Animation and Optical Illusions

Let's have a go at making our own optical illusion toy.

Thaumatropes were a toy popular in the 19th century.

They come in a variety of styles, but mostly consist of a piece of card with an image on both sides. When the card is rotated very quickly the two images appear to blend into one.

Follow the instructions below to make your own. You could create your own design or colour in the example.

Step 1
Draw a picture on both sides. The pictures need to link, like a goldfish and a bowl, or flowers and a vase. Think about where you draw them on the paper: imagine that if you put both pictures together, they would join (see the example below).

Step 2
Colour in the picture only – don't colour in the background.
Bright and bold colours work best.

Step 3
Cut the whole rectangle out, and fold it in half, so one side will be the flower and the other the vase.

Step 4
Find a pencil and stick this inside of the paper. Then stick the folded paper together with tape. Make sure the pencil is right in the centre and nice and secure.

Step 5
Now you should have your finished piece. Roll the pencil around in between your hands as fast as you can and watch your pictures blend together.

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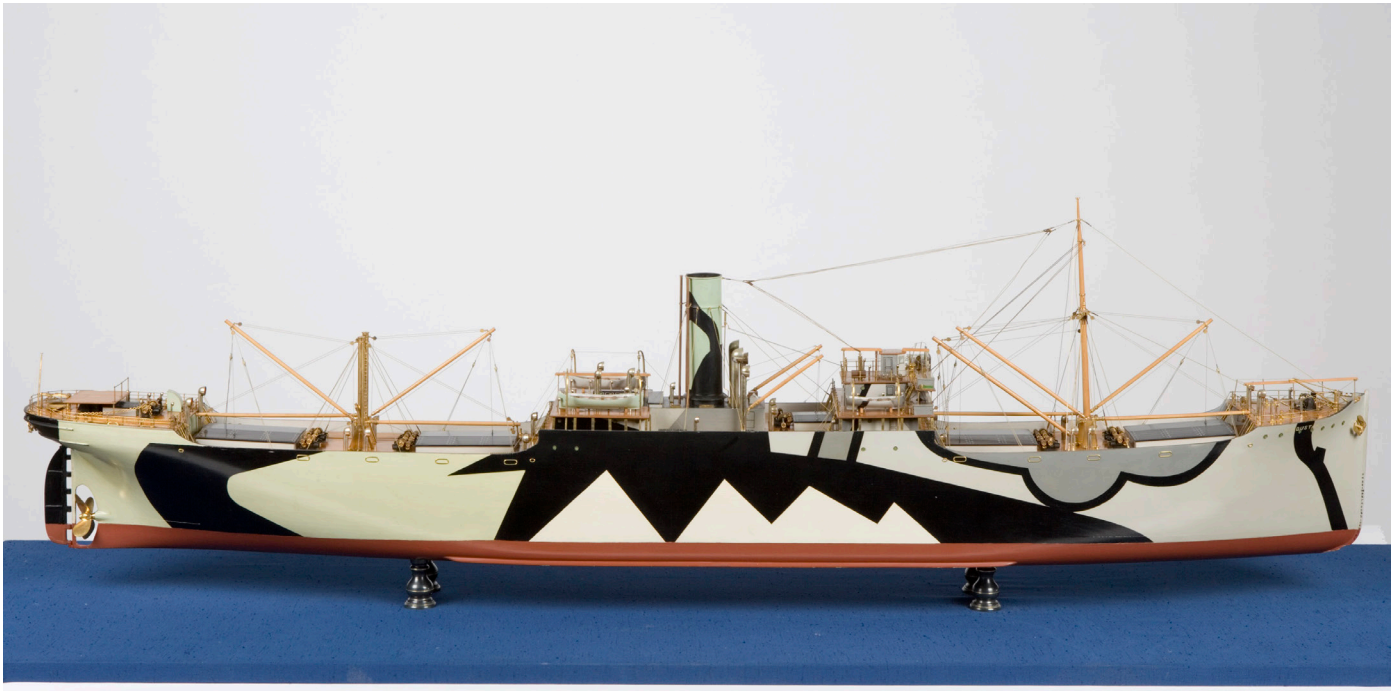
Dazzle Ships

In 1917 artist Norman Wilkinson had the idea of using dazzle painting on ships. He believed that by painting huge, bold, bright patterns and shapes on them it would help to confuse the enemy submarines.

