

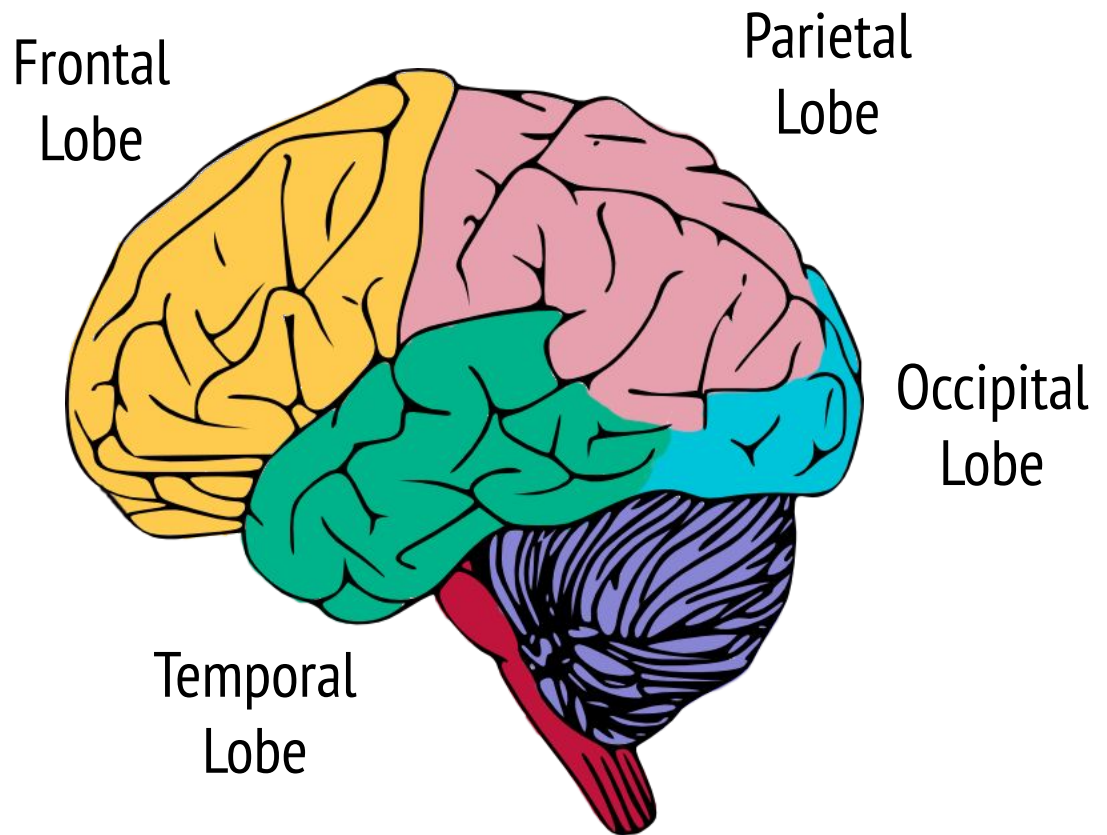
LESSON 4



LET'S TALK ABOUT SMELL & TASTE

WHAT DID WE LEARN LAST TIME?

WE LEARNED
ABOUT THE 4
LOBES OF OUR
BRAIN & THEIR
IMPORTANT
JOBS!



FILL IN THE BLANK!

FRONTAL, PARIETAL, TEMPORAL, OR OCCIPITAL

THE _____ LOBE HELPS US HEAR SOUNDS.



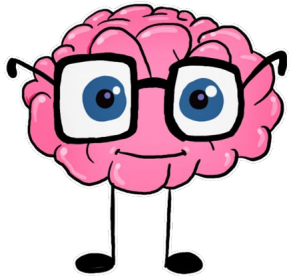
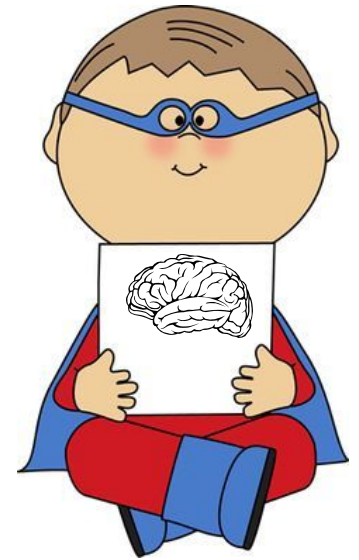
THE _____ LOBE HELPS US FIGURE OUT HOW OUR BODY IS POSITIONED.



