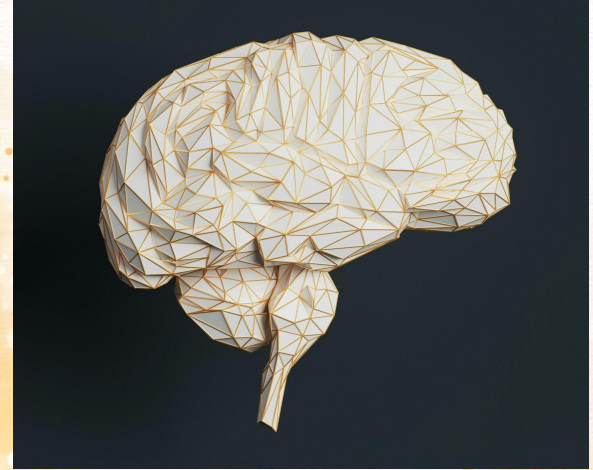


How Adult Brains Learn Languages

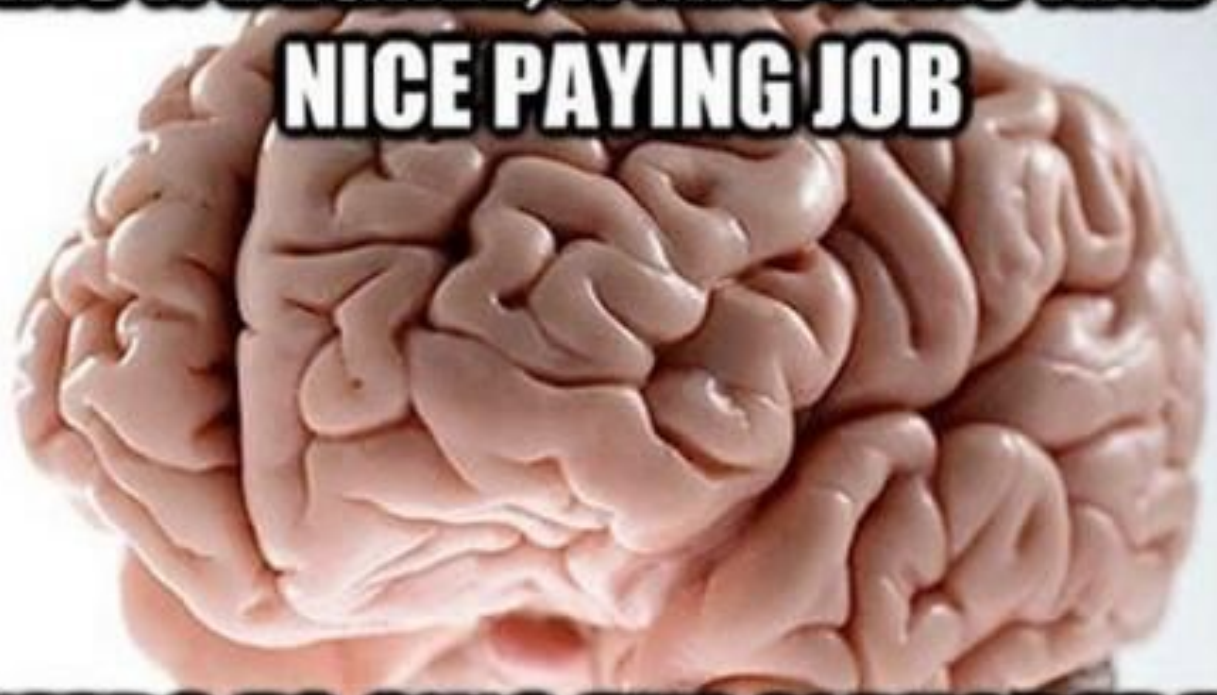
Andrea Echelberger*

*Not a neuroscientist, but really wishes
she was one





**HAS A DEGREE, A MASTERS AND A
NICE PAYING JOB**



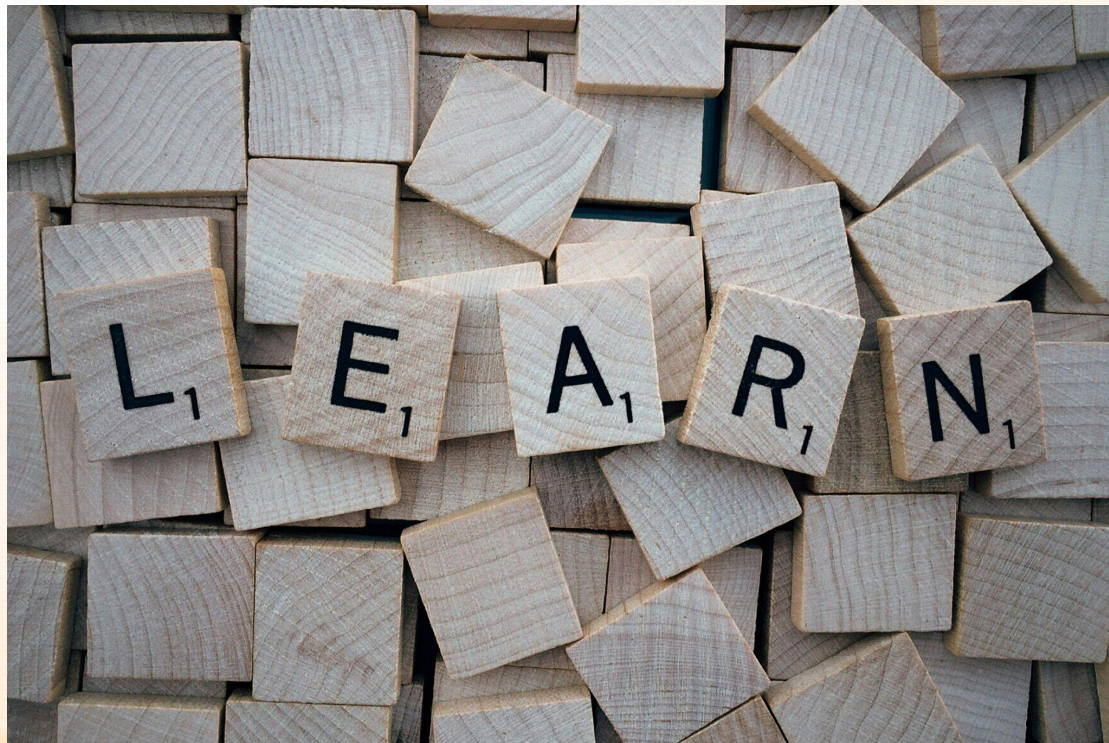