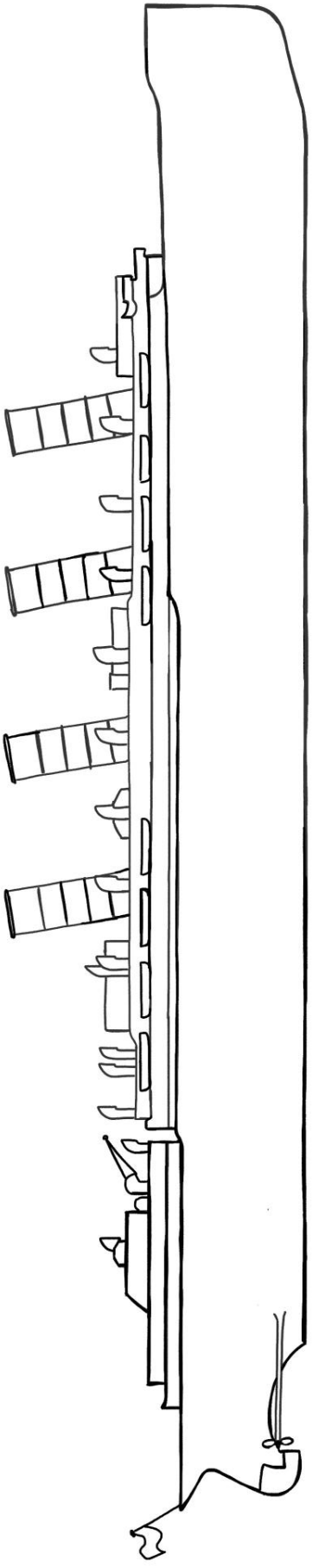
These patterns were said to make the outline of the ship look distorted.

Here is a photograph of a dazzle painted ship.



SS War Climax TWCMS: 2001. 3700.1

Design your own dazzle ship patterns below.



Build your own Zoetrope

The instructions to build your own zoetrope can be found in this week's video. You will need to print off or cut out the following materials.

Mini Zoetrope (7 frames)

- x1 black zoetrope strip
- x1 blank white animation strip or the jumping man animation strip
- x1 cardboard circle (4.5cm radius)

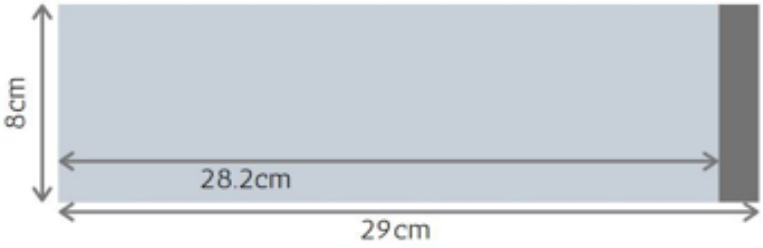
Helpful hint: The radius is the distance from the edge of the circle to the centre. You can use a compass to help you draw a circle the right size.

Large Zoetrope (14 frames)

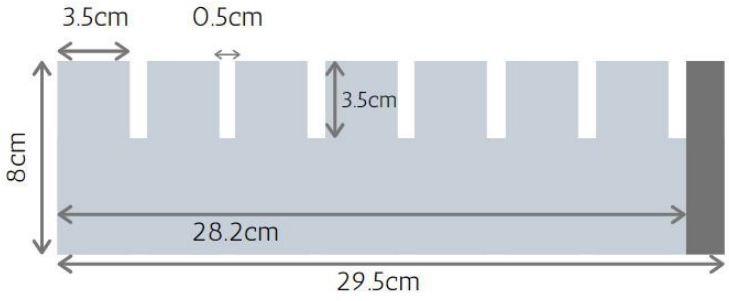
- x2 black zoetrope strips
- x2 blank white animation strips or the smiling bouncy ball animation strips
- x1 cardboard circle (8.9cm radius)

