



# The Brain level 3

Rida

Day 16

## Dua after eating

الْحَمْدُ لِلَّهِ الَّذِي أَطْعَمَنِي هَذَا وَرَزَقَنِيهِ مِنْ غَيْرِ حَوْلٍ مِنِّي وَلَا قُوَّةٍ



### What it means:

All praise is for Allah who fed me this and provided it for me without any might nor power from myself.

### Transliteration:

alhamdu lillaahil-ladhee  
at'amanee haadhaa wa  
razaqaneehi min ghayri  
hawlin minnee wa laa  
quwwah

Abu Dawud, At-Tirmithi & Ibn Majah

### Kids:

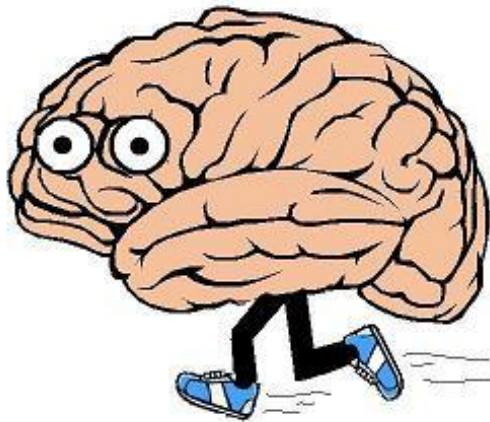
Say this to tell Allah how happy you were with all your yummy food!

### Mum and Dad:

This is a really amazing way to end a meal. Did you know that the Hadith says Whoever says this supplication, his sins shall be forgiven as mentioned in the hadith.



# Questions?



What is the most important part of your body?

**Your Brain!**



# Cells

**Q:** What is a cell?

**A:** Building blocks to our body

The human brain is made of specialized cells called neurons

**Q:** Guess how many neuron cells there are in our brain?

**A:** 100 billion neurons

# The Neuron

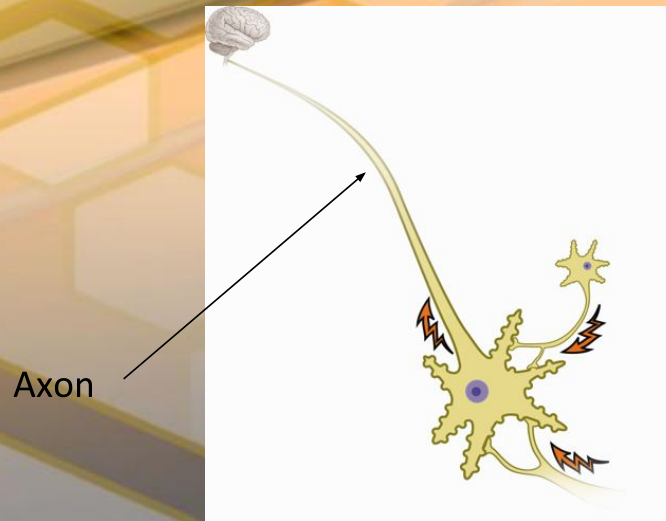
The brain is like a big message center !

- Messages are sent and received in the brain all the time
- Neurons send and receive messages telling us how we think, move, and feel
- Neurons **DO NOT** grow back if they are injured



# The Neuron

Neurons are different from other cells in our body because they have specialized branches



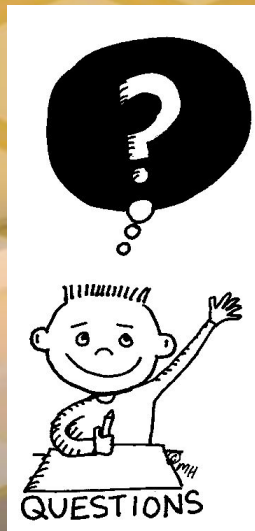
**Axon:** Sends messages to other neurons

# Anatomy





# The Brain



**Q:** Why is the brain so important?

**A:** It controls our ability to think, move, see, hear, taste, and smell.

**Q:** How much do you think your brain weighs?

**A:** 2 ½ to 3 lbs

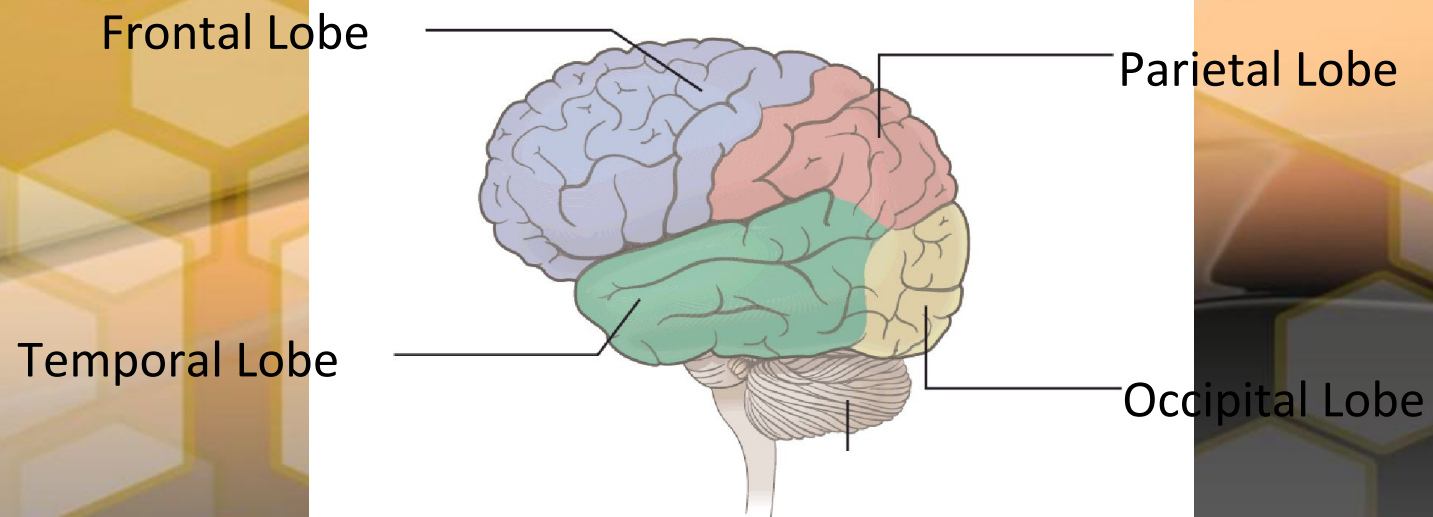


# The Lobes of the Brain

The brain has 4 important lobes:

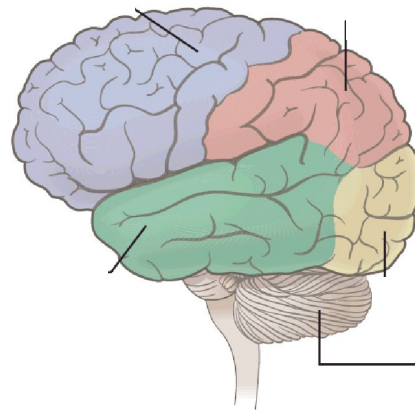
- Frontal Lobe
- Parietal Lobe
- Temporal Lobe
- Occipital Lobe

# The Lobes



# Cerebellum

- An important part of the brain but not one of the lobes.