**NEEDS TO SING THE ALPHABET TO
REMEMBER WHERE J GOES**



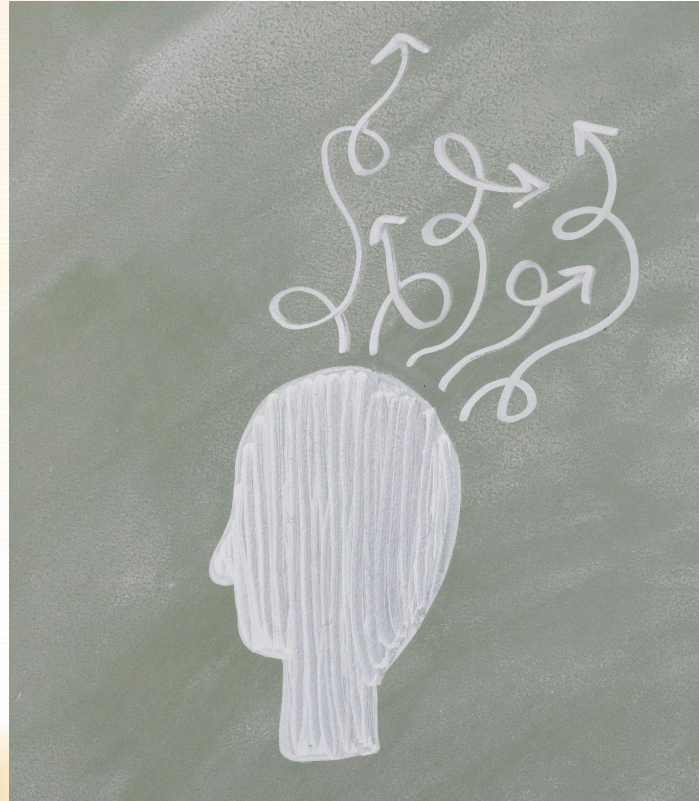
Session Overview

- **How Brains Learn**
- **Memory and Language**
- **Teaching Recommendations**

How Brains

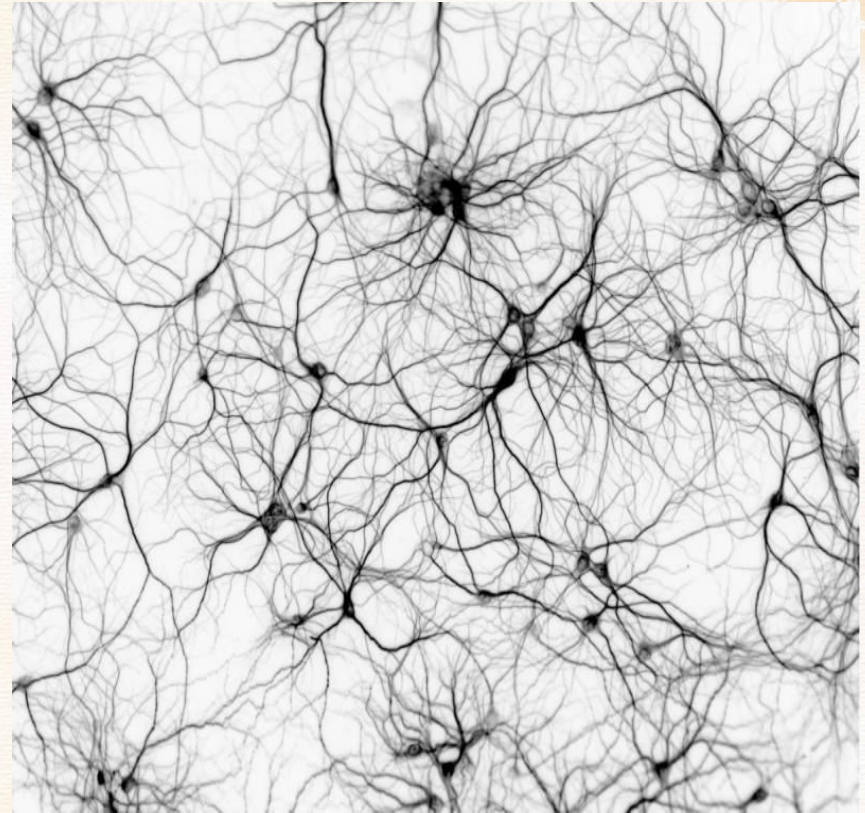


What happens inside your brain when you learn something new?



