

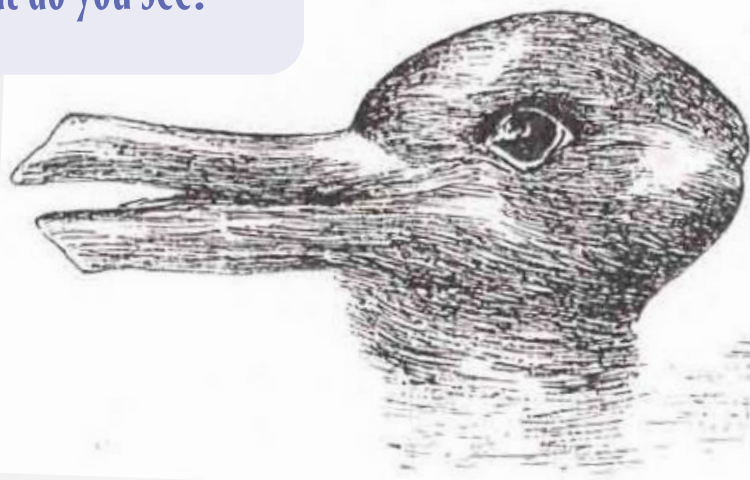
Student Activities



STEAM and
Optical Illusions

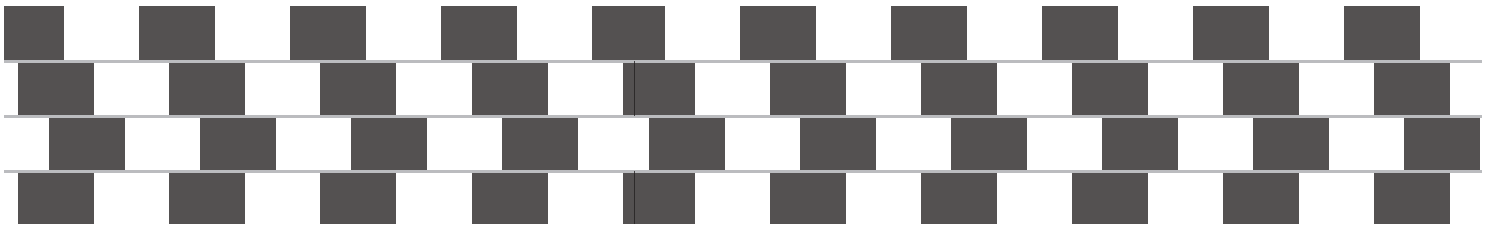
Activity 1: Double-Pictures

What do you see?