Cerebellum

# Question

**Q:** What happens when we damage our lobes?

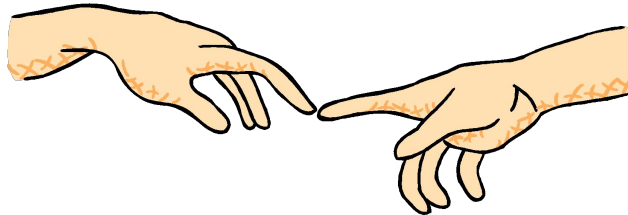
**A:** Life would just not be the same!





# Five Senses

- Vision
- Touch
- Smell
- Taste
- Hearing



The background features a honeycomb pattern in shades of yellow, orange, and grey. A faint, semi-transparent image of a hand holding a pen is visible in the upper right quadrant.

Before we go any further lets  
take a look at the ayah's in the  
Quran that mention some of  
our 5 sense

# Sense of Hearing, sight and feeling

- Chapter (32) sūrat l-sajdah (The Prostration)

ثُمَّ سَوَّاهُ وَنَفَخَ فِيهِ مِنْ رُوحِهِ ۖ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ ۚ قَلِيلًا مَّا تَشْكُرُونَ ﴿٩﴾

- The Qur'an explains it thus: “And He gave you (the faculties of) hearing and sight and feeling (and understanding).” [Al-Qur'an 32:9]

- Surah Al-Mu'minun [23:78]

- وَهُوَ الَّذِي أَنْشَأَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ قَلِيلًا مَّا تَشْكُرُونَ

- “It is He Who has created for you (the faculties of) hearing, sight, feeling and understanding: little thanks it is ye give!” [Al-Qur'an 23:78]



## In terms of Sight

- When it comes to sight the Quran speaks many times of the truth in front us
- Allah (swt) tells us to look at the signs he has given us of him
- Someone people see those signs and yet still don't believe in Allah
- Those people are referred to as blind, not physically but spiritually (Now only Allah knows who is truly blind or not , so don't go around calling people blind)
- In Surah Rahman we are reminded of the signs of Allah , let's take a look at the video.

# Surah Rahman youtube

- <https://www.youtube.com/watch?v=JITIXPEKE4Y>
- If no wifi ask Shahab to sign in using his school login

# Pain

- See pdf

## Short Biography: Wernher Von Braun

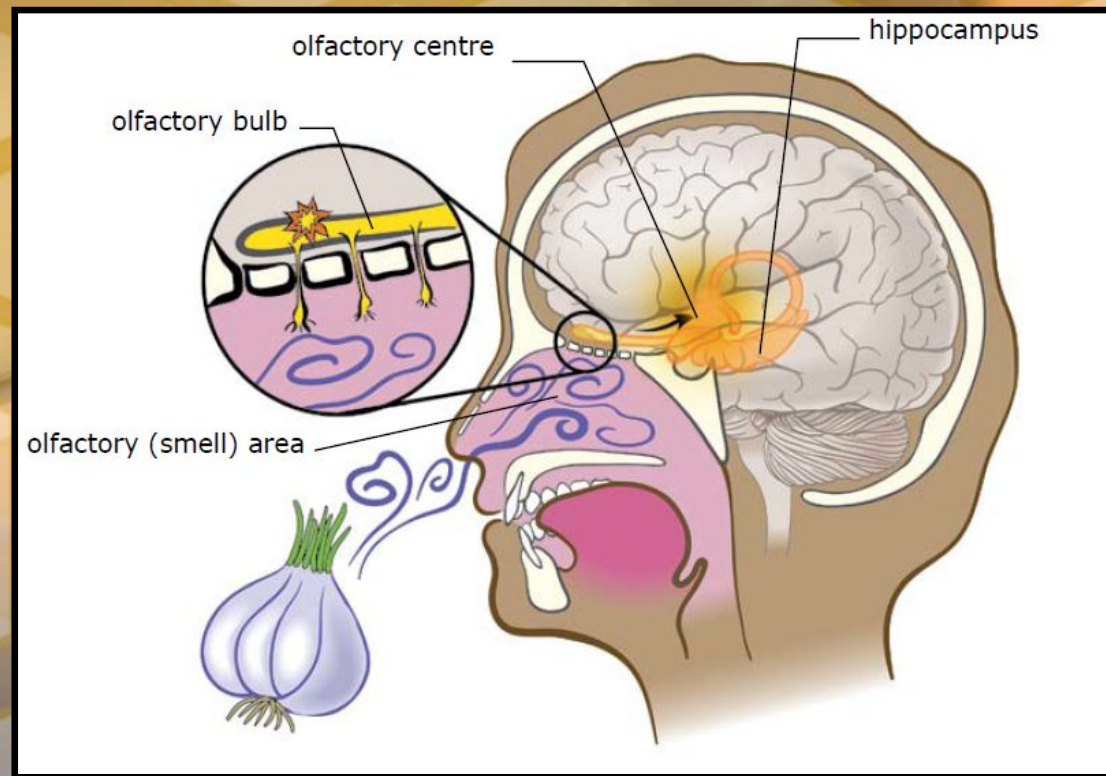




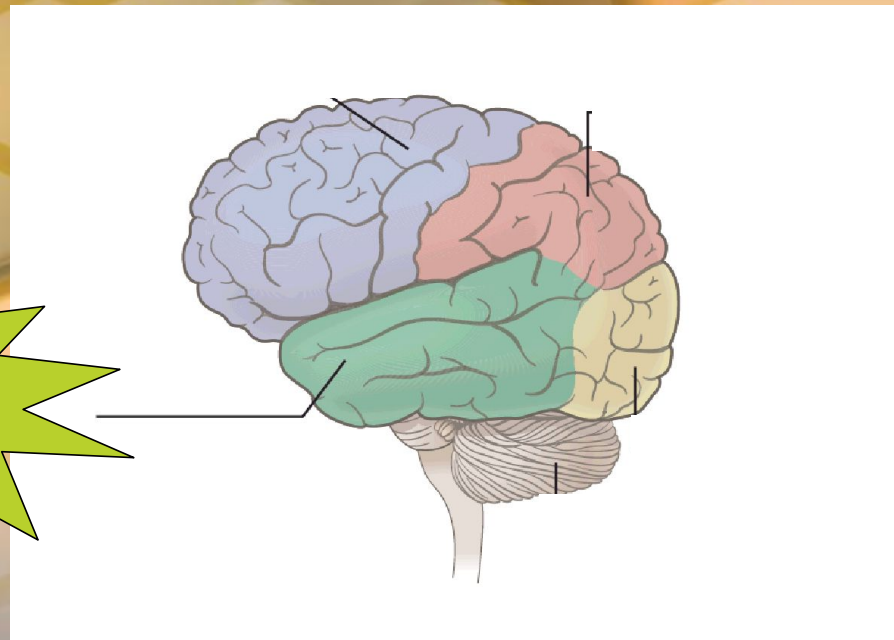
# Smell



# Q: How does the nose work?



Q: Which lobe controls smell?



# Smell

Q: Can you think of a smell that reminds you of something?





# Anosmia

- **Q:** What smell would you miss if you could not smell?
- **Q:** Why is smell important?
- **Q:** What situations would be dangerous if you could not smell?

# Taste



# Question

- **Q:** Has anyone noticed that if you are sick with a cold that your food doesn't taste as good?