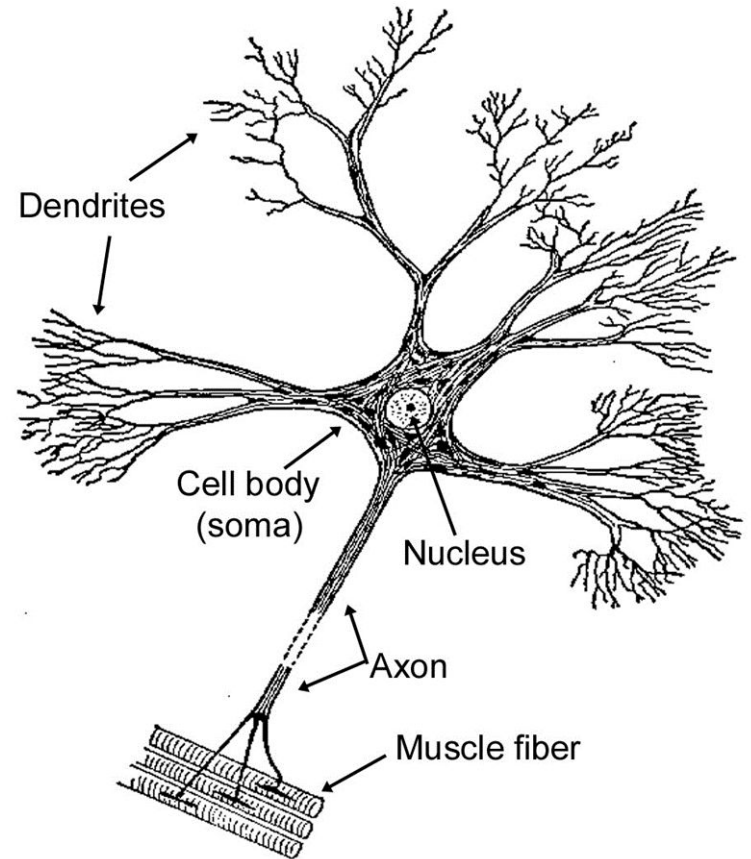
Building Blocks of Learning

- Brain cells are called **neurons**.
- You are born with at least 100 billion neurons.
- **Dendrites** (fibers) grow out of the neurons when you listen to/write about/talk about/ practice something.



