

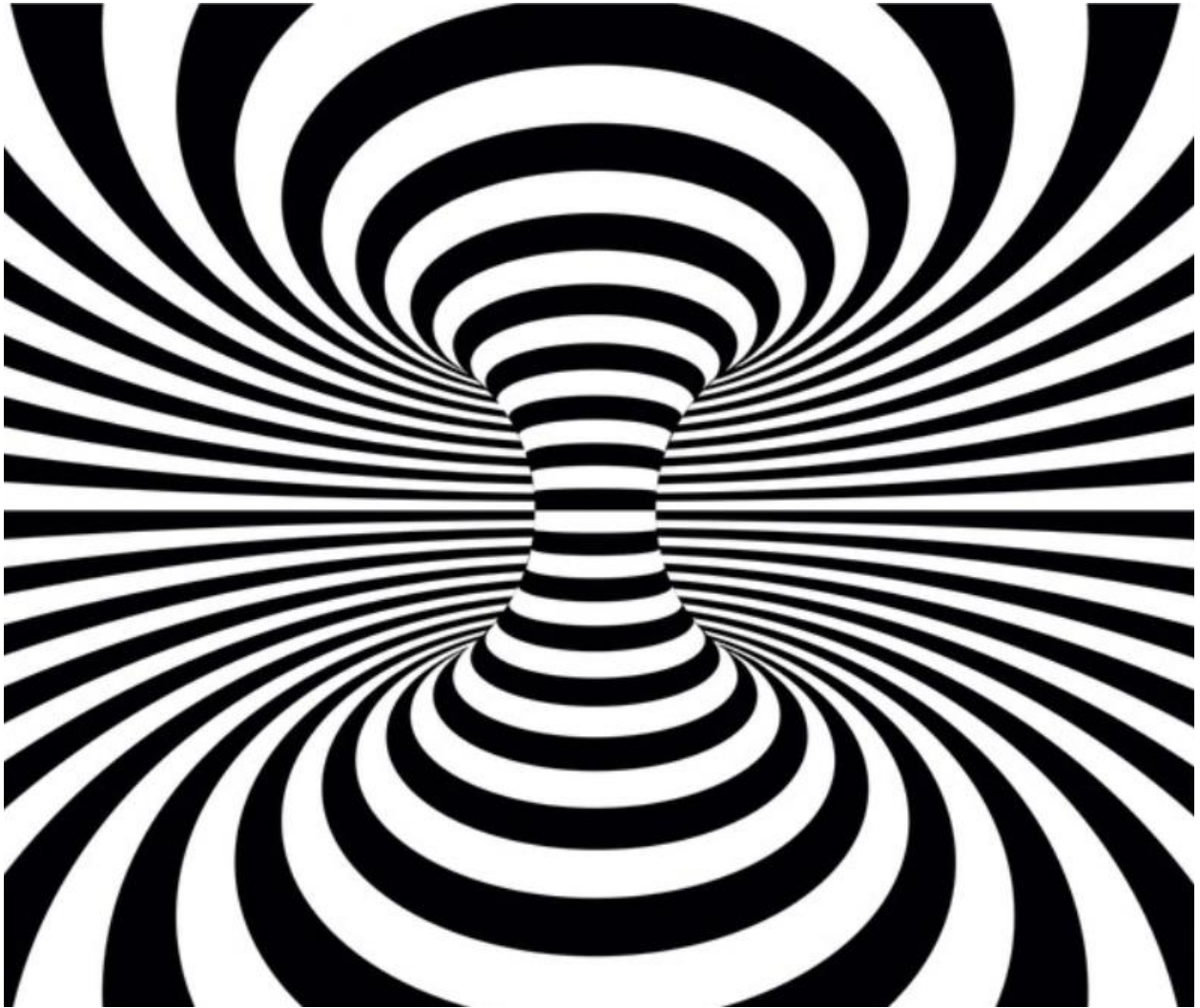


**ROBBIE'S  
BOOK OF**

**OPTICAL  
ILLUSIONS**

Made for Robbie by Grandpa Albie

# What is an Optical Illusion?



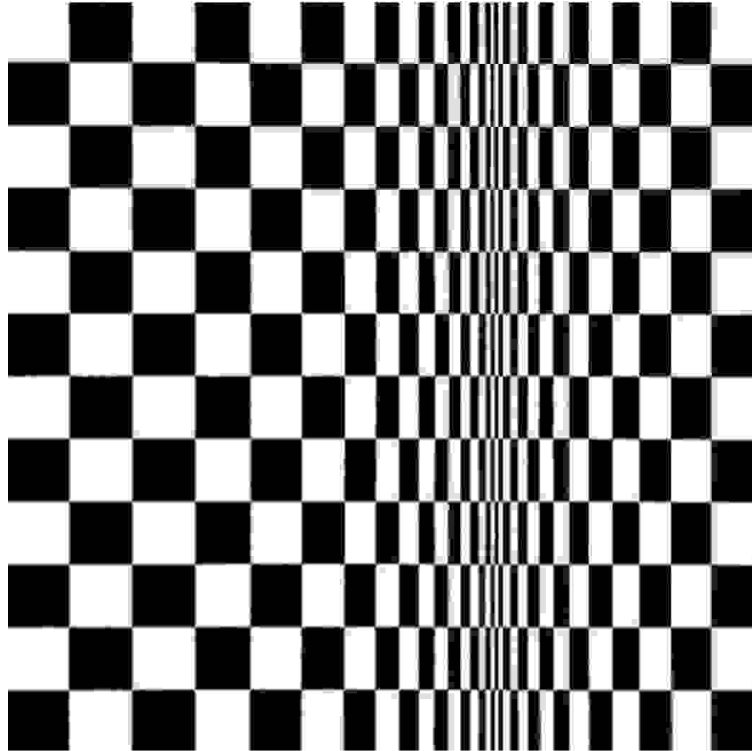
**An Optical Illusion is something that tricks your eye into seeing something that's looks real or moving or changing into something else, even though it is flat, not moving and not changing.**

