

WATER REFRACTION

Try this super simple experiment and learn about water refraction.

INSTRUCTIONS:

STEP 1: Print out the template designs and cut.

STEP 2: Fill a clear glass to the top with water.

STEP 3: Place each design behind the glass of

water and stand back a bit to look at it through the glass.

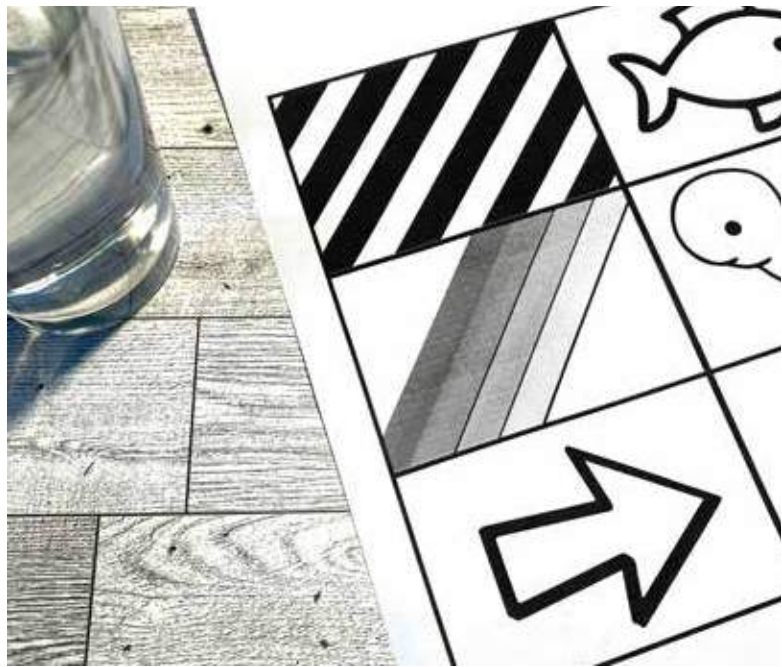
STEP 4: Try moving the designs closer to the glass and then further away. Record what you see.