FILL IN THE BLANK!

FRONTAL, PARIETAL, TEMPORAL, OR OCCIPITAL

OUR _____ LOBE IS LIKE A SUPERHERO
BECAUSE IT HELPS US SOLVE PROBLEMS &
MAKE DECISIONS.



OUR _____ LOBE HELPS US WITH VISION.

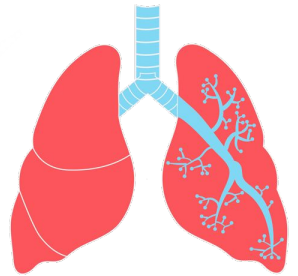
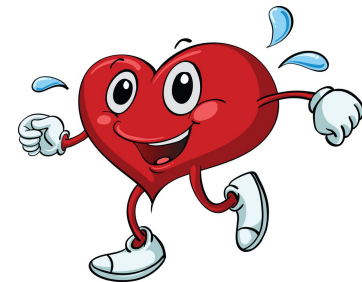
WHAT DID WE LEARN LAST TIME?

WE ALSO LEARNED THAT.....

THE **CEREBELLUM** CONTROLS OUR BALANCE & COORDINATION.



THE **BRAIN STEM** WORKS TO CONTROL OUR HEART RATE & BREATHING.



TODAY WE ARE GOING TO LEARN ABOUT:

OUR ABILITY TO
TASTE AND
SMELL THINGS!



HOW DO WE SMELL THINGS?