Here are the measurements if you are drawing the templates yourself

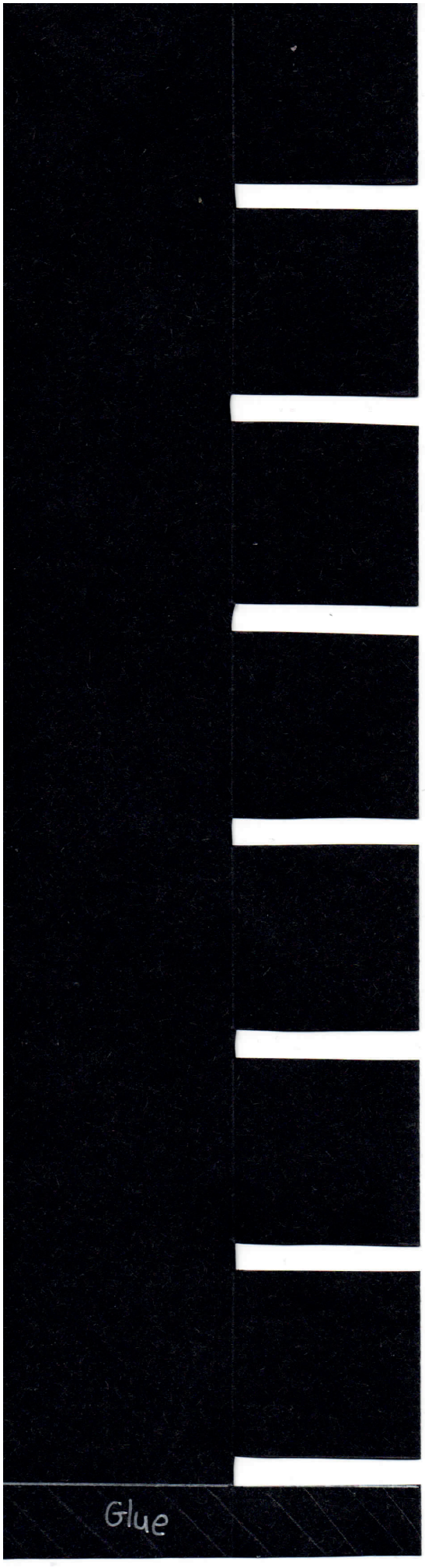
Animation strip