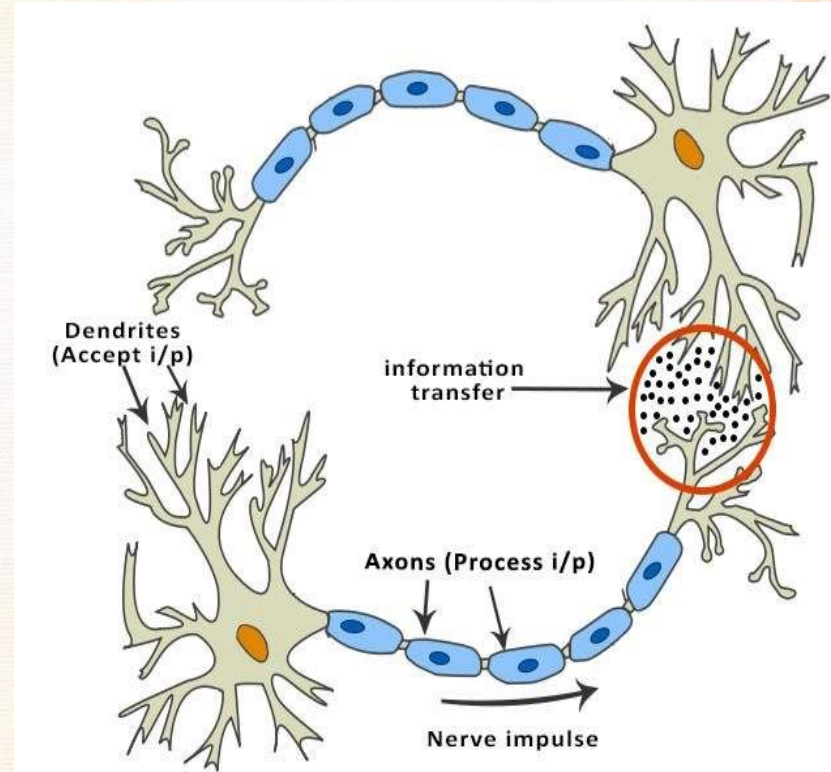
Learning is Natural

- Neurons know how to grow dendrites, just like a stomach knows how to digest food.
- **Learning = Growth of dendrites.**
- New dendrite spines begin to form between 5-20 minutes after stimulation.



Making Connections

- When two dendrites grow close together, a contact point is formed. A small gap at the contact point is called the **synapse**.
- Messages are sent from one neuron to another as electrical signals travel across the synapse.



Fire it to wire it!





Photo by [Tirza van Dijk](#) on [Unsplash](#)