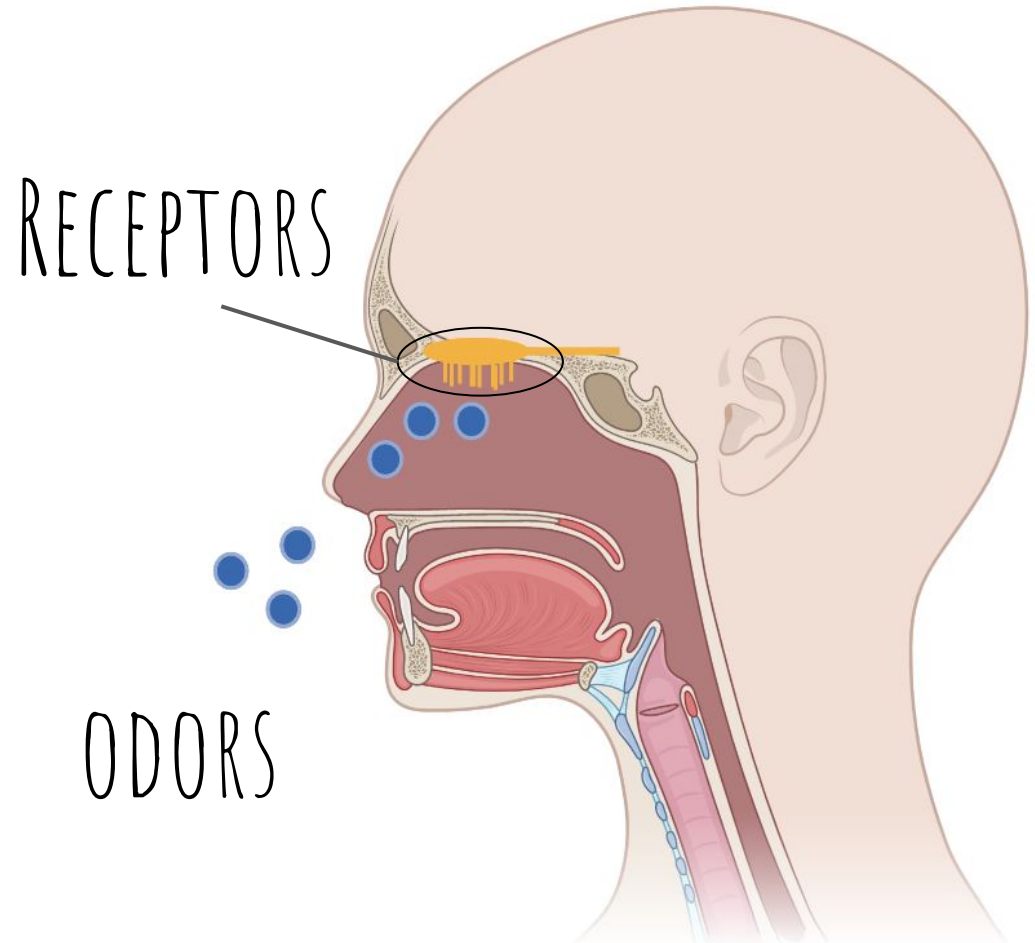
WE SMELL THINGS WITH OUR **NOSE!**

"ODORS" (OR SMELLS) ARE
CONSTANTLY FLOATING AROUND
IN THE AIR THAT WE BREATHE!



HOW DO WE SMELL THINGS?

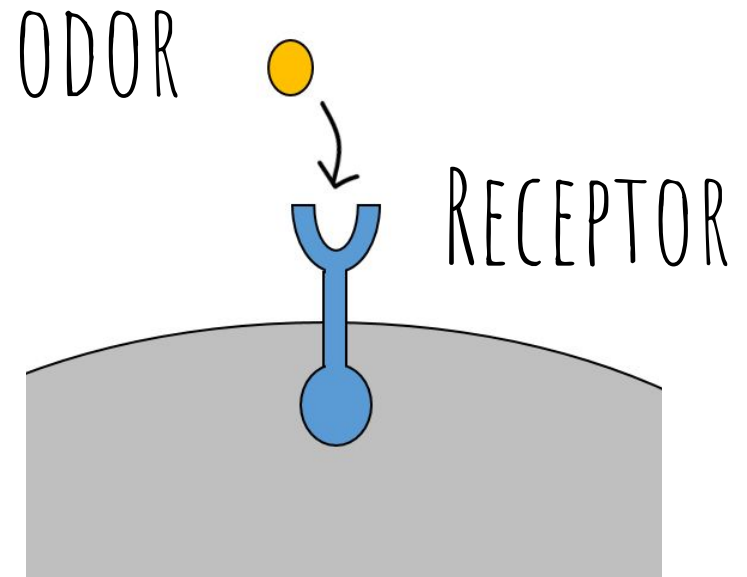
“RECEPTORS” IN
OUR NOSE RECEIVE
OR CATCH ODORS
(SMELLS) THAT ARE
IN THE AIR.



THINK OF RECEPTORS LIKE BASEBALL MITTS



JUST LIKE A BASEBALL MITT
CATCHES A FLY BALL...



A **RECEPTOR** CATCHES
AN **ODOR**.

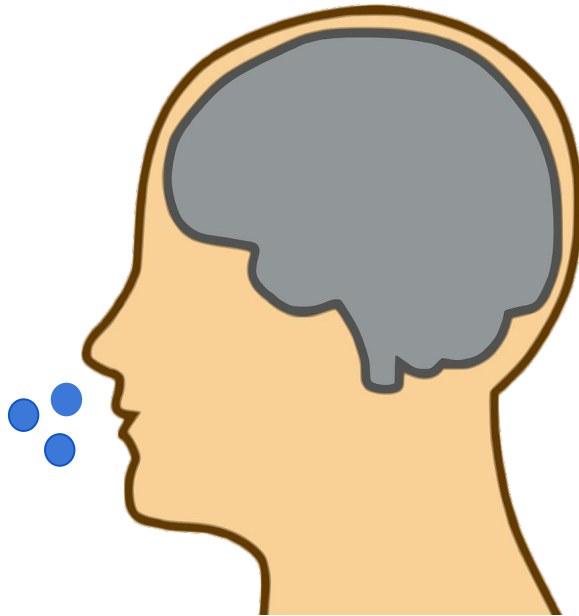
WHAT'S NEXT?