**Like the picture above.**

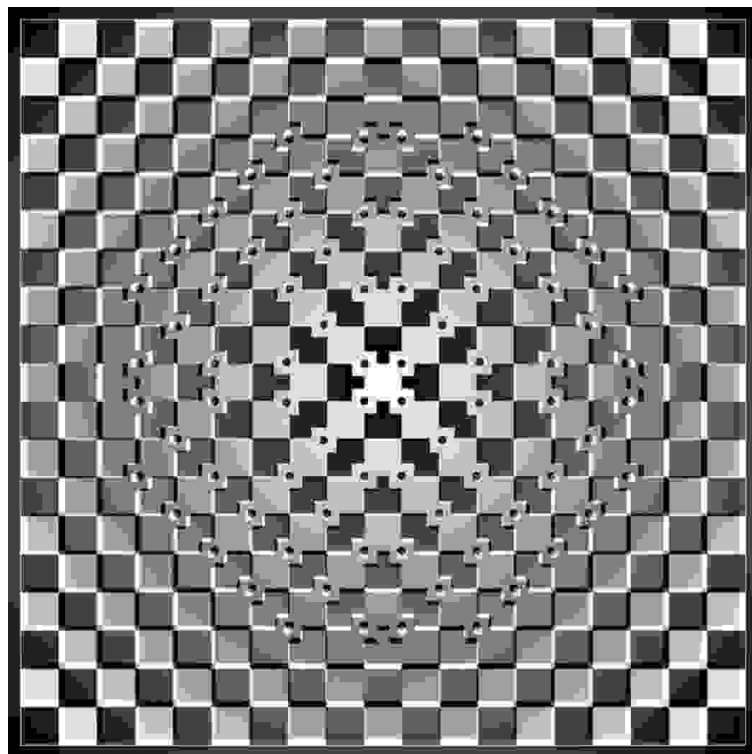
**Doesn't it look like a swirling tornado with a hole behind it?**

**Well, it's just a drawing of black curved stripes.**

Here are more black shapes that makes you think that there is a deep crease **IN** the paper.



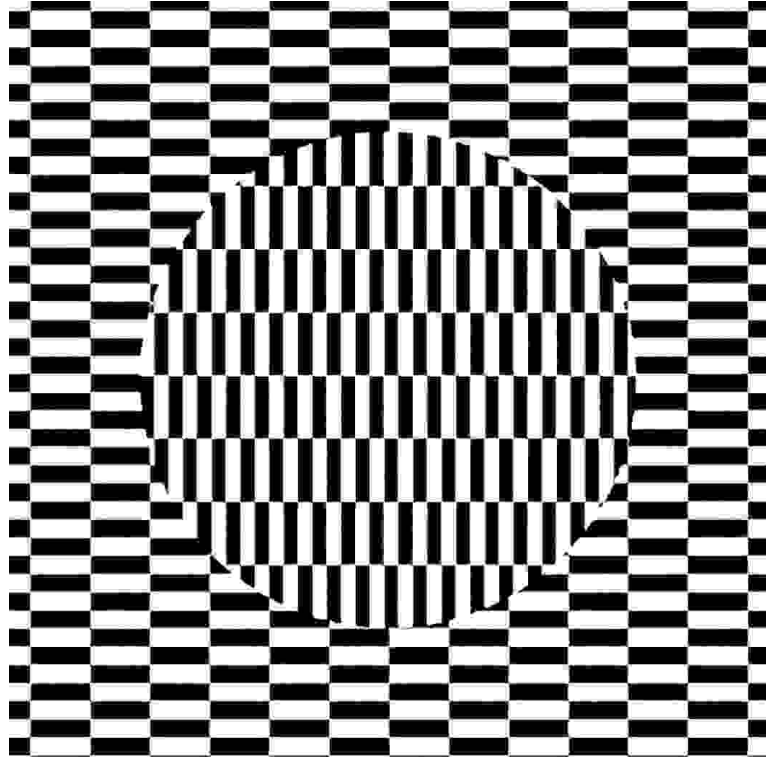
The shapes on the paper can make you think that there is a round bulge coming **OUT** of the paper.



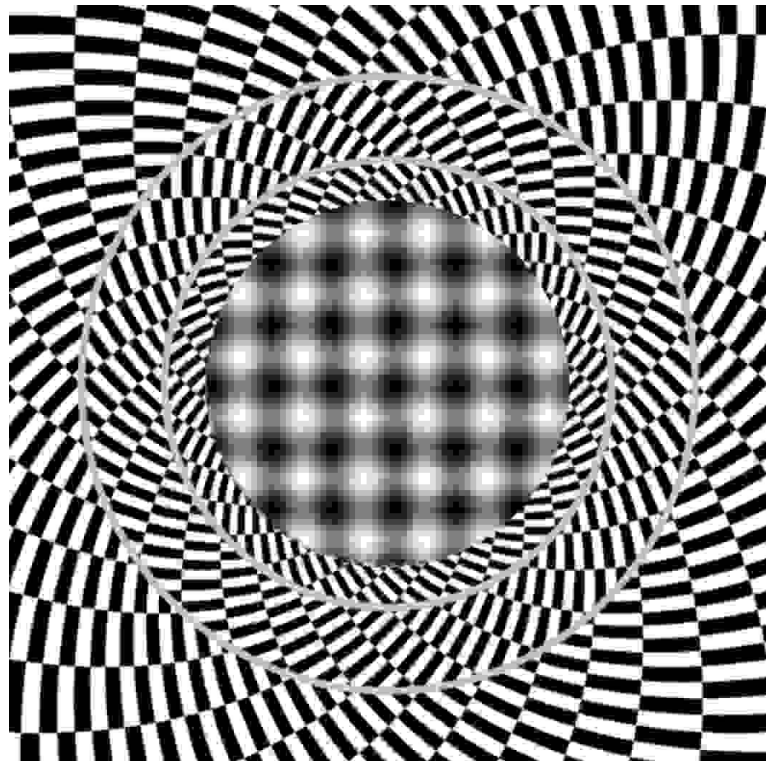
**Here are some more circle optical illusions...**