Repetition

Repetition

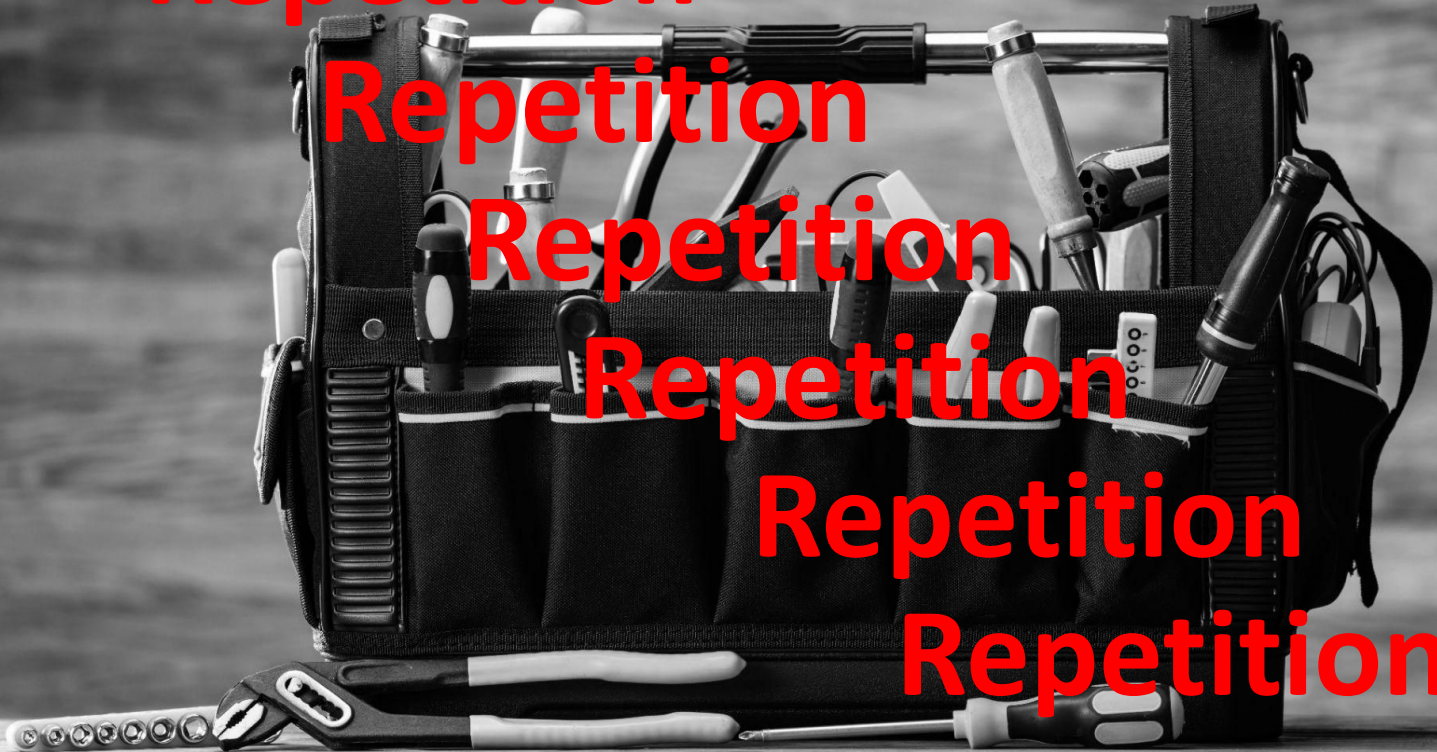
Repetition

Repetition

Repetition

Repetition

Repetition







<https://www.youtube.com/watch?v=ELpfYCZa87g>

Please follow the directions on your
paper

Tractor

Green

Apple

Zero

Weather

Pastel

Quickly

Ocean

Nicely

Countertop

Airplane

Jump

Laugh

Tall



Memory and language

How Brains Store Words

Home Language

- **Stored by association**
 - Physical level: spelling and sounds (dog/log, dog/dig)
 - Semantic association: synonyms and related words (dog, bone, puppy)
 - Word class (nouns, verbs, adjectives)
 - Emotions and sensory perceptions (dog/fear, dog/smell)



How Brains Store Words

New Language

- Stored by association
- Stored with counterparts from other languages

Less vocabulary = fewer and weaker connections, less likely to be able to access due to fewer cues



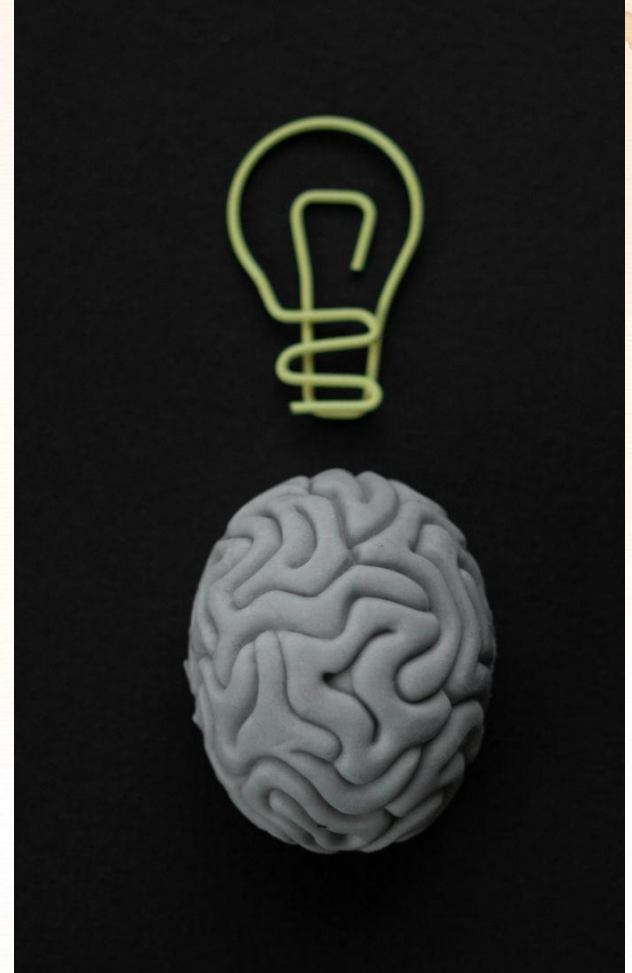


Speaking and Listening are Critical





Teaching Recommendations



Test:

1. When did the Pilgrims land at Plymouth Rock?



1620.