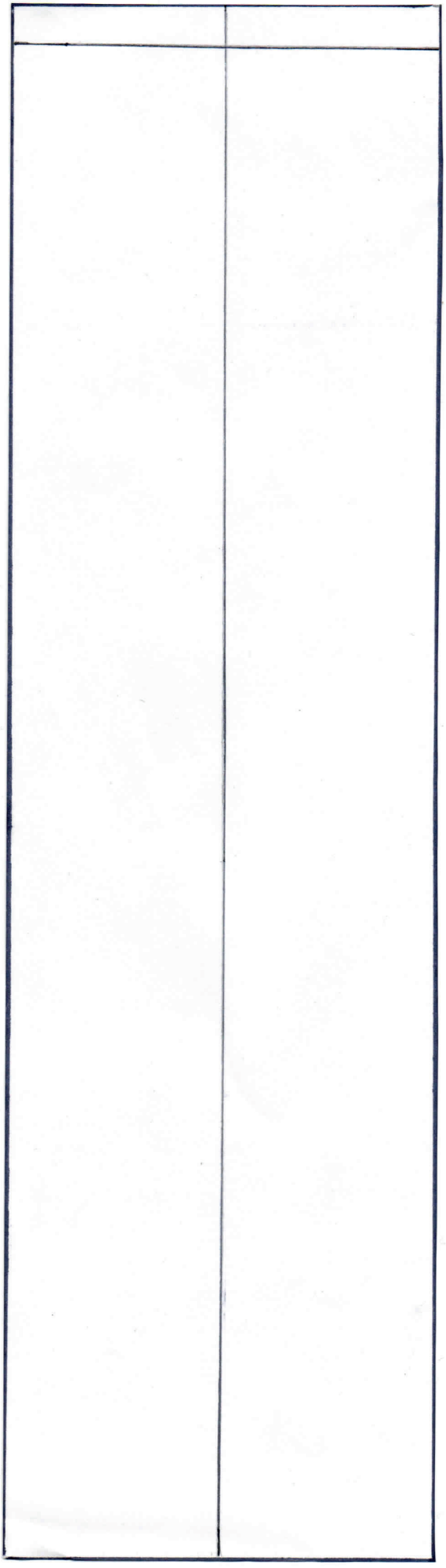
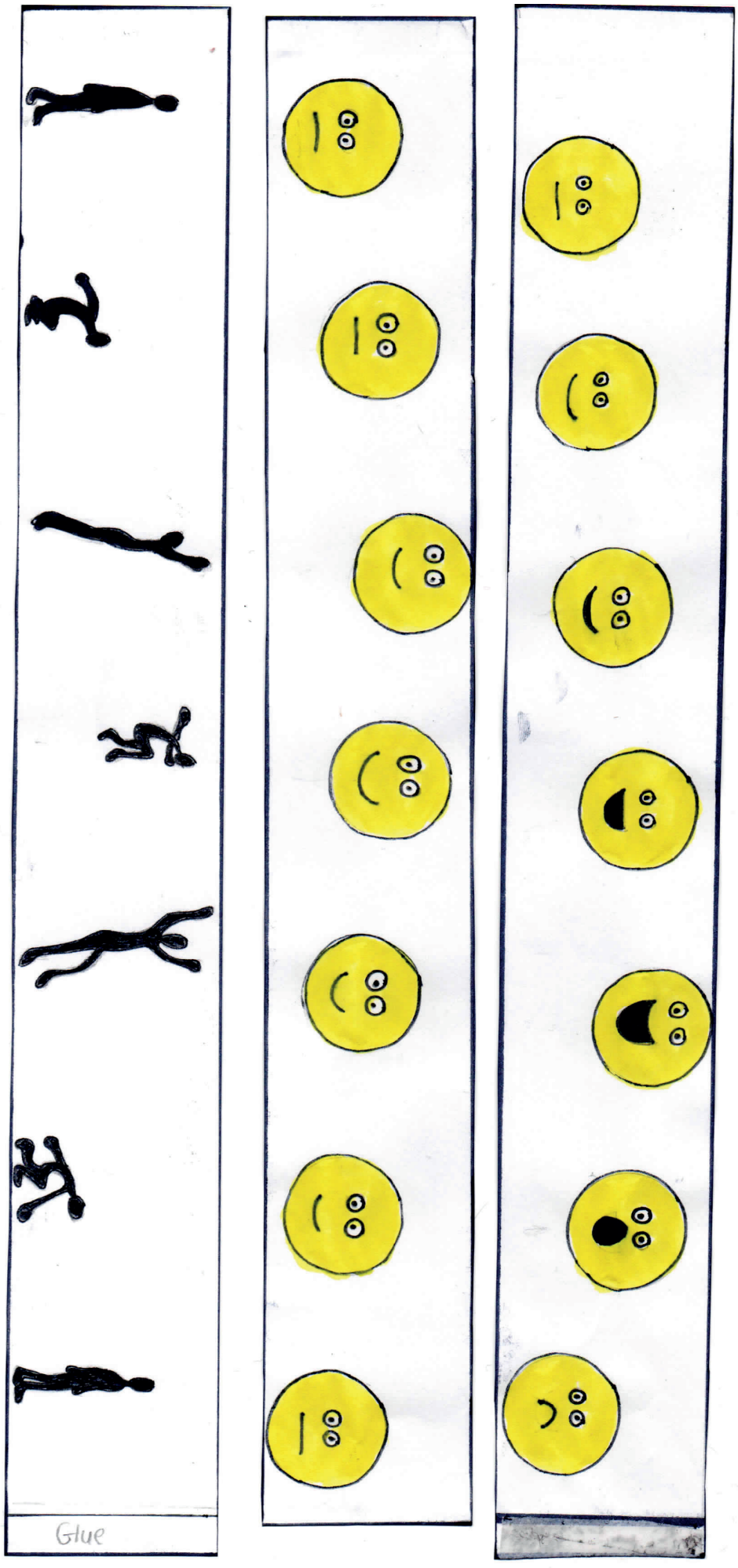


Zoetrope Strip



Zoetrope templates





Zoetrope templates