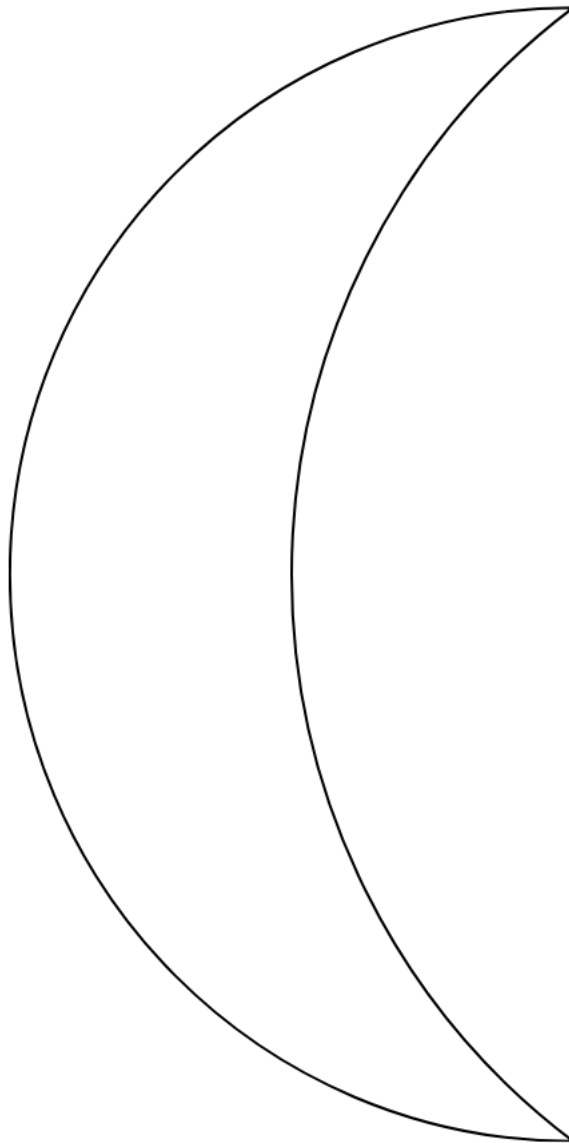
More Double-Pictures

Young lady or old woman?	Horse or Frog?	Woman or Family of Birds?	Saxophone player or woman?



This Is Not a Moon!

Directions: This is not a moon! Add to the image below to create a new picture. What do you see?



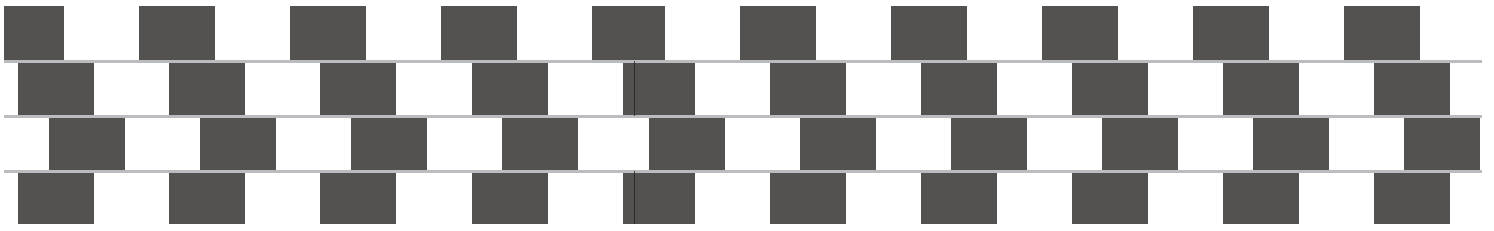
You may see a moon, but I see a _____!

Activity 2: Müller-Lyer Illusion



Which Line Is Longer?





My Müller-Lyer Illusion Illustration

Directions: Use the space below to create your own Müller-Lyer illusion drawing! Experiment with how different shapes, sizes and angles affect line perception.

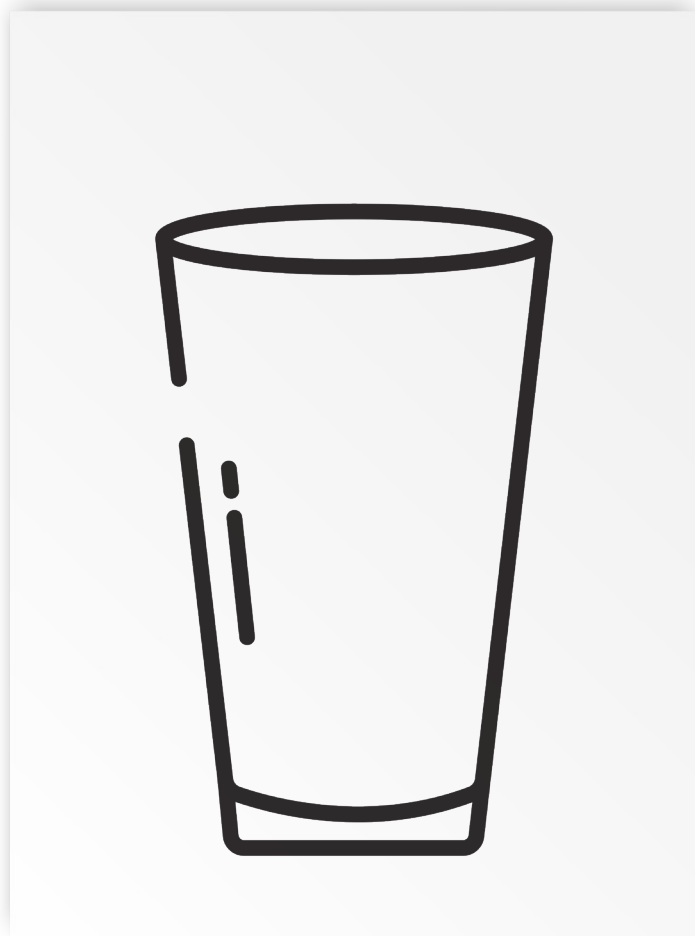
For an added challenge, use this illusion in a detailed illustration. Create your own landscape or cityscape, whatever you can think up. Use your imagination! How many Müller-Lyer illusions can you incorporate?