- **Q:** Does anyone know why that is?  
**A:** Smell and taste work together

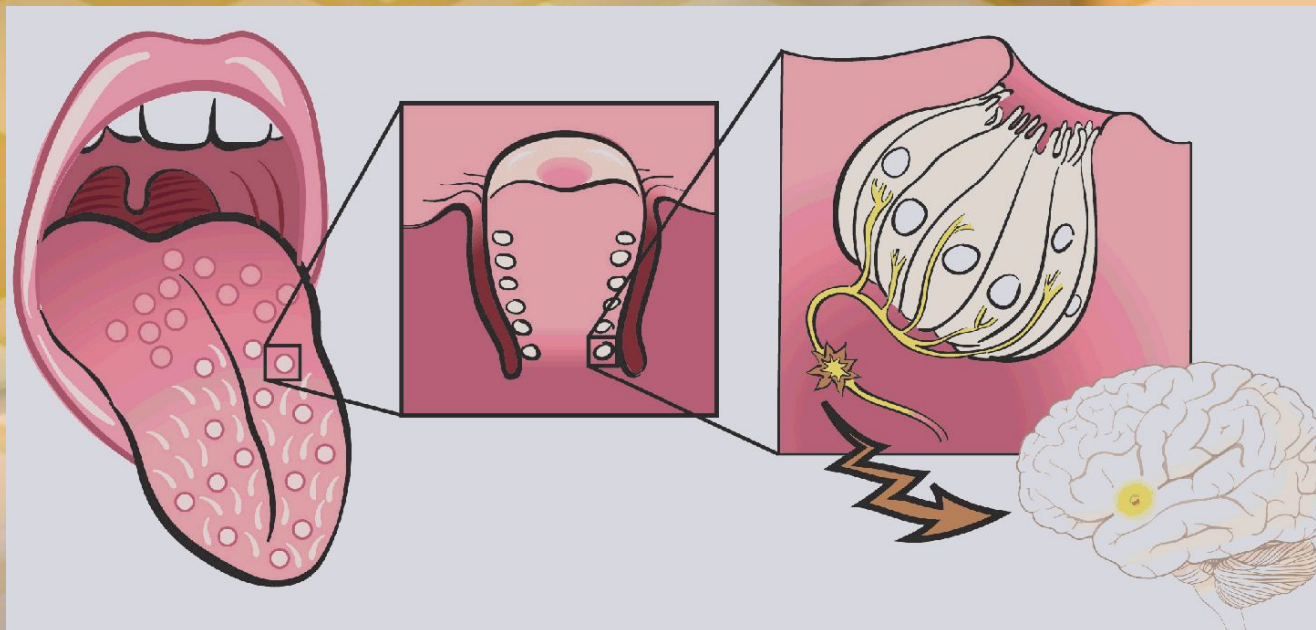
# What do you see?

- **Stick out your tongue!**

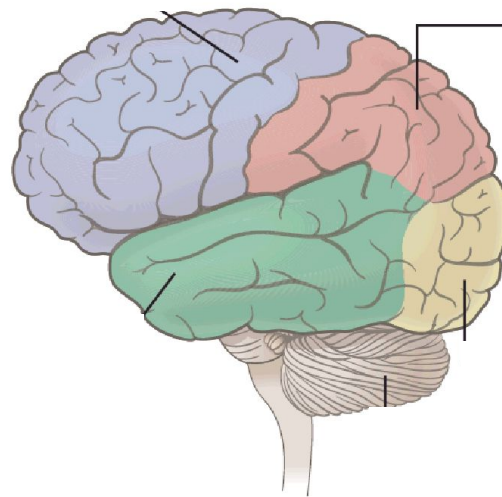




# The Tongue



Q: Which lobe controls your taste?



Parietal lobe

Q: What are the four types of taste?

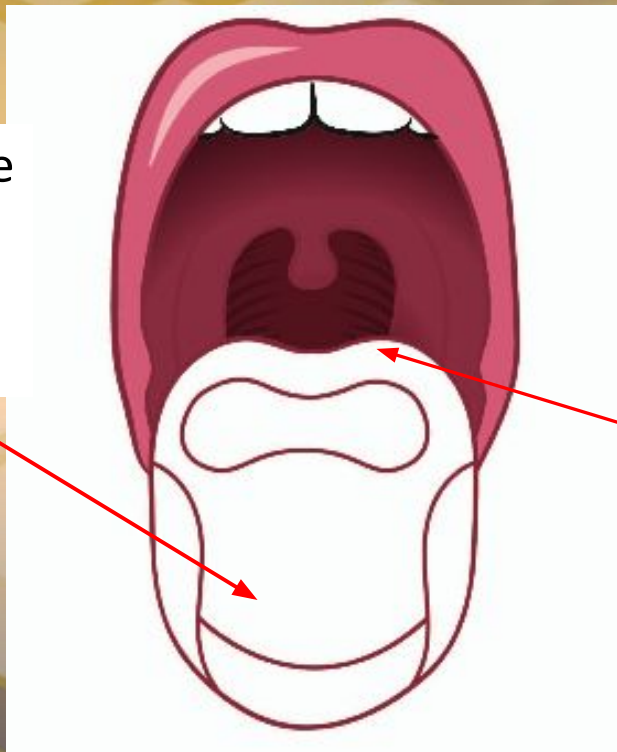


Bitter  
Sweet  
Sour  
Salty



# Taste Buds

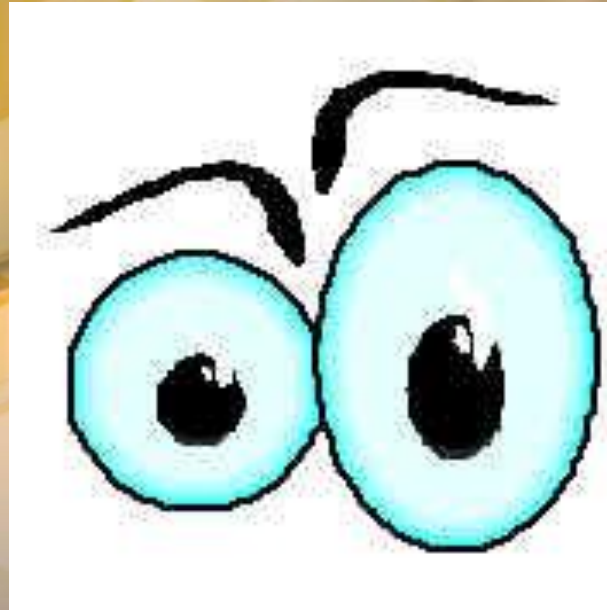
There are more  
taste buds at  
the front of  
your tongue



