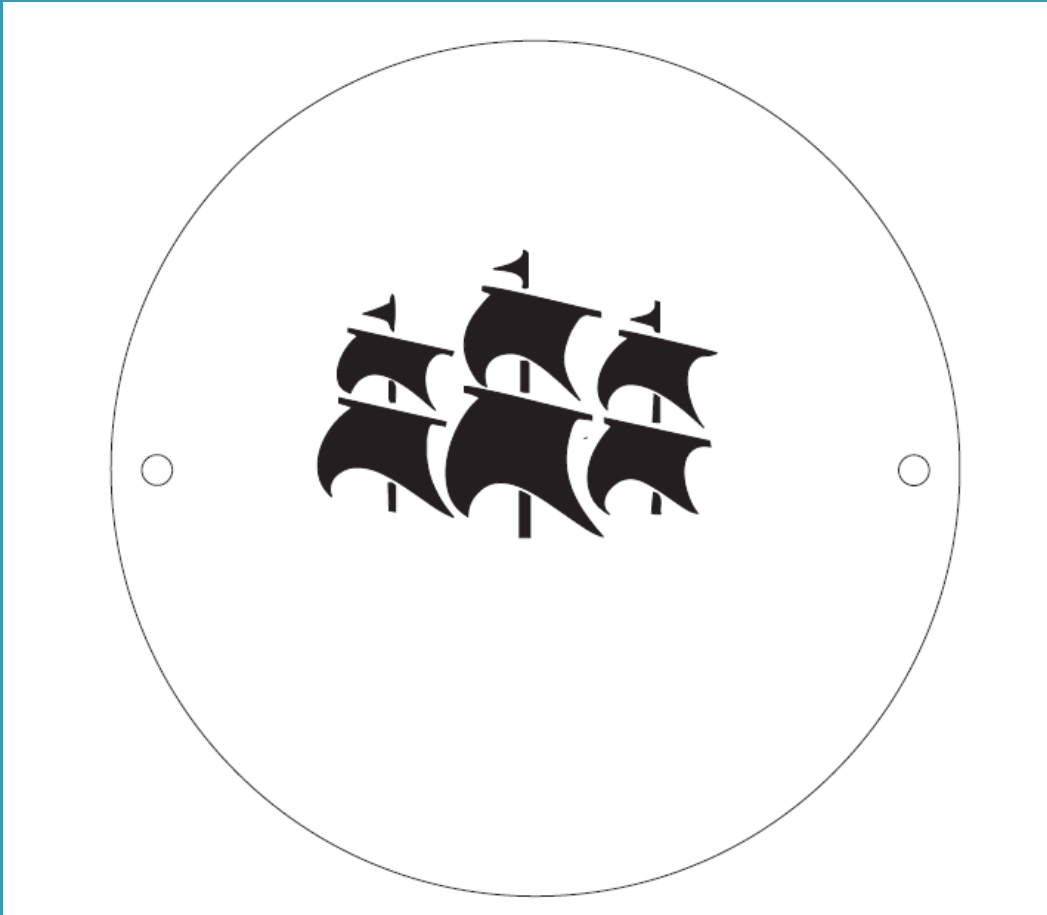
#### Make your own Thaumatrope

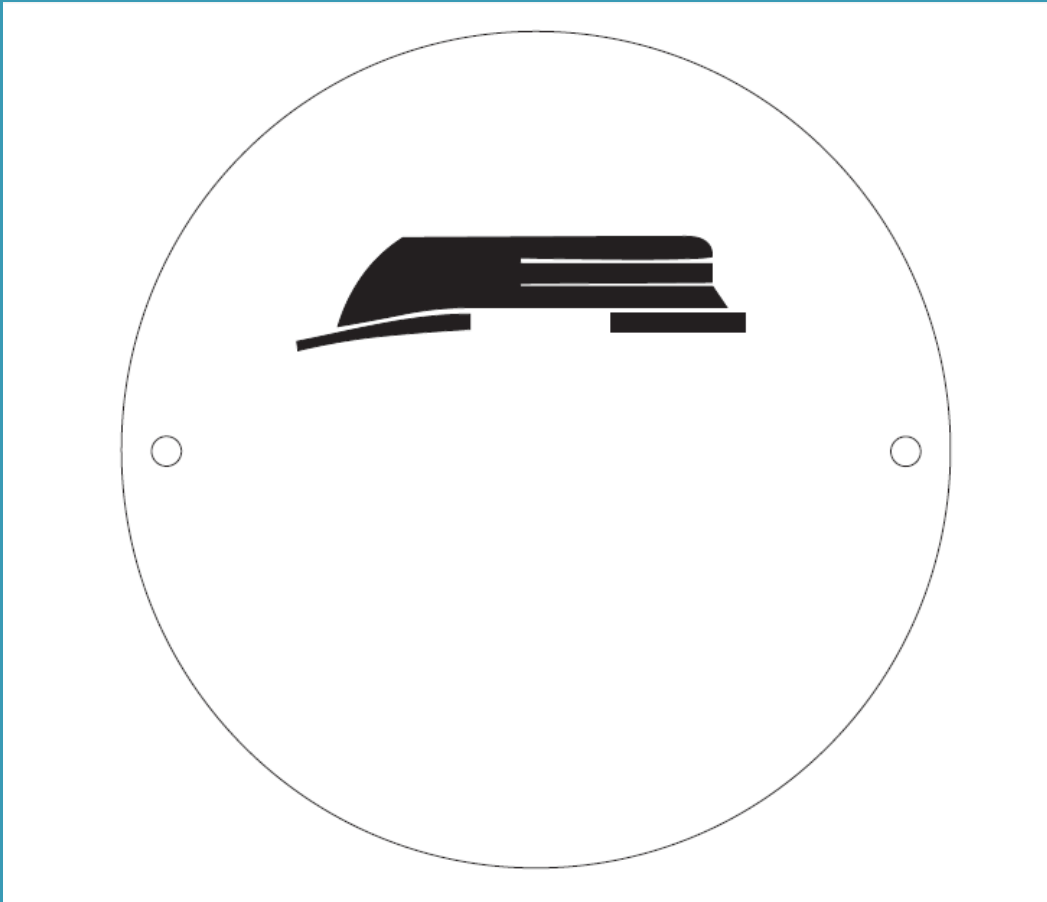
Ask the students to think of a picture. Break the picture into 2 parts. Draw one part on one side and the other upside down on the other side

e.g A person riding a horse or a fish swimming in a fishbowl. e.g Draw a horse, saddled for riding on one side of the disc and draw a person, positioned for riding, on the other side of the disc. The picture on the second side of the disc should be drawn upside down. Make sure both parts of the picture line up. (Testing out the Thaumatrope by spinning it before inking and colouring may help.) Colour all parts of the picture brightly.

#### What will happen and why?

When your Thaumatrope moves very fast, it will appear that the sails are attached to the boat. This happens due to Persistence of Vision, which is the power of our brain to blend images if moving in a certain speed.







### Make your own!

Download this blank Thaumatrope, print, cut & punch. Once you have your disk ready, punch the holes. Draw with a pencil on both sides. Remember to test your Thaumatrope before inking & colouring. Voila! Your own first mini-movie is ready 😊 Cheers!