THE RECEPTORS SEND
A SIGNAL (MESSAGE)
TO OUR BRAIN
THROUGH A CHAIN OF
NEURONS.

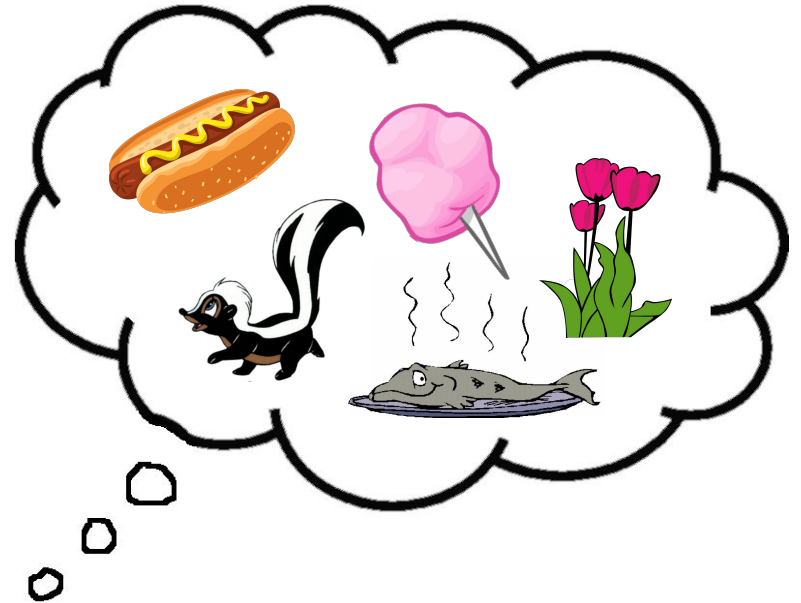


WHAT'S NEXT?

THEN, OUR BRAIN
INTERPRETS THE MESSAGE.



DOES THIS SMELL GOOD?



HAVE I SMELT THIS
BEFORE?

OUR SENSE OF SMELL IS VERY IMPORTANT!

SMELLS CAN TELL US
WHAT TO **APPROACH**...