You will need:

- Rulers
- Pencils
- Colored writing utensils

Activity 3: A Mind-Bending Illusion

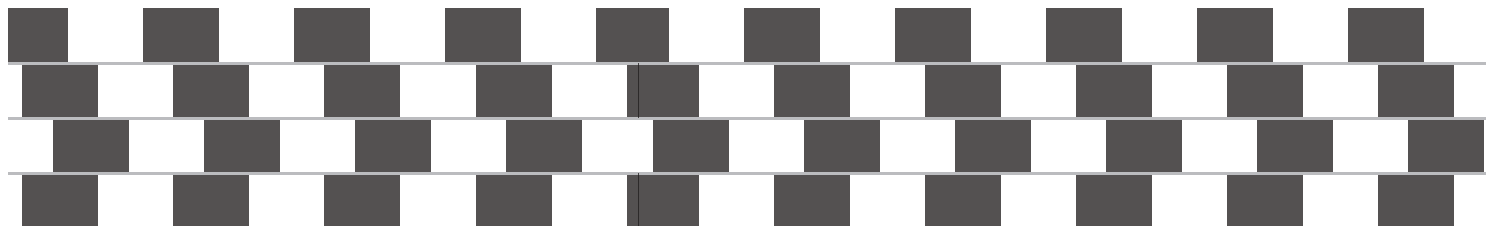
Directions: Sketch your observations.



In your own words, describe what happened in your experiment.

Keywords to Include:

Refraction
Light
Air



Magic Coin

Supplies:

- A transparent cup
- One coin
- Water

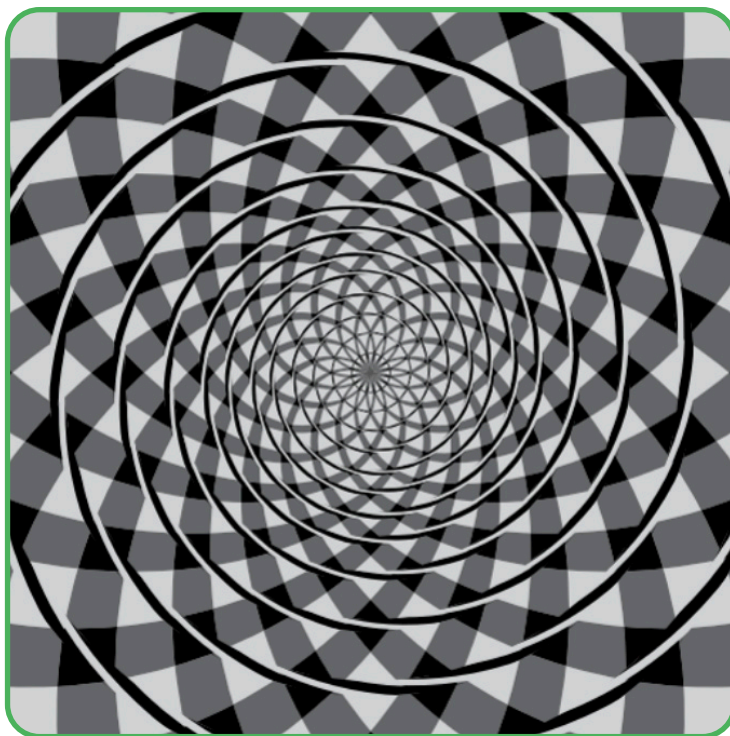
1. Why does the coin seem to disappear?
2. What do you see when you look down from above the cup?
3. What do you see when you look down from the side of the cup?