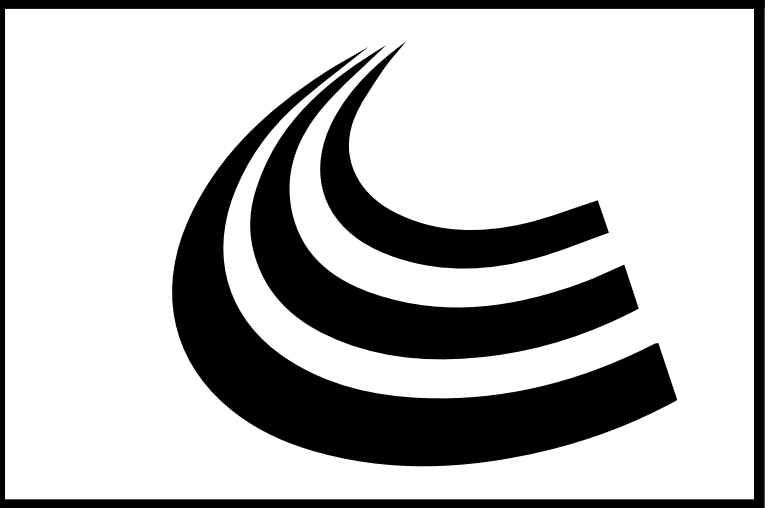
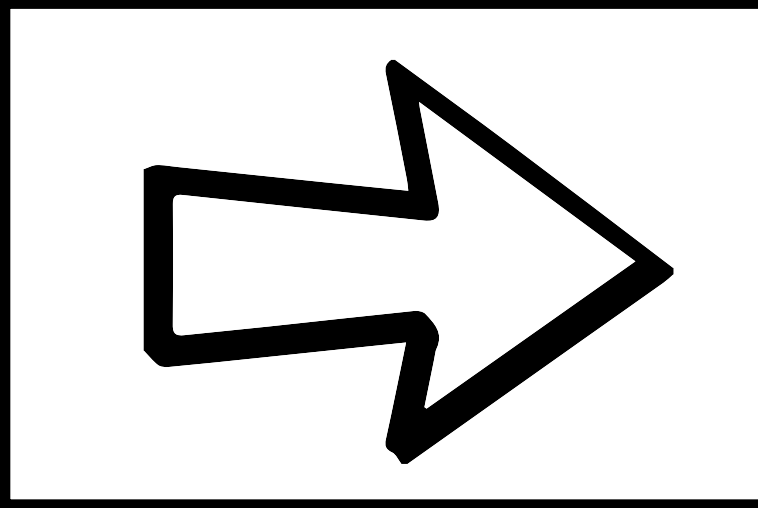
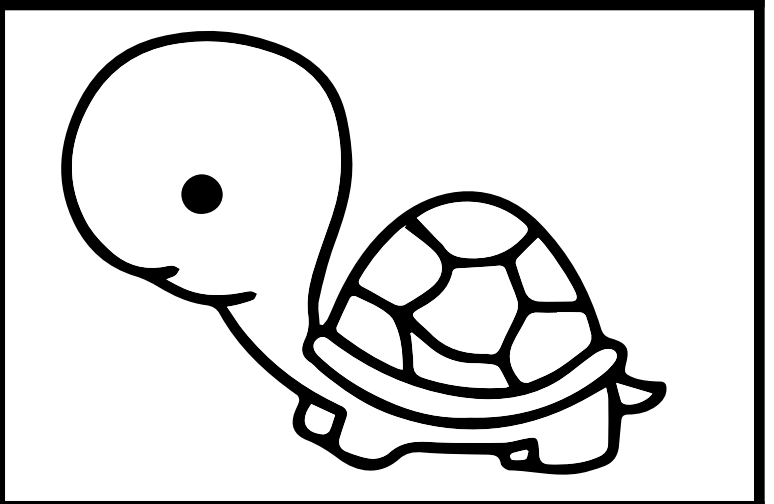
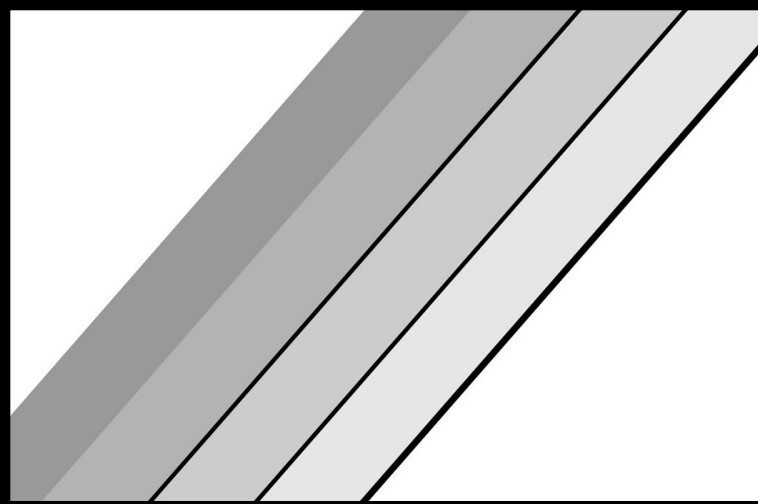
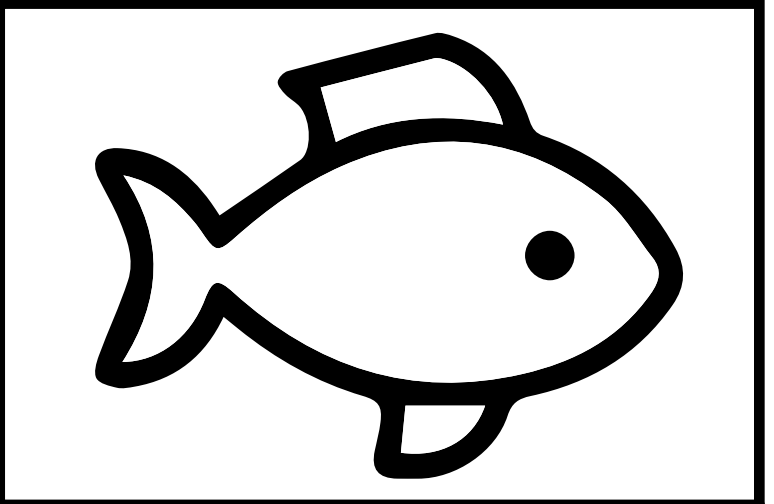
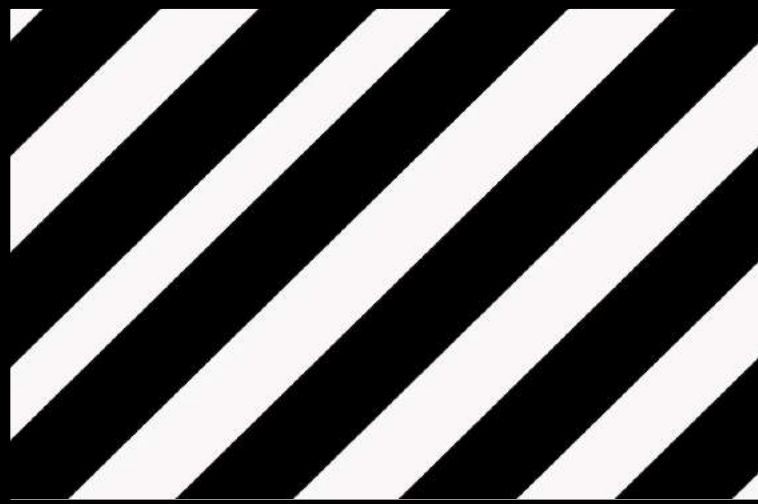
SUPPLIES

Printable templates
Glass
Water
Scissors

THE SCIENCE

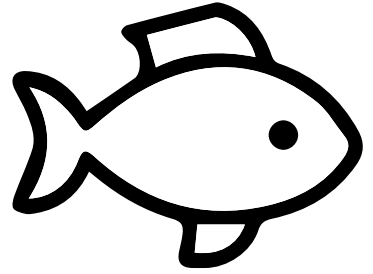
Water refraction is when light changes direction as it passes from air into water. When light enters water at an angle, it slows down and bends. This bending of light is called refraction. This is why objects in water can appear distorted or appear to be in a different place than they really are. The amount of refraction depends on the angle at which the light enters the water and the difference in the density of air and water. Water refraction is important in many fields, including underwater photography and the design of eyeglasses and cameras.





Water Refraction Observations

Use this worksheet to process and evaluate your work.



Place your image directly behind the glass of water, touching the glass.
What do you see?

Now slowly move the image farther away. What do you see now?

Why do you think you notice a change?

What did you learn about water refraction?