**This one looks like there's a hole in the center of the pattern.**

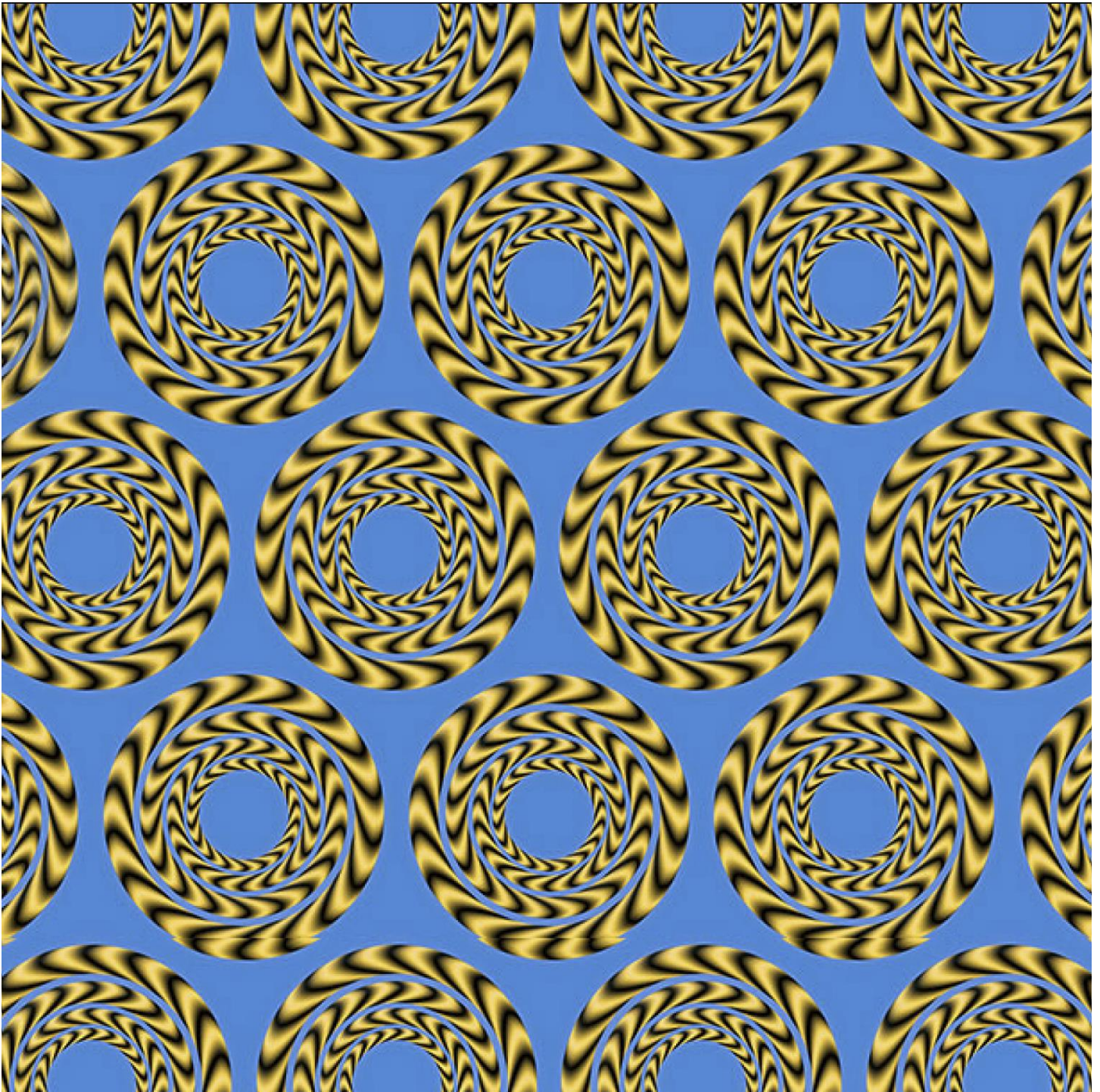
**It also appears to be vibrating.**



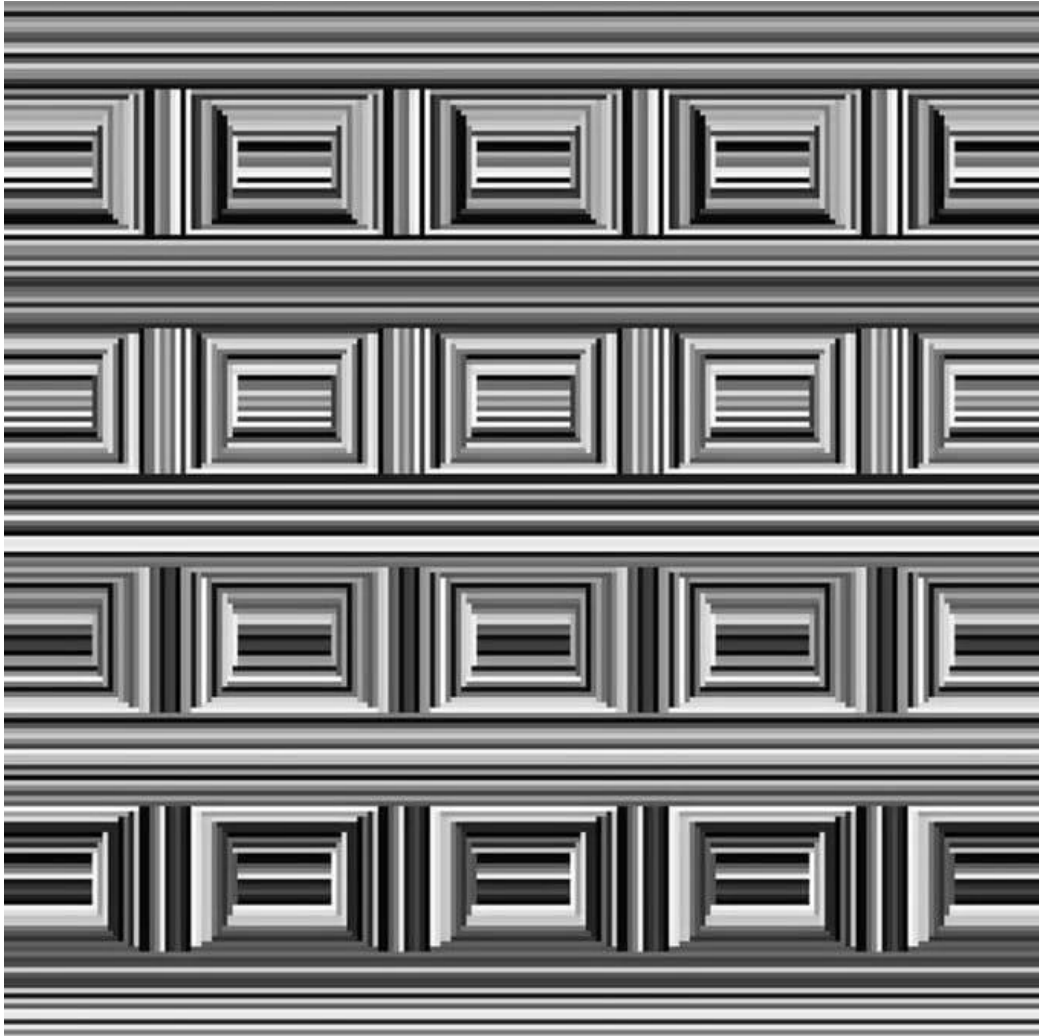
**This one also looks like a vibrating hole.**



If you move your eyes across this Optical Illusion, you will think that the circles you are **NOT** looking at are moving. Then, when you look to see one of them moving, it just sits still. You are also tricked into seeing glowing centers in the circles you are **NOT** looking at.



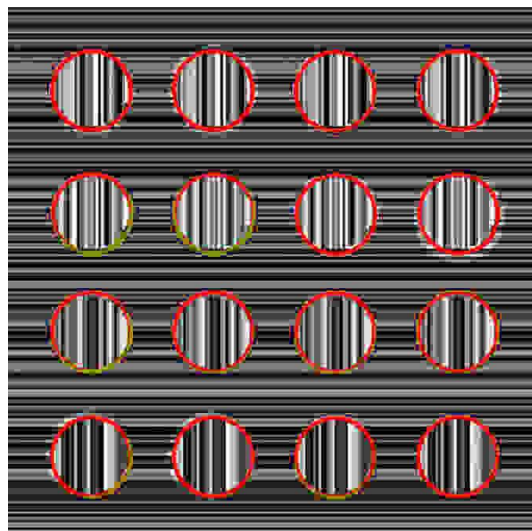
This one is hard to see at first. If you look at the **up and down** stripes between the rectangles, you will suddenly see circles.



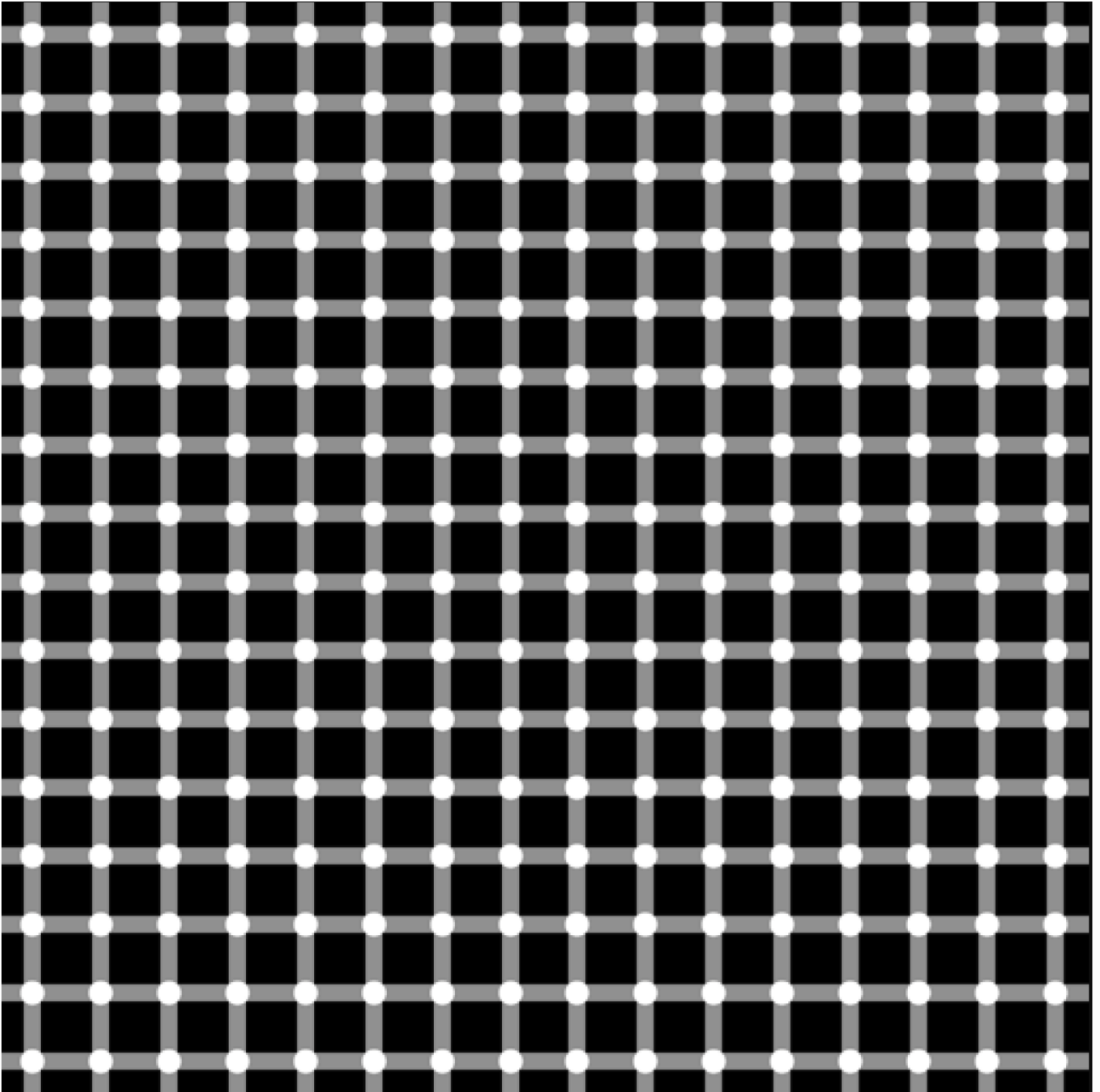
**HINT:**

This is where the  
Circles appear to be...

Stare at the up and down  
edge of the rectangles.



Look at the white circles at the corner of the black boxes and you will see some of the other white circles have a black dot in them. Then, when you try to look at the black dots, they disappear and seem to be in different places. This is called an **after-image effect**. Your eyes want to see the opposite color when you look away.



**Another type of Optical Illusion is when you can see more than one thing in the same image.**

**When you look at this picture, do you see an old woman looking down, or do you see a young woman looking away?**



**In this picture, you may see another young woman looking away and an old man with a moustache looking down.**



Is this a man with a moustache looking off to the side?

Or is it a merman talking to a fish with his hair flowing in the water?



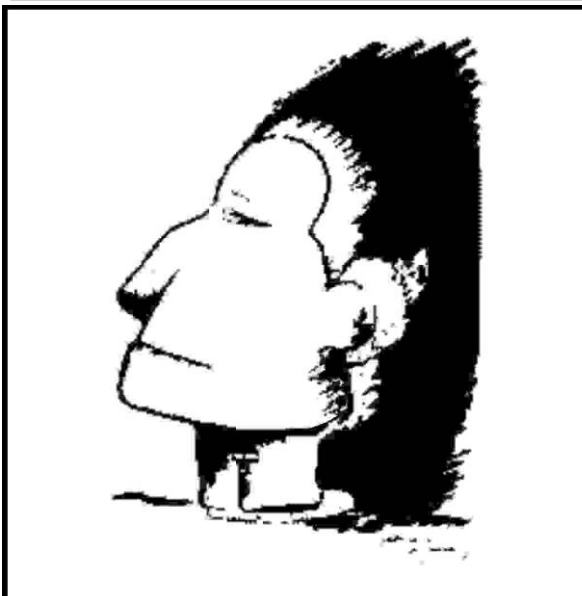
This man is sad, because he's worried that his missing dog may be hungry!

If you look at him **upside down**, you'll see that his dog is happily chewing on a bone.



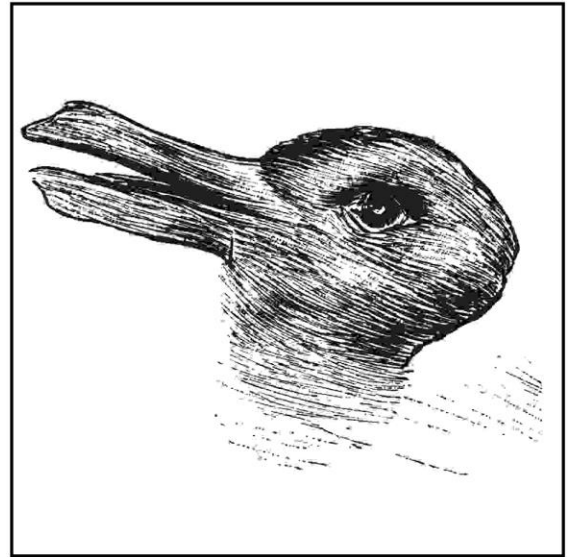
Do you see the proud eskimo?

Or do you see him bundled up in his hooded snow jacket looking into a cave?

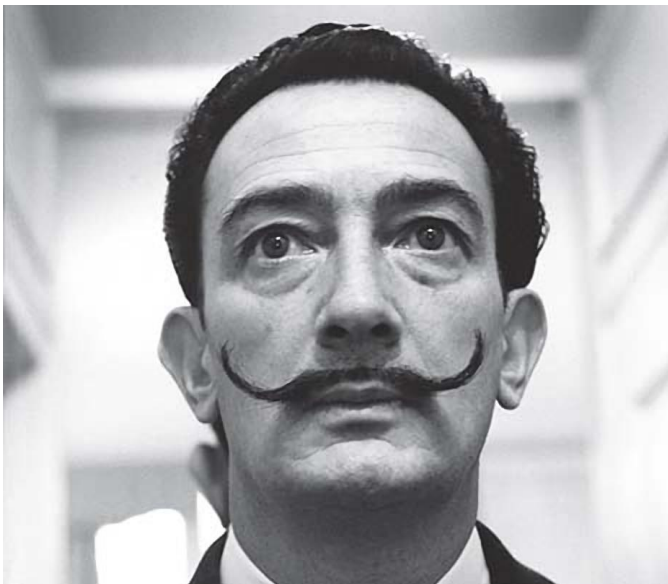


Is this a bunny rabbit  
looking to the right...