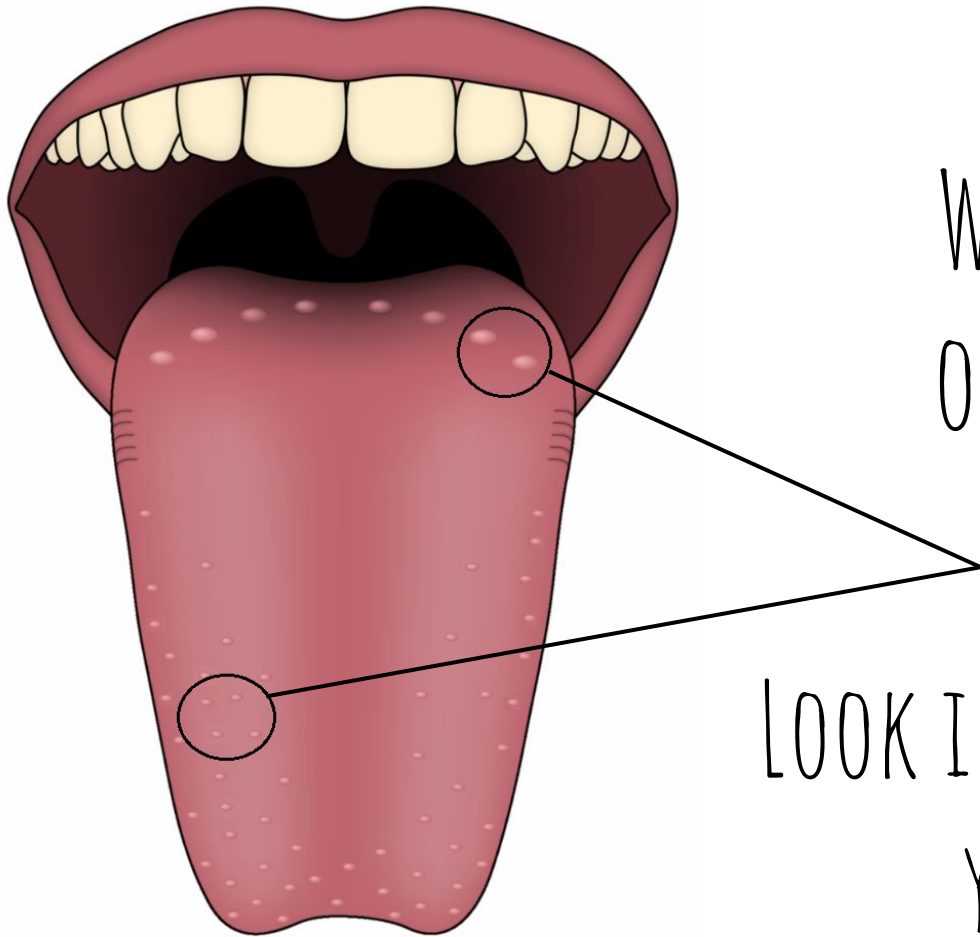
...& WHAT TO **AVOID!**



HOW DO WE TASTE THINGS?

OUR **TONGUE!**

WE HAVE BUMPS ON
OUR TONGUE CALLED
"PAPILLAE"

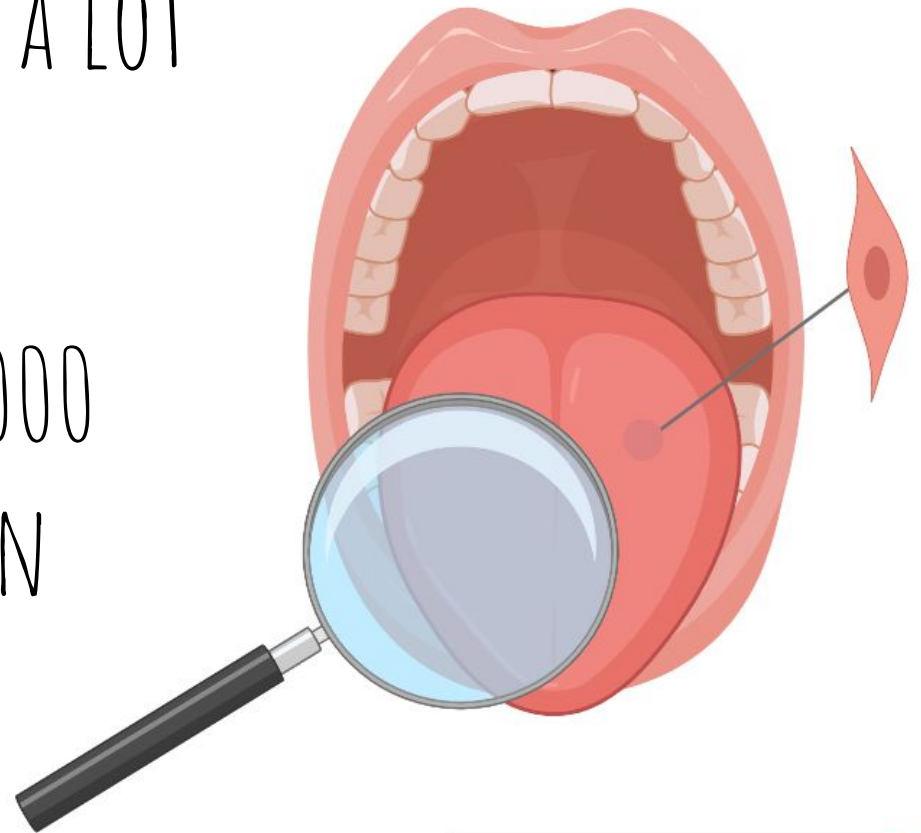


LOOK IN THE MIRROR - CAN
YOU SEE YOURS?

HOW DO WE TASTE THINGS?