AS YOU CAN SEE, I'VE MEMORIZED THIS UTERLY USELESS FACT LONG ENOUGH TO PASS A TEST QUESTION. I NOW INTEND TO FORGET IT FOREVER. YOU'VE TAUGHT ME NOTHING EXCEPT HOW TO CYNICALLY MANIPULATE THE SYSTEM. CONGRATULATIONS.





Make lasting memories



Make Connections



Circle the foods you like. Cross out the foods you don't like.



Circle the foods you like. Cross out the foods you don't like.





How could you help learners activate previous knowledge?



Let's test your memory!

Tractor

Green

Apple

Zero

Weather

Pastel

Quickly

Ocean

Nicely

Countertop

Airplane

Jump

Laugh

Tall

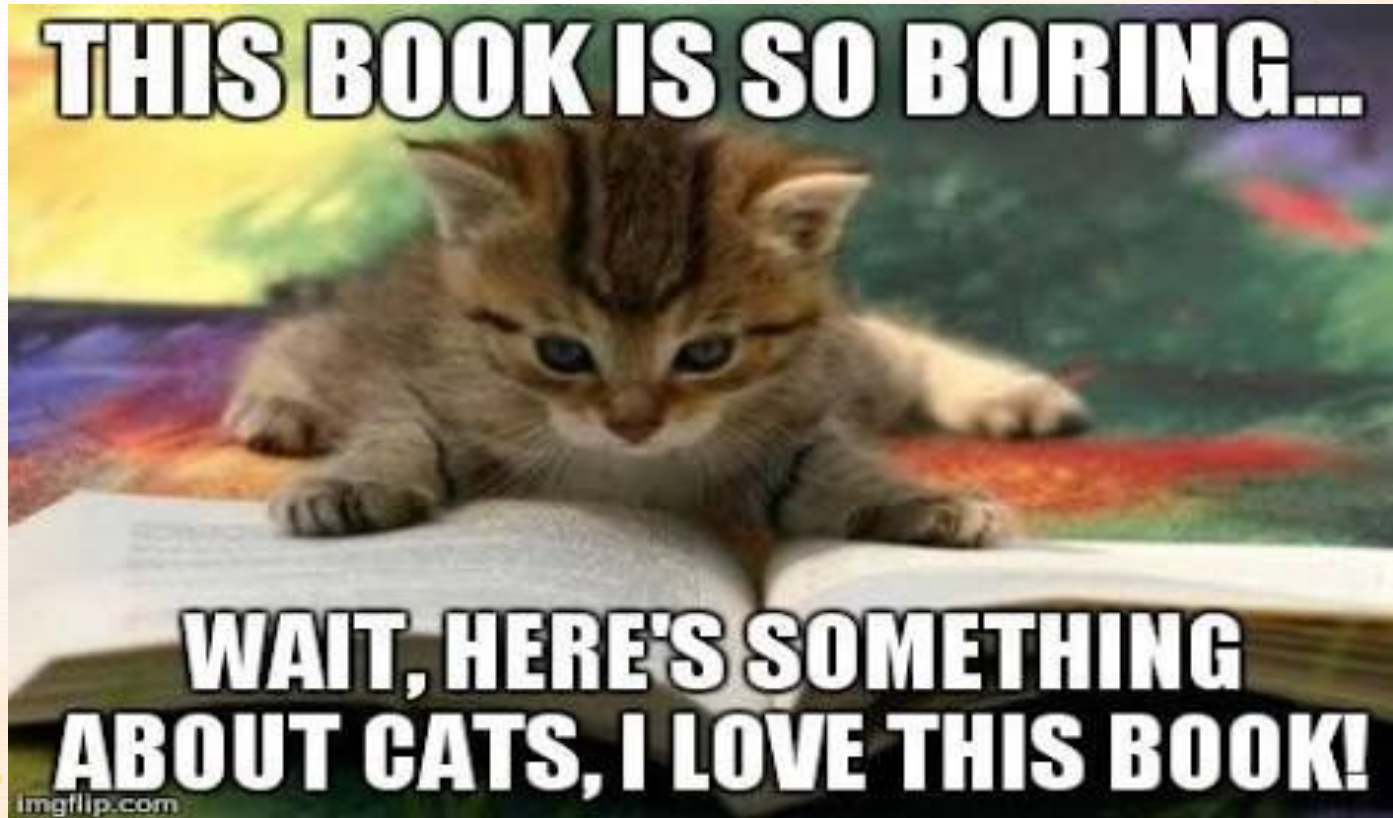
Group 1:

**How many
did you
remember?**

Group 2:

**How many
did you
remember?**

Make It Personal



Make It Personal

Date: 3/23/26	Verb: start regular / irregular
Present: start starts	We start our class at 9:00am. Mouctar starts work at 3:00pm.
<u>Negative Present</u>	We don't start our class at 10:00am.
Past: Started	Yesterday we started class at 9:00am.
Negative Past	We didn't start class at 10:00am.
Present Continuous:	

**Excuse me, what time will your store open on
Wednesday?**

It'll open at 8am.

How long will it be open?

For 14 hours. It'll close at 10pm.

Will your store be open on Sunday?

Yes, it will.





What's your name?

What time do you open your phone in the morning?

What time do you close your phone at night?

What days do you sleep late?

Do you like your neighbors? Why or why not?



Less confident / unclear	More confident / clear (using modals)
My child has a problem.	I need to talk to you about a concern I have about my child.
I don't understand.	Could you explain that in simpler language? I want to make sure I understand.
Fix the heater.	I need to report that our heater is broken. Could you send someone to fix it this week?
I can't come to work that day.	I need to request that day off for a family appointment. Would it be possible to swap shifts?
She needs more help.	My daughter should be getting more support in class. I would like to talk about what options are available.

Small Group Discussion

1. Tell your group about a time you spoke up for your child. What did you say? How did it go?
2. Was there a time you wanted to speak up but did not? What held you back? (*Held you back means: stopped you or made it hard to act.*)
3. What helps you feel more confident when you need to talk to someone in authority — like a doctor, teacher, or boss?

Color Idioms

Do you ever **feel blue**?

Have you ever **seen red**?

Do you know anyone who sees the world through **rose-colored glasses**?

Have you ever been **green with envy / jealousy**?



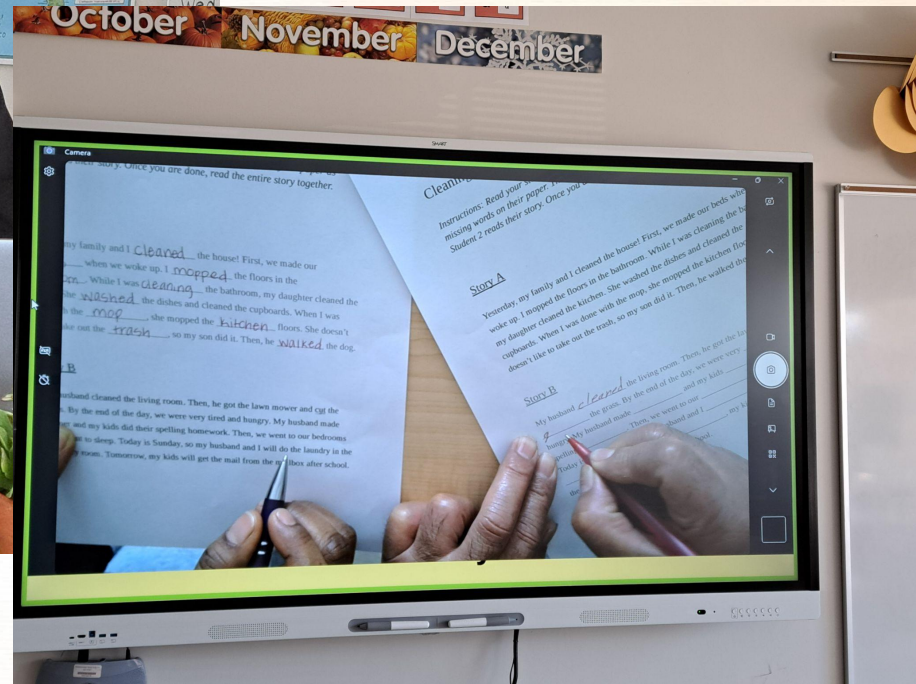
What are some real life situations where people will need to use third person singular verbs?

