

Disappearing Penny

Items Needed:

A glass
A saucer
A penny
Water

Instructions:

1. Place a penny on your countertop.
2. Place the glass on top of the penny.
3. Place the saucer on top of the glass. Can you see the penny? You can!
4. Now remove the saucer and fill the glass with water.
5. Place the filled glass on top of the penny.
6. Place the saucer on top of the glass. Can you see the penny? You cannot!!



What's Happening?

Refraction! Specifically, the refraction of light. When we see something, we are basically seeing the light rays that are bouncing off of whatever that thing is. In normal circumstances, there is very little refraction of light, and we see things as they are.

In this demonstration, by adding water we were bending the rays of light. This is called refraction. The glass also causes some refraction, and the combination makes it so you cannot see the penny anymore. Lift the plate, though, and clearly the penny is still there!

Science! It's like magic, but real.