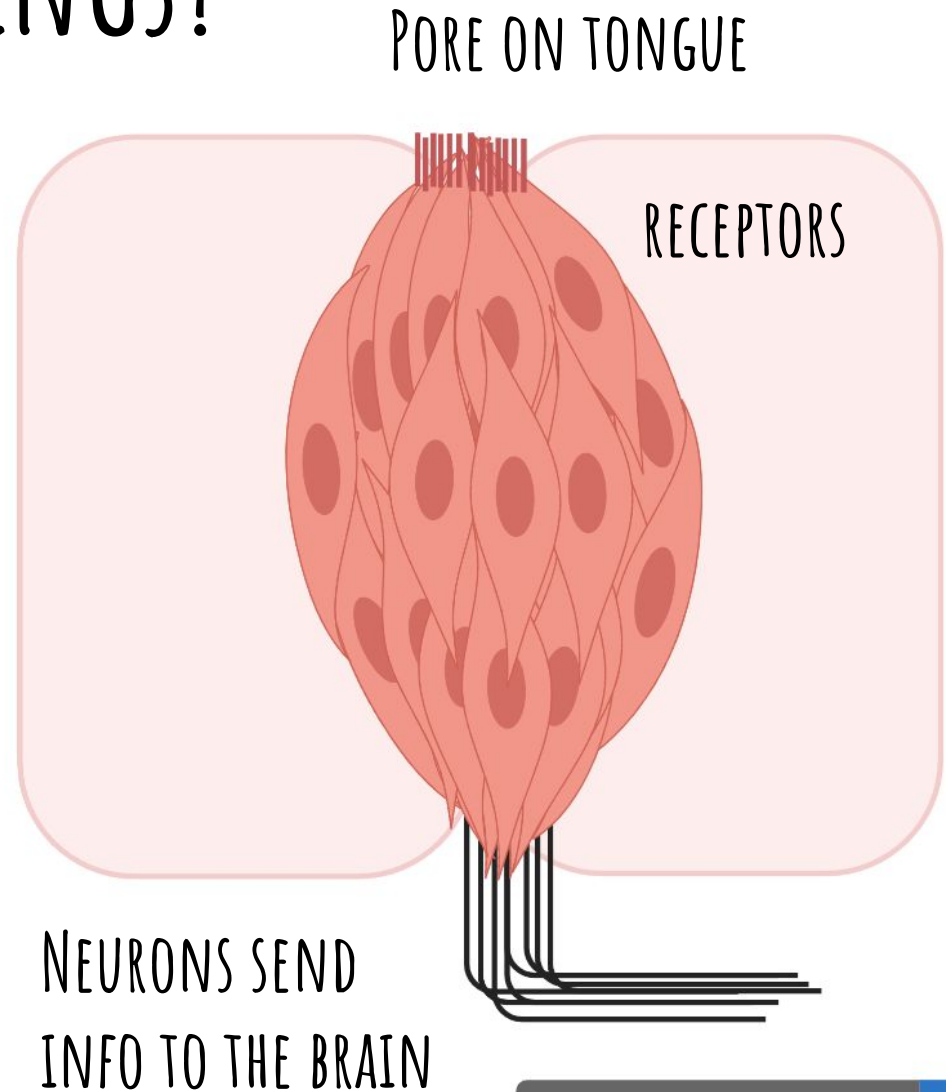
OUR PAPILLAE CONTAIN A LOT
OF TASTE BUDS.

OVERALL, WE HAVE ~2,000
- 4,000 TASTE BUDS ON
OUR TONGUE!



HOW DO WE TASTE THINGS?

OUR **TASTE BUDS** HAVE **RECEPTORS** THAT SEND MESSAGES TO THE BRAIN ABOUT WHAT WE TASTE THROUGH **NEURONS**.



DIFFERENT TYPES OF TASTE

OUR TASTE BUDS CAN PICK UP ON **FIVE** DIFFERENT TYPES OF TASTE.

CAN YOU NAME ALL FIVE?



WHAT TYPES OF TASTE ARE THERE?

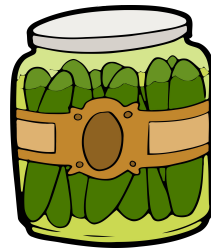
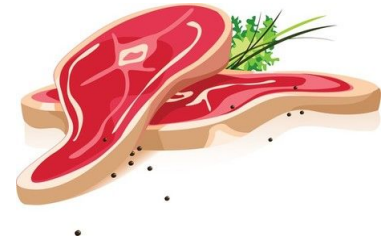
SWEET

SALTY

SOUR

BITTER

SAVORY



WHAT ARE YOUR FAVORITE FOODS?