Refraction in Action

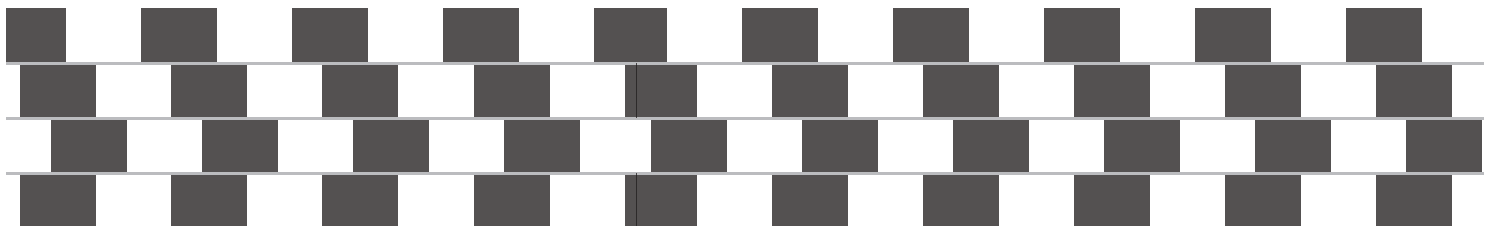
Directions: Choose an image that faces one direction and draw it. Use this space to brainstorm and practice sketching before drawing your final image on a notecard or piece of paper.

Activity 4: A Twisted Illusion

Directions: Look at the image and sketch what you see without the background. If someone else wanted to recreate your sketch, what directions would you give them?



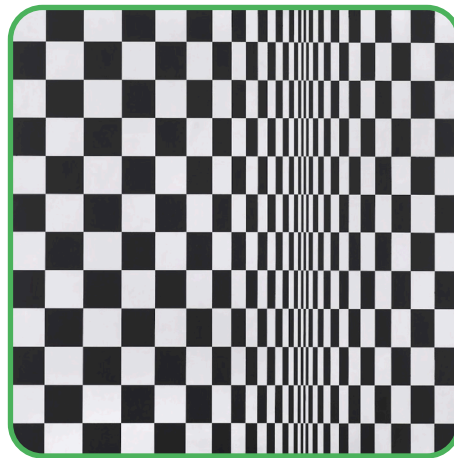
My Sketch



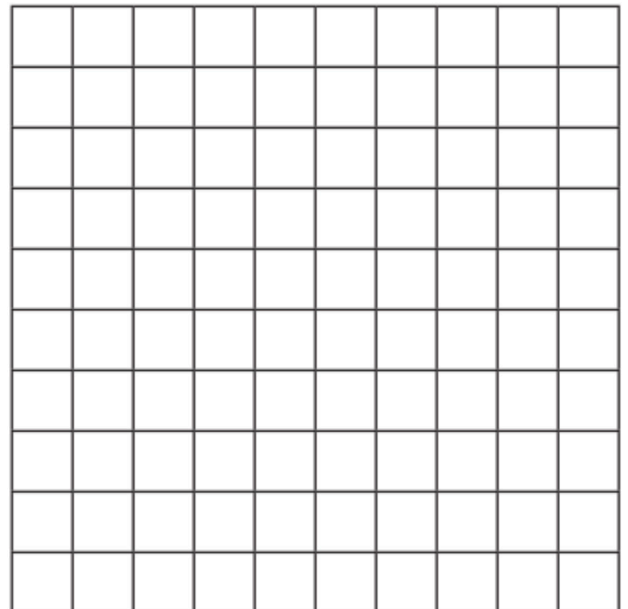
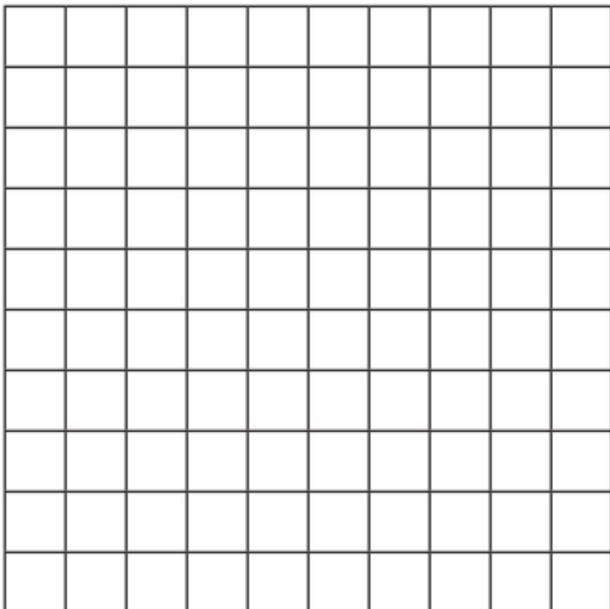
Optical Art

Bridget Riley is well-known for using geometric shapes to create a feeling of motion in her artwork. *Movement in Squares* is a perfect example of her style. In the piece, she uses black and white colors that contrast with each other. The squares appear to bend, giving viewers a sensation of movement.