Or seagull looking to the  
left?

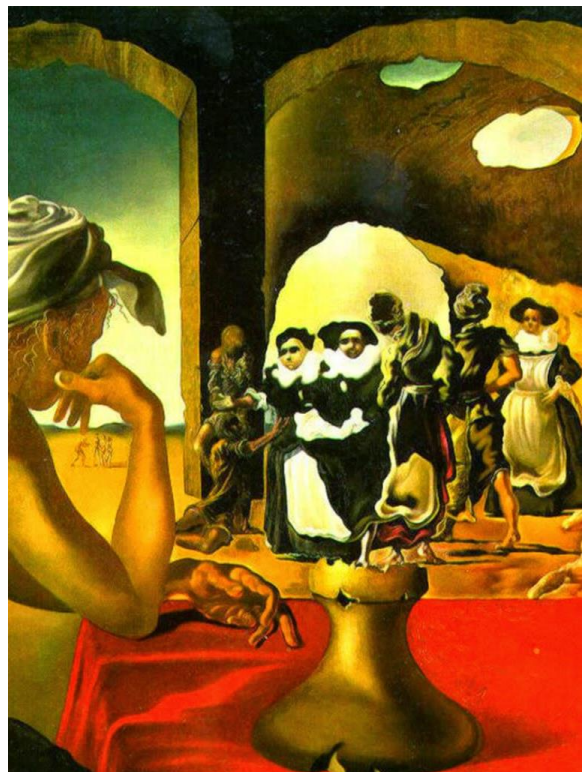
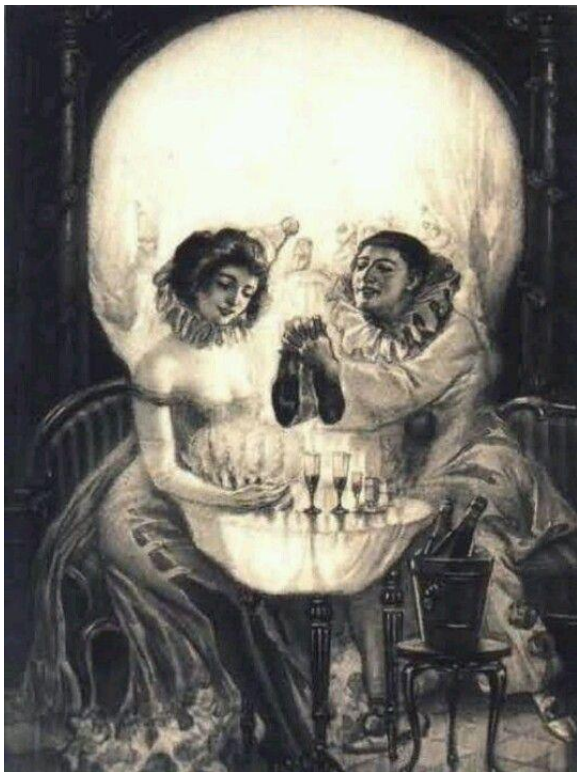
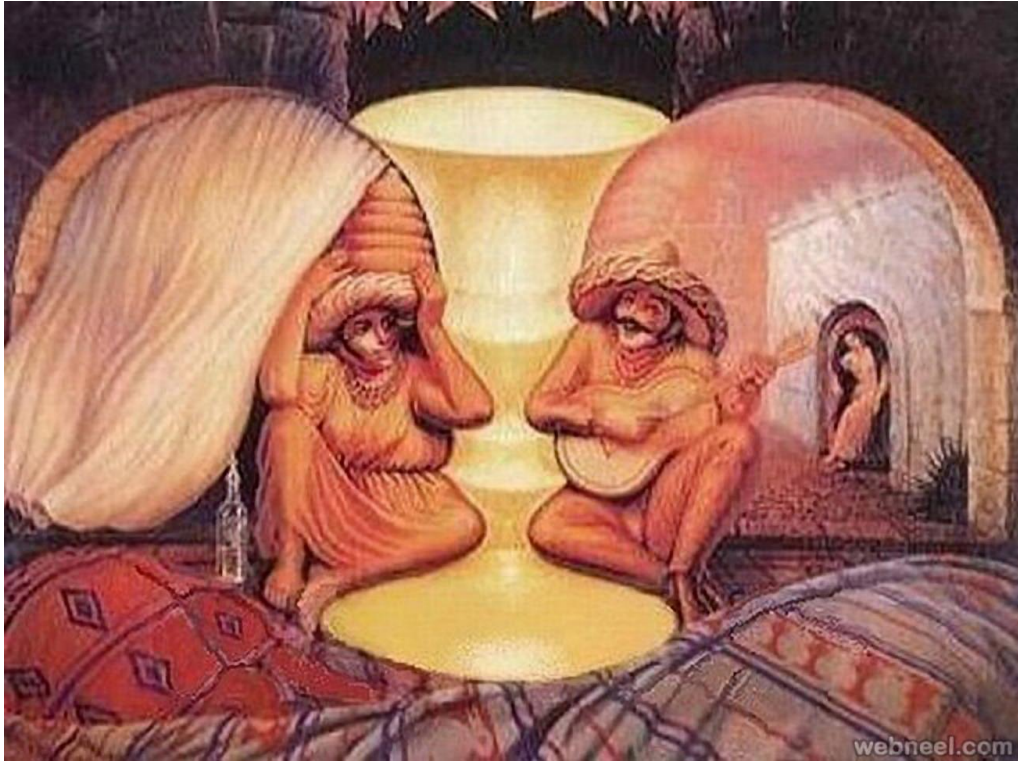


Salvador Dali is an artist who  
paints dream-like pictures that  
look real, but strange. This kind  
of art is called **SURREALISM**.