WRITE THE NAMES OF YOUR FAVORITE FOODS
UNDER EACH CATEGORY!

SWEET

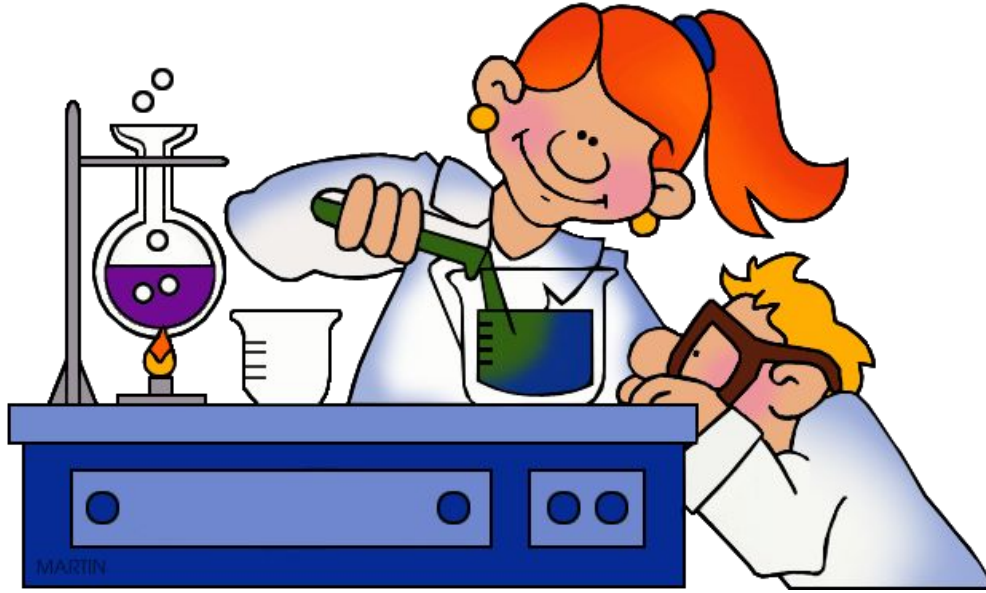
SALTY

SOUR

BITTER

SAVORY

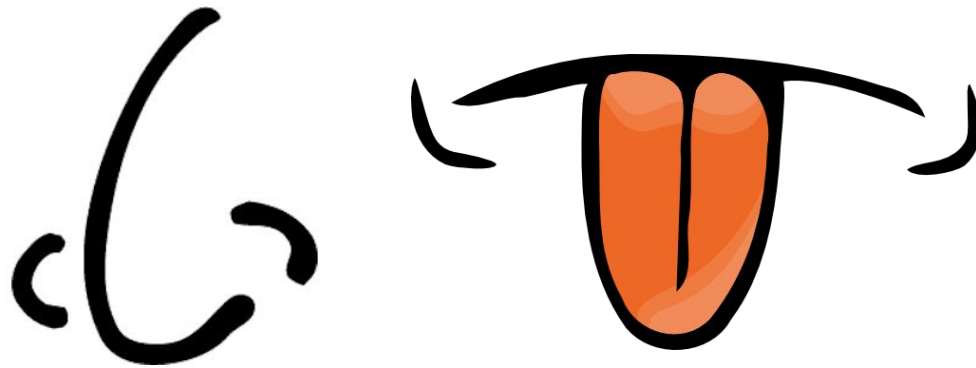
LET'S DO AN EXPERIMENT!



AN **EXPERIMENT** IS WHEN WE DO A TEST TO
ANSWER A QUESTION.

OUR QUESTION TODAY:

DO THE NOSE & TONGUE WORK TOGETHER TO HELP
US TASTE FLAVORS?



