

Trick and turn



3D craft
and design

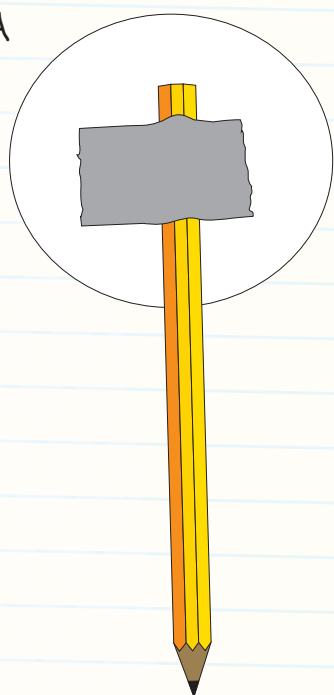


20 mins

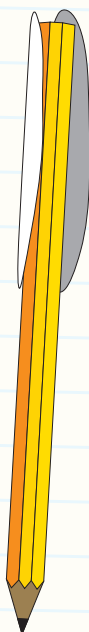


Give it a go

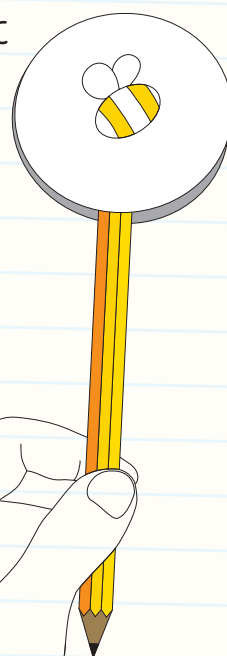
A



B



C



Aim of activity

Magically turn two pictures into one with this amazing trick of the eye!

What you'll get out of it

- Discover and create your own optical illusion.
- Develop new craft and design skills.

What you'll need

For each group:

- 2 circle templates
- Scissors
- Coloured pens and pencils
- Sticky tape

For each girl:

- A4 coloured card
- A drinking straw or pencil



WE DISCOVER, WE GROW

Girlguiding



Before you start

Make circle templates by drawing around a sticky tape roll and cutting them out. Share these and the other equipment out equally between four stations around the meeting space.

Secret pictures

| Group | Picture 1 | Picture 2 |
|-------|----------------|-----------|
| 1 | Fish | Pond |
| 2 | Slice of pizza | Plate |
| 3 | Bee | Flower |
| 4 | Windows | House |

Thaumatropes are a type of optical illusion. An illusion is when your brain sees something that isn't true. When you spin your thaumatrope, the two pictures are moving so fast that your eyes and brain can't separate them, so they look like one.

Thaumatrope is hard to say, so try to sound it out – 'thau - ma - trope'. Have a go at creating your own!

What to do

- 1 Get into four groups and each go to one of the stations.
- 2 Everyone take a sheet of card and draw around the circle template twice. Now cut your circles out.
- 3 Your leader will come and tell you what your first secret picture is. Make sure you stay quiet and keep it a secret from the other groups.

4 Draw your picture on one side of one of your card circles, making sure it's in the middle of the circle.

5 Your leader will now tell your group the second picture – remember to keep it a secret again. Draw this on your second card circle and make sure it takes up most of the room on your circle.

6 Everyone get a straw or pencil. Carefully tape one of your circles to the top of the straw/pencil, like in picture A. Make sure your picture is facing outwards.

7 Take your second circle and tape this to your straw/pencil on the opposite side to your first circle, with your drawing facing outwards again, as in pictures B and C.

8 When your group is done, put your straws or pencils between your hands and twist the straw as fast as you can. Watch as your two pictures become one!

9 Come together as a unit but stay in your groups and don't tell anyone else what your secret drawings are! Take turns to show the other groups your thaumatrope and look at theirs. Everyone else try and work out what the two pictures are. Did you get it right?

Take it further

Explore other optical illusions and have a go at making them.