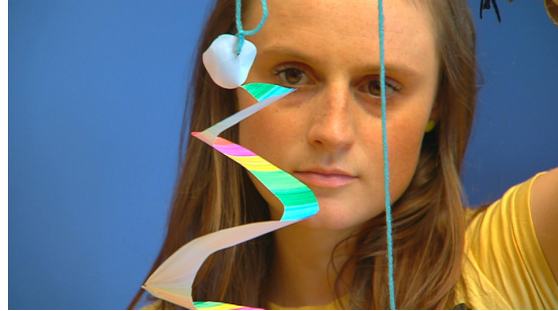
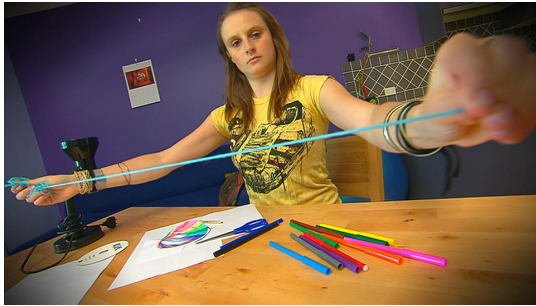


Spiral Art

On SCOPE's Science of Art episode, Julia used the heat of a lamp to make a spiralling sculpture. Here's how you can make one at home:



What you need:

Paper
Coloured pens
Scissors
Something round, e.g. an old CD
Wool or string
Lamp (make sure it has a light bulb that generates heat)

What to do:

1. Draw a circle on the piece of paper by tracing around the CD.
2. If you want a colourful sculpture, use the coloured pens to decorate inside the circle.
3. Cut out the circle and then cut the circle into a spiral. You can either draw a spiral and cut it out, or simply start cutting and make sure you're always around 2cm away from the edge.
4. Find a spot to hang the sculpture. You'll need to make sure there is a power point nearby for the lamp. One idea is to hang the spiral from a ruler sitting on a table or bookshelf and kept in place by a heavy book.
5. Cut a piece of wool about 40cm long. The length will depend on where you are hanging your sculpture.
6. Set up the lamp so the light is facing up.
7. Attach one end of the wool to the centre of the spiral and the other end to the ruler (or your chosen spot). Arrange the spiral so it hangs about 5cm above the lamp and is able to spin freely.
8. Turn the lamp on and watch your sculpture spin in the light!

What's happening?

When you turn the light on, it warms up the air above the bulb. As hotter air rises above cooler air, a column of rising air is created above the lamp that rotates the spiral. You might find the spiral slows down because the string winds up too much. But it will eventually unwind and then start all over again!

The same movement of warm air is what helps create wind. When the sun heats up the air, the hotter air rises, and cooler air rushes in to fill the space it leaves behind, making wind on the surface of the earth!