TASTE EXPERIMENT

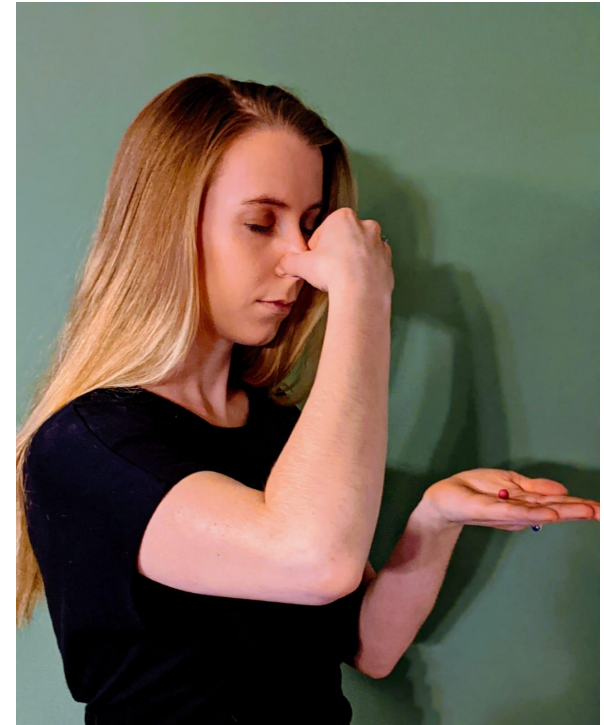
1. GET JELLY BEANS (OR ANY SWEET WITH A CONSISTENT SHAPE & A VARIETY OF FLAVORS, I.E. GUMMIES, SKITTLES, STARBURST).



TASTE EXPERIMENT

2. ONE PERSON CLOSES THEIR EYES AND PLUGS THEIR NOSE WHILE ANOTHER PERSON PLACES A JELLY BEAN IN THEIR FREE HAND.

3. THE PERSON WHO RECEIVED THE JELLY BEAN PUTS IT IN THEIR MOUTH AND CHEWS IT WHILE KEEPING THEIR NOSE PLUGGED.



TASTE EXPERIMENT

4. CAN YOU GUESS THE FLAVOR OF THE JELLY BEAN?!

COTTON CANDY

BLUEBERRY

ORANGE

GREEN APPLE

CHERRY ??

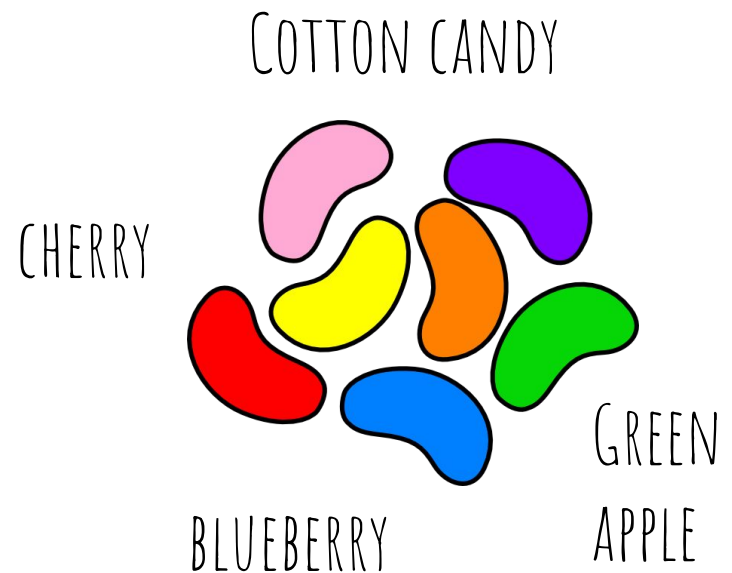
5. WHILE STILL CHEWING, UNPLUG YOUR NOSE AND TAKE A BREATH IN!

6. NOW CAN YOU GUESS THE FLAVOR OF THE JELLY BEAN?!

WHAT DID WE DISCOVER?

WHEN WE HAD OUR NOSE PLUGGED, THE JELLY BEAN TASTED SWEET, BUT IT WAS HARD TO TELL THE EXACT FLAVOR.

WHEN WE UNPLUGGED OUR NOSE,
OUR SENSE OF SMELL **WORKED
TOGETHER** WITH OUR SENSE OF
TASTE TO PICK UP ON THE FLAVOR!



WE'RE DONE! CAN YOU NAME **ONE**
THING THAT YOU LEARNED TODAY?

1.)