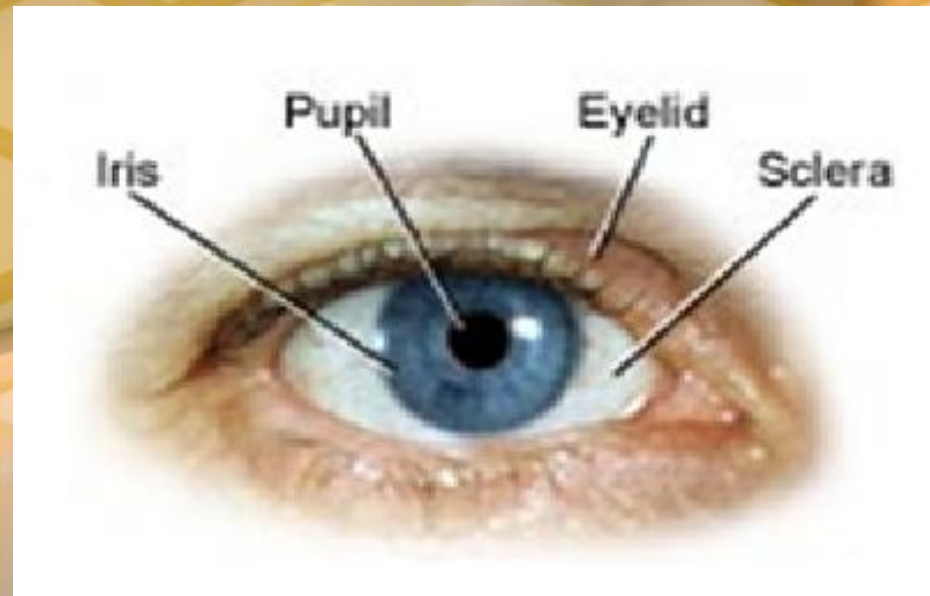
There are less  
taste buds  
here



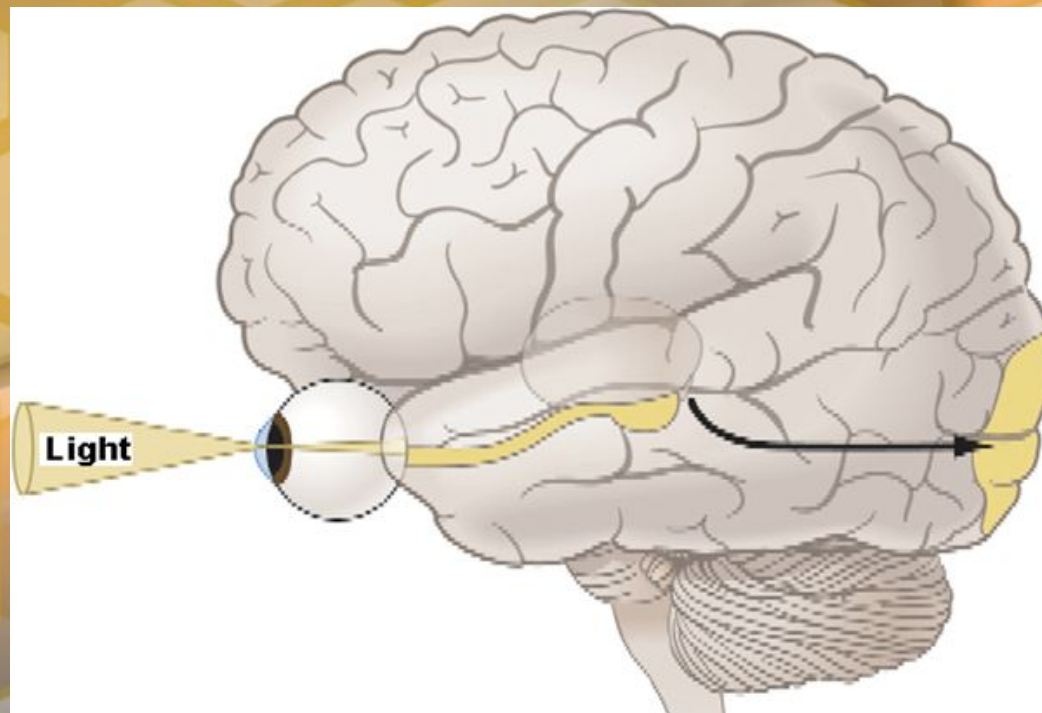
# Vision



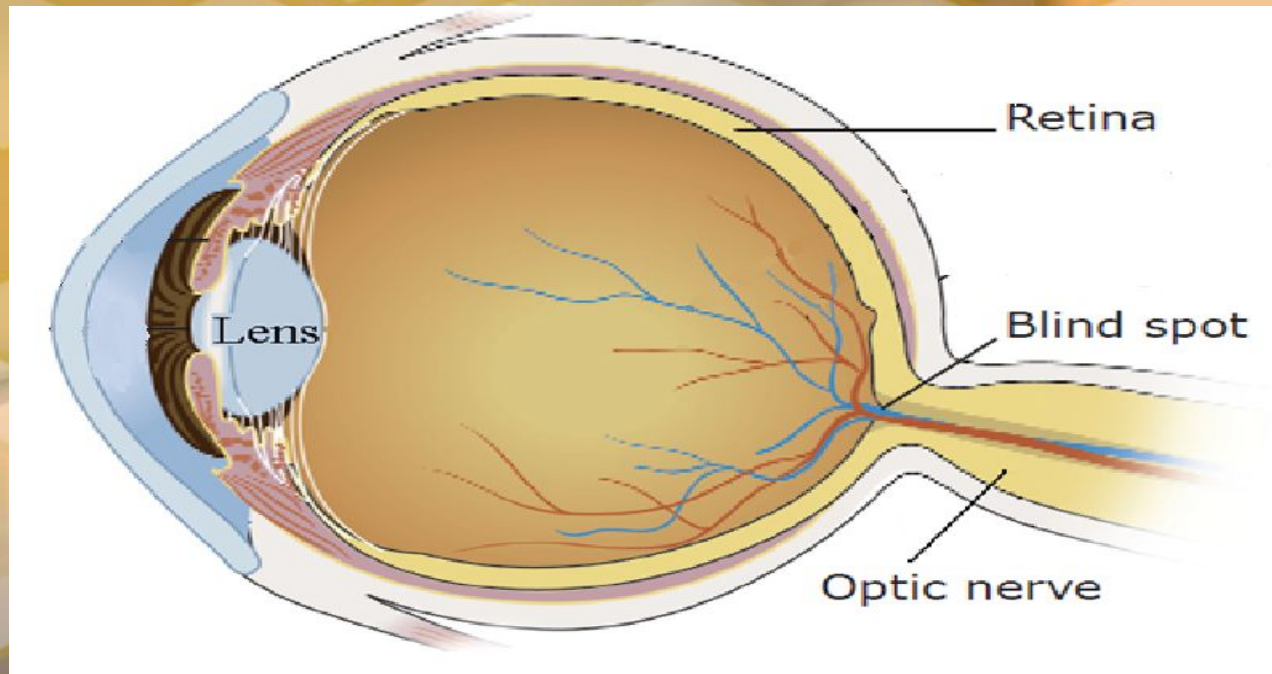
# Anatomy of the Eye



# The Visual Pathway