Movement in Squares

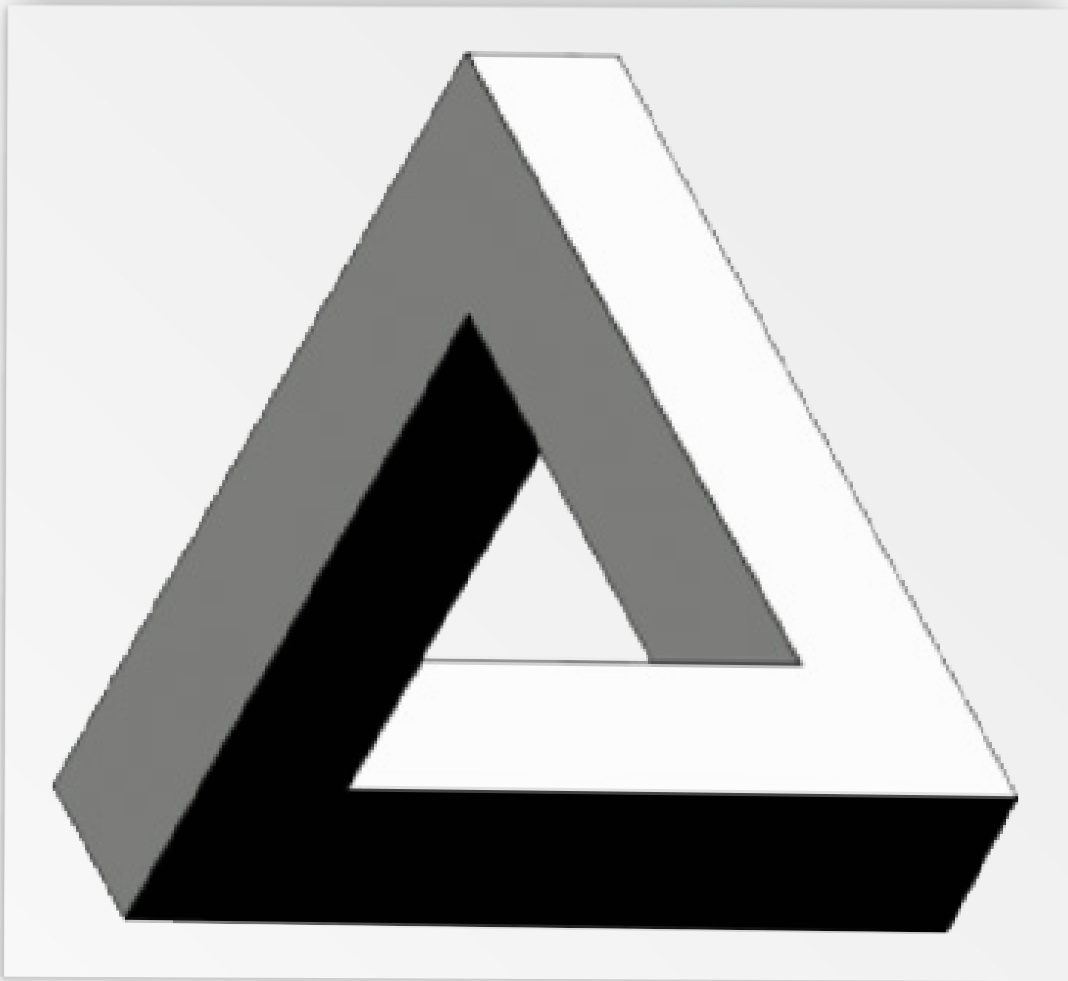


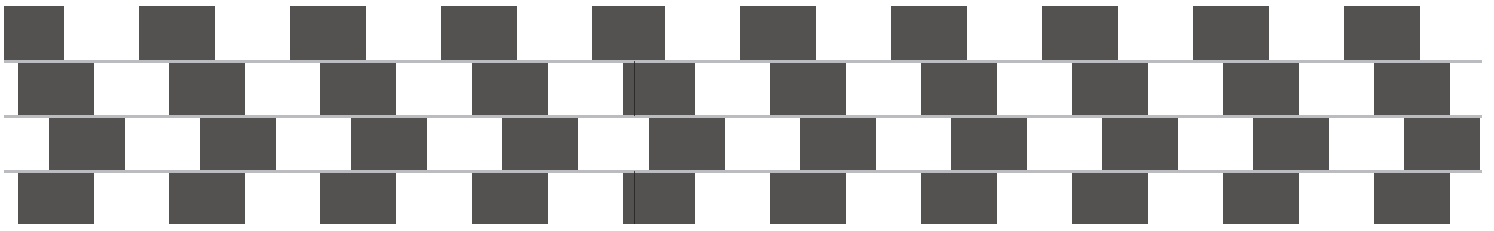
Directions: Experiment with different designs on a 100-square grid to create your own optical art illusions. You can try breaking the squares in the grid into triangles, rectangles, or other shapes to experiment and explore different possibilities.



Activity 5: The Impossible Triangle

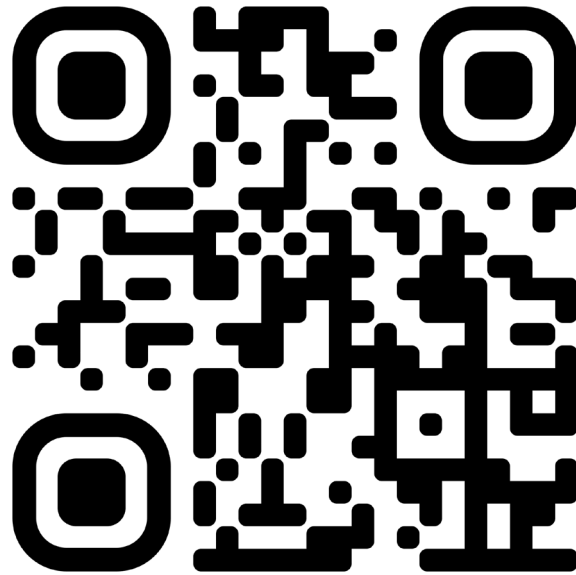
The Penrose Triangle (2-D model)





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