**He/She/It
is, goes,
loves,
eats**



Make It Visual





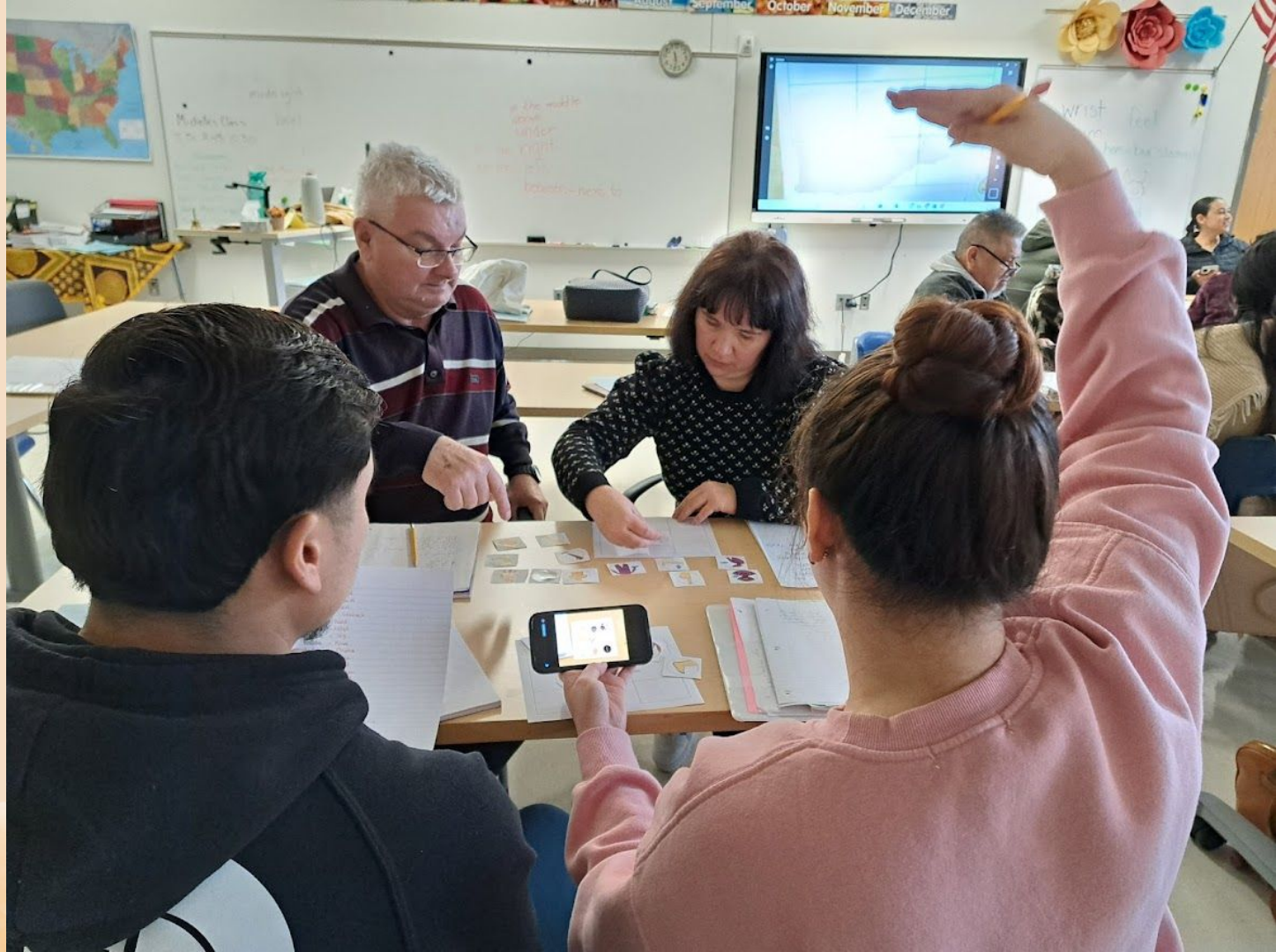
A close-up photograph of a smartphone screen displaying the Amazon logo. The phone is resting on a wooden surface with a visible grain. The screen is white, and the logo is centered. The phone's black bezel and a notch at the top are visible.

amazon