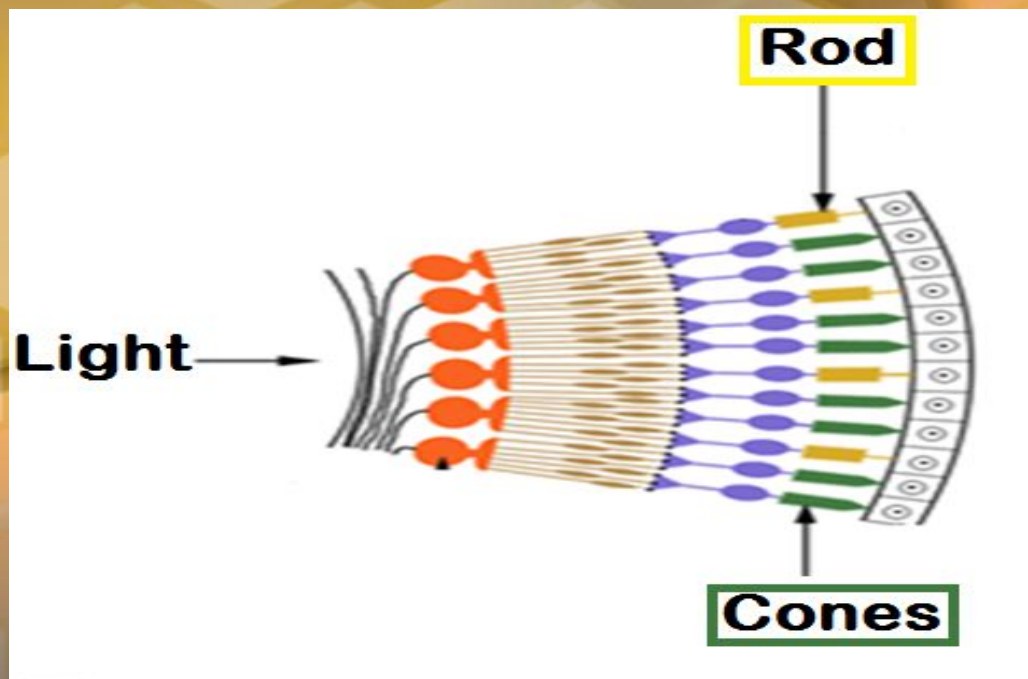


# Vision

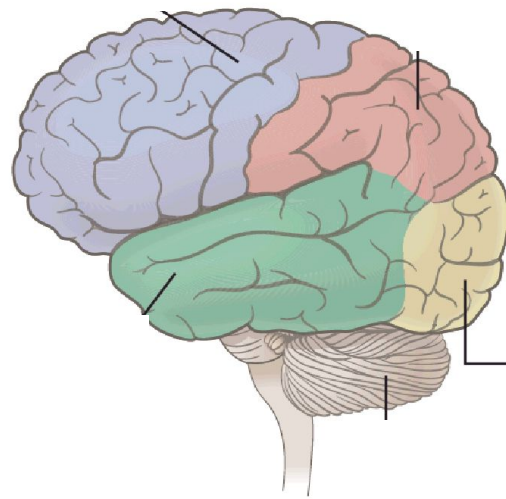




# Rods & Cones

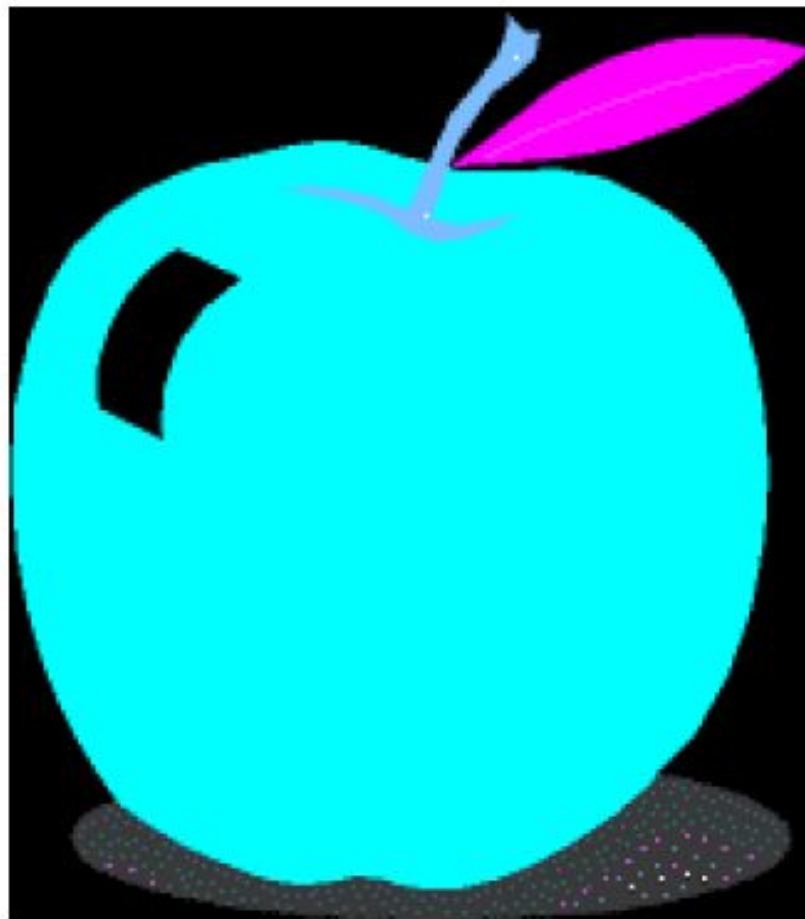


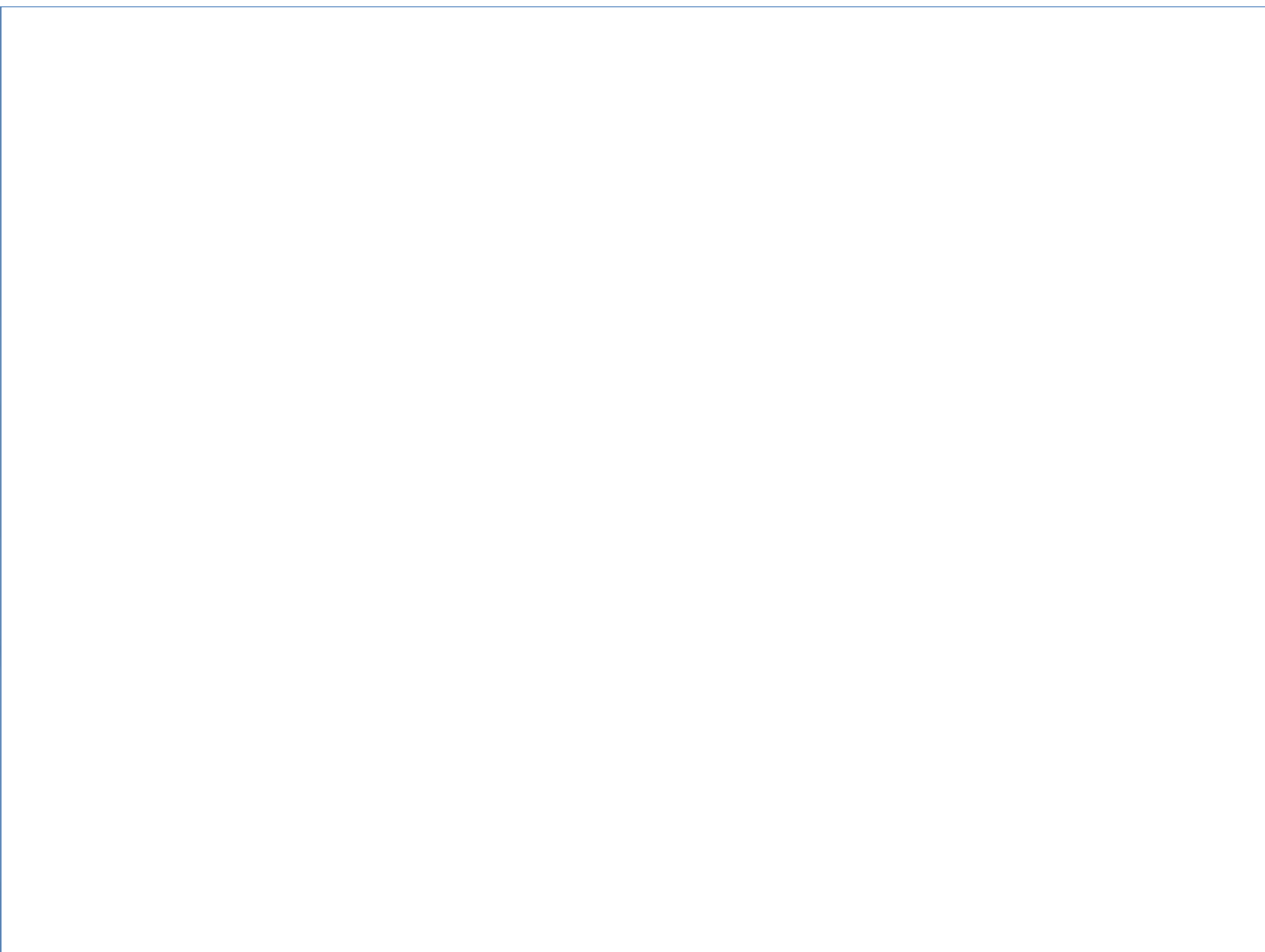
Q: Which lobe controls the vision?