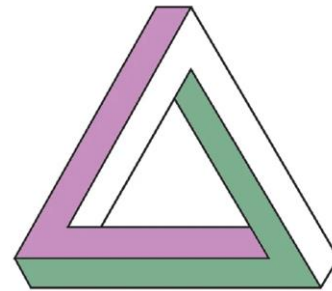
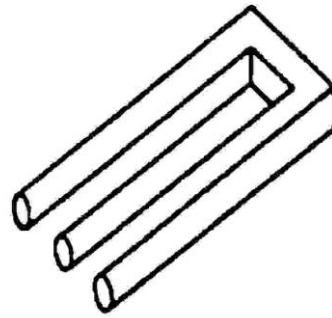
Here's a picture he made of himself that looks  
like a woman reading a book in a restaurant.

Here are some other paintings by Dali that have hidden images. Can you see them?



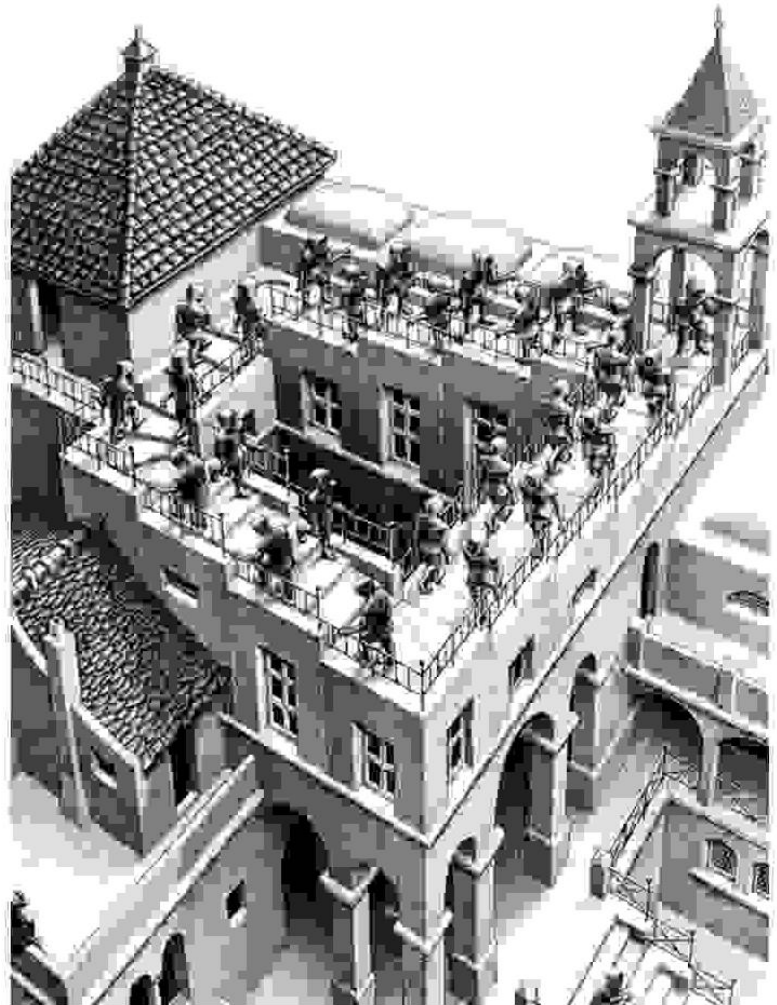
**Another Surrealist artist is M.C. Escher. He likes to make images of things that are impossible to exist in the real world.**

**These objects look like you could hold them in your hand, but they just don't look right.**



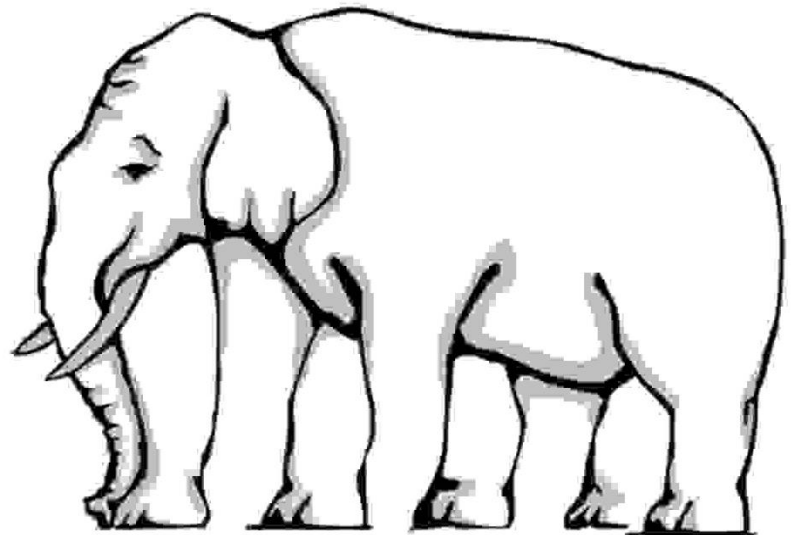
**He uses these tricks to create images of things that look like they are real, but just do not make sense.**

**Look at these men walking up and down this staircase. Follow one of them and you'll see that he keeps going up and up even though he's walking to the same place he started from. How can this be?**



