



Science of the week

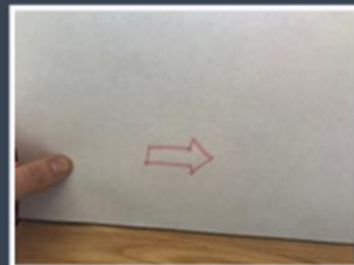
15.05.20

The magic arrow!

- You will need:**
- Sheet of paper
 - A large glass of water

Instructions:

1. Draw an arrow onto a sheet of paper.
2. Place the arrow behind the glass of water.
3. You should notice that the arrow flips and now points in the opposite direction.





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The Science behind it...

The arrow looks like it has changed direction or bent because of something called **Refraction**. Refraction happens when light passes through one **transparent (clear)** thing into another. In this case, from the air through the water, back through the glass and then back through the air before hitting the arrow. This has caused the light to bend and made the arrow look like it has been reversed.

Challenge:

Try to use a different shaped glass. Will the arrow be reversed this time?

Or

Try to change the distance between the arrow and the glass. What do you think might happen now?