Occipital Lobe

# Colour Afterimage

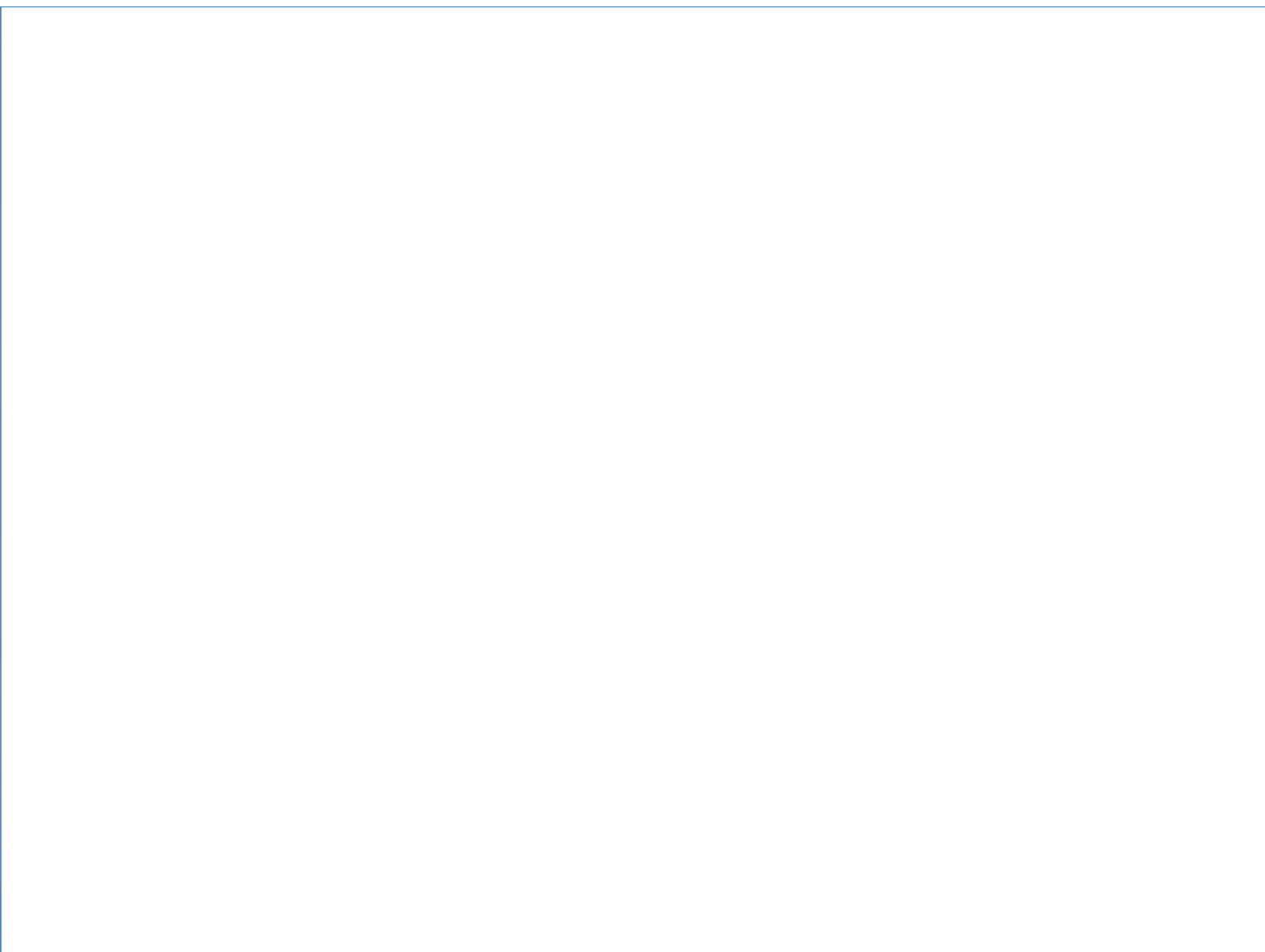




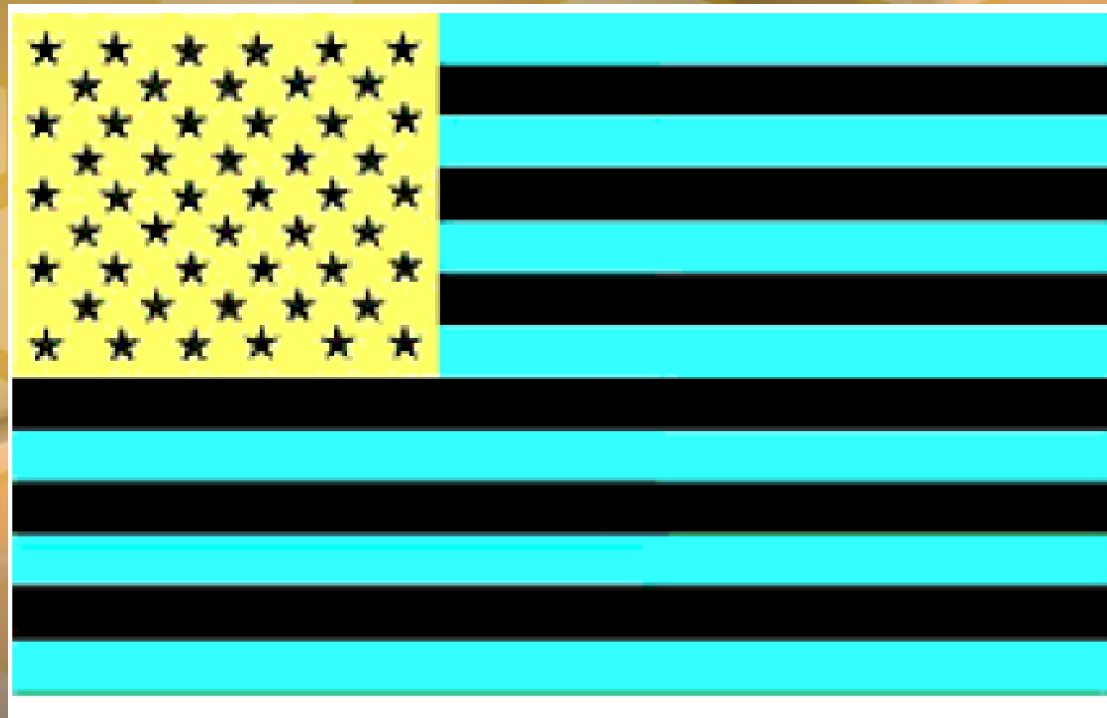


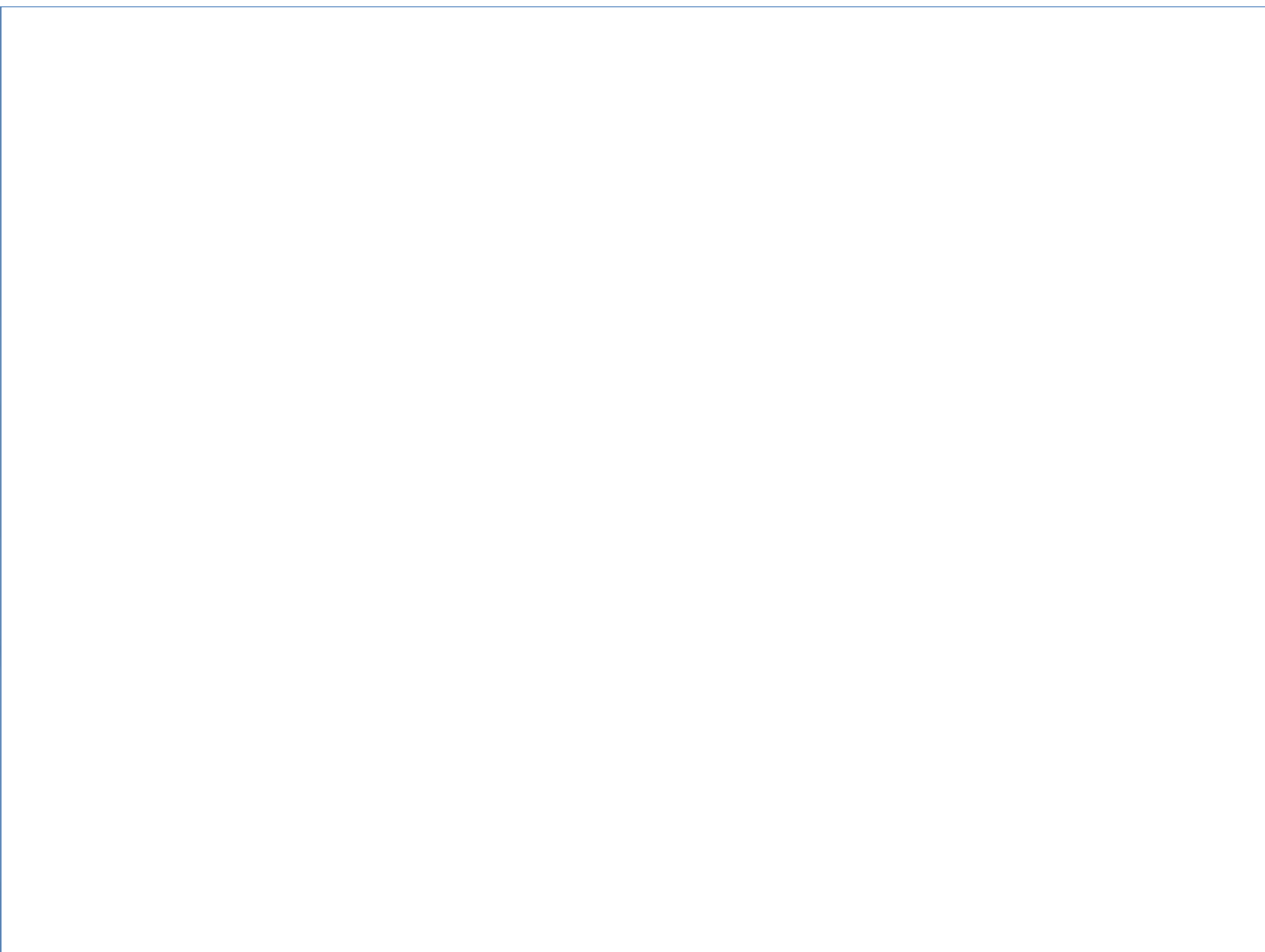
# Colour Afterimage





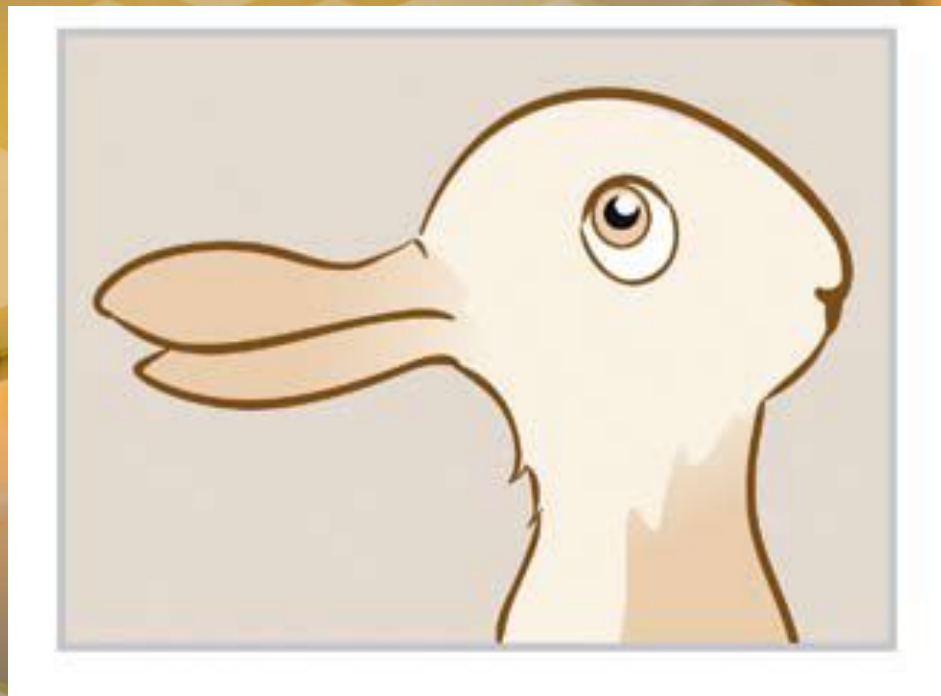
# Colour Afterimage



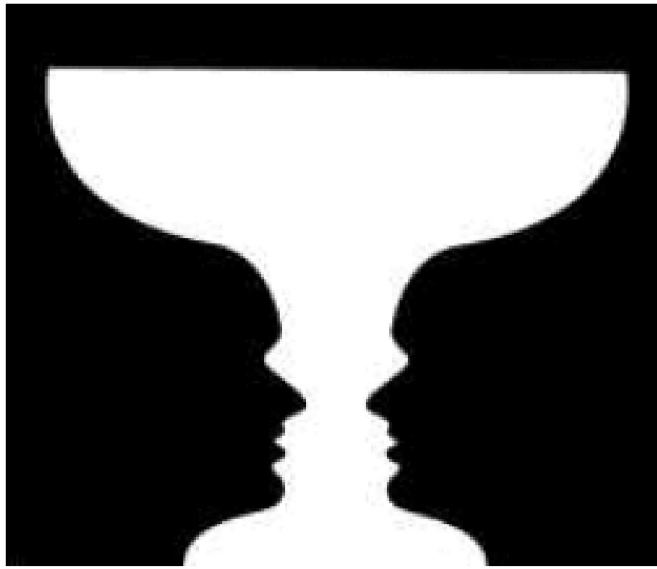




# Reversible Figure Illusions



# Reversible Figure Illusions





# Hearing



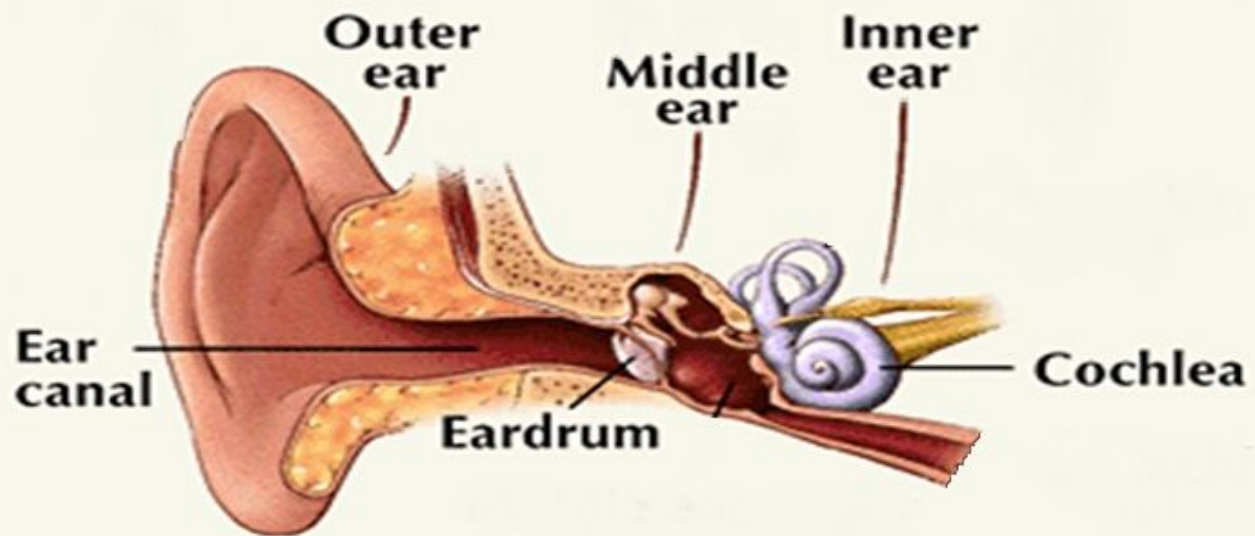


# Q: Why Do you Need your Hearing?

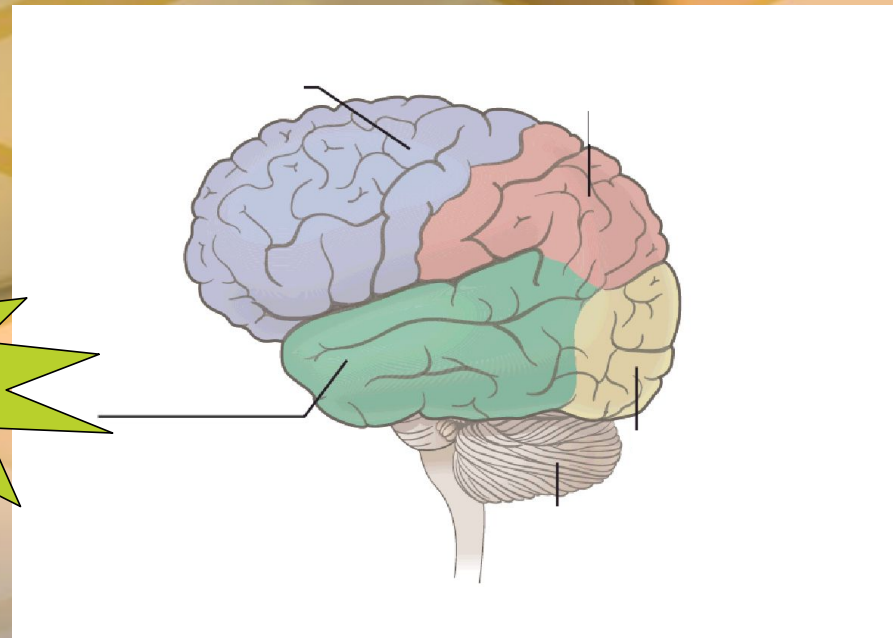
- Communication
- Listen for danger
- Be aware of your surroundings
- Enjoyment (for example music)aa



## Three parts to the ear



Q: Which lobe controls your hearing?



# Sense of touch





# Q: Why Is Touch Important?



**Comfort**

**Detect Danger**

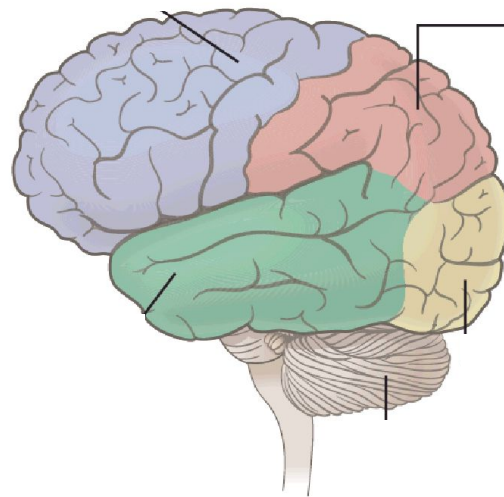
