





Pirate Thaumatrope

The Thaumatrope was invented in the 19th century and became a popular children's toy. It works on the principle of *persistence of vision*. The human eye and brain can retain a visual impression for up to a thirtieth of a second. If another image replaces the first one in this period of time, it will create the illusion of continuity.

You will need:

A4 printout of Pirate Thaumatrope

Coloured pencils or textas

Scissors

Thin card like a cereal box

Glue stick

Hole Punch

2 elastic bands per thaumatrope

Someone to help work your thaumatrope

Colour in the inside pictures on your first thaumatrope – don't worry about the backgrounds.

Cut it out on the outside of black line.

Trace around one circle of your thaumatrope onto a piece of card and cut the circle out.

Stick one side of your thaumatrope to the piece of card with a glue stick.

Fold it in half and stick the other side of your thaumatrope onto the back of the card with a glue stick.

Ask an adult to help you punch a hole on each side of your thaumatrope.

Thread an elastic band through each hole, looping each band back into itself.

Hook the third finger of each hand into each elastic band.

Using your thumb and second finger, turn the thaumatrope away from you until the elastic is really tight (about 50 times, depending on the size of your elastic band).

If this is too hard, ask someone else to spin it for you.

Let the thaumatrope go and stretch each elastic apart a bit.

What can you see?

Repeat this process with your other two thaumatropes.