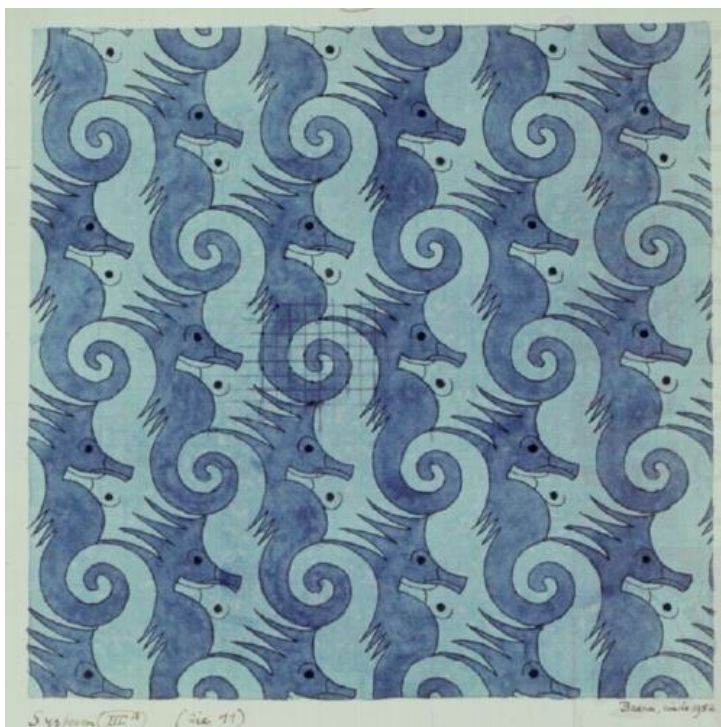
How many legs does an elephant have?

This one has 5!



M.C. Escher also invented something called **TESSELLATIONS**. A tessellation is a pattern that repeats itself and that has no wasted space in between the images.

Some tessellations have the same image repeated, like these seahorses or lizards.



He makes other images that also have no wasted space, but do not repeat like tessellations.



Some images with no wasted space are a little trickier to see. Can you see the faces and the animals?



When you draw something on a flat surface that makes it look like it is 3-dimensional and real, it's called **PERSPECTIVE DRAWING**.

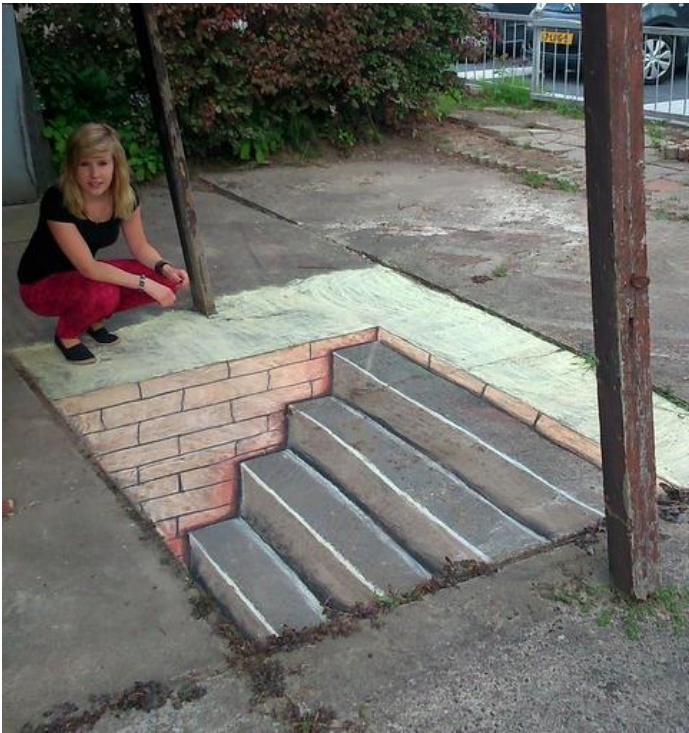
**Some artists work on the ground show off their work...**

**Chalk artists use the rules of perspective drawing to make sidewalks look like they have depth when you look at them from a certain point of view, or perspective.**

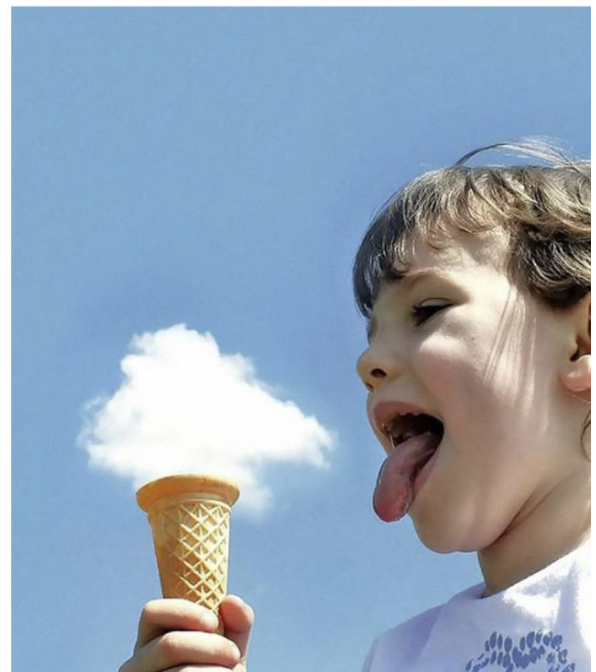


**Sometimes they take a picture of themselves on the drawing, so they look like they're part of the scene.**





These illusions are made from photos that are taken from a certain point of view. This is called **PHOTOGRAPHY FORCED PERSPECTIVE**.



Maybe you can discover other ways to trick your eyes into seeing things that really aren't there.

Maybe you can use a camera and make some yourself!