**Personal Contact**



Q: What are four types of Touch?

- Pain
- Temperature
- Pressure
- Vibration

Q: Which lobe controls touch?

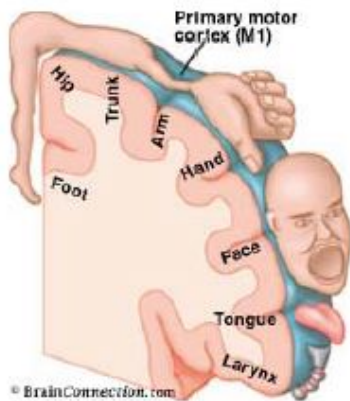


Parietal lobe

# Homunculus

**Q:** What body part has the most sensory receptors?

**A:** Hands, tongue and lips



**The bigger the body part on Homunculus, the more you will feel on that body part**





# Concussions

- What is a *concussion*?

**CONCUSSION = A type of Brain Injury!**

Any blow to head, face, neck or body, which causes sudden jarring of the brain inside the skull may cause a concussion.a=

# Concussion Symptoms

PHYSICAL	COGNITIVE (THINKING)	EMOTIONAL
Loss of consciousness (Blanking out for a moment)	General confusion (Being Confused)	"I don't feel like myself"
Headache		
Nausea or vomiting (Throwing up or feeling like throwing up)	Difficulty remembering (Can't remember as well as before)	Sadness
"Pressure in the head"		
Dizziness	Difficulty concentrating (Find it hard to focus/concentrate)	Moody, grumpy (irritable)
Low energy (Tired)		
Sensitivity to light or noise (Lights or noise bother me)	Feeling like "in a fog"	Nervous or anxious

**S-T-A-R**

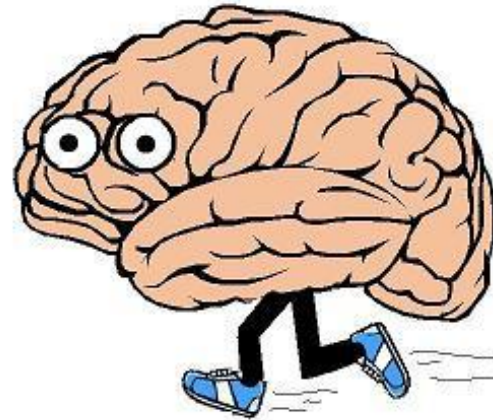
**S**top Playing!  
**T**ell an adult,  
Get **A**ssessed, and  
**R**est!



# Summary

Q: Why is it important to protect our brain?

- S m e l l
- T a s t e
- V i s i o n
- H e a r i n g
- T o u c h







Alhumdulillah for all our  
senses we cannot live  
without

# How do we protect our Brain?



# 2-V-1 Rule



# Questions

Q: Should you wear a helmet over a baseball hat or ponytail?

