

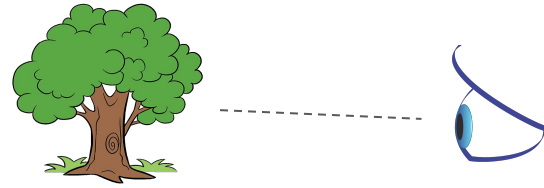
The World Arounds Us Student Material List

<u>Item</u>	<u>Quantity</u>	<u>Notes</u>
Pencils	3 (in case tips break)	Alt: 1 Pen Alt: 1 Pencil + Sharpener
Printer Paper (or lined paper, etc.)	5 sheets (NOT including handouts)	Alt: Notebook at least 7 blank pages Alt: Tablet with stylus Alt: Any other writing surface (i.e. whiteboard + markers)
(ALT for clay activity) Colored Pencils	At least 3 colors	<i>If students choose not to use clay for the modeling activity, they can instead use colored pencils to draw their design.</i>
Clay	2 or 3 packs (4 oz. packs)	<i>Color shouldn't matter, but having more clay or more colors can open up more creativity for students.</i> Alt: Playdough (3 standard size packs)
Laptop	1	Alt: Any electronic device that can easily allow for Google searches
Timer	1	Alt: Phone Timer Alt: Timer website



Seeing

When we open our eyes, information from the world around us is taken in through our eyes.

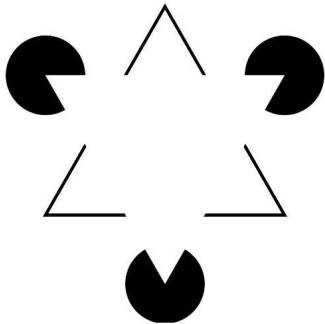


That information is then taken to the brain where it is received and processed. This is what we call “seeing”.



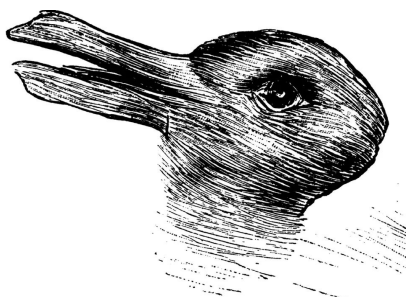
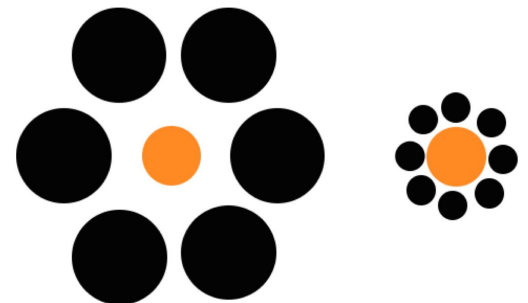
Optical Illusions

We don't always see things the way they are. Sometimes our brains actually change the information we take in through our eyes. Here are some examples:



You probably see a triangle here, but it's actually not there at all! Sometimes, your brain expects to see certain things and fills out information that's not even there.

The middle circle on the right looks bigger than the one of the left when they're the exact same size! Your brain can distort information based on surrounding context.



Do you see a rabbit? A duck? Based on past experiences and how your mind is right now, your brain can make you see an object in different ways.



Crafting from Multiple Perspectives

You already learned that an object can be seen in different ways. Now it's your turn!

Your task: Use clay or playdough to design a model that can be seen in two or more ways. Here are some ideas:

- A house that looks like a candy gnome when looking from the side
- A rabbit that can also be seen as a duck if you think of the rabbit ears as a beak (from optical illusion)
- A person standing on a boat that looks like an umbrella when you turn it upside down

You can use these examples, but it's more exciting if you come up with your OWN ideas!



*Alternate task: If you don't want to use clay or play dough, you can instead use color pencils and crayons to draw out your creation on paper!



How Good is Your Memory?

Let's put your memory to the test! For the online face memorizing game, play it 5 times and record your scores in the table below! Then, ask someone else (family member/friend) to try a few times. Who can memorize faces better?

Your scores:

Trial	Score (Out of 10)
1	
2	
3	
4	
5	

Other's scores:

Trial	Score (Out of 10)
1	
2	
3	
4	
5	



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Set your stopwatch for 2 minutes. After you start, write down as many words as you can from the list. Good luck!

This box is for List # 1:

This box is for List #2:



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Circle the words from below that were on the list you just memorized:

house pencil apple
shoe book flag
rock train ocean
hill music water
glass school

Now it's your turn to fool somebody else!

What is the theme of your list? _____

List to memorize:

List to recognize words from:



Biological Perspectives of Cognition

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So far we learned about:

- How humans see the outside world
- How our brain can change information we take in from the eyes
- How attention is selective and limited
- How memory can be affected in different ways

Some animals share traits like humans, while other animals are completely different. It's now your turn to explore the animal kingdom!

Animal	Trait (Memory/Perception /Attention)	Description of trait/technique
Birds	Memory	Birds need to migrate in order to avoid the cold. They need to memorize the path to take in order to find the right place to go to.



Moving Forward

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Most interesting things I learned today:

Ways I'm going to use what I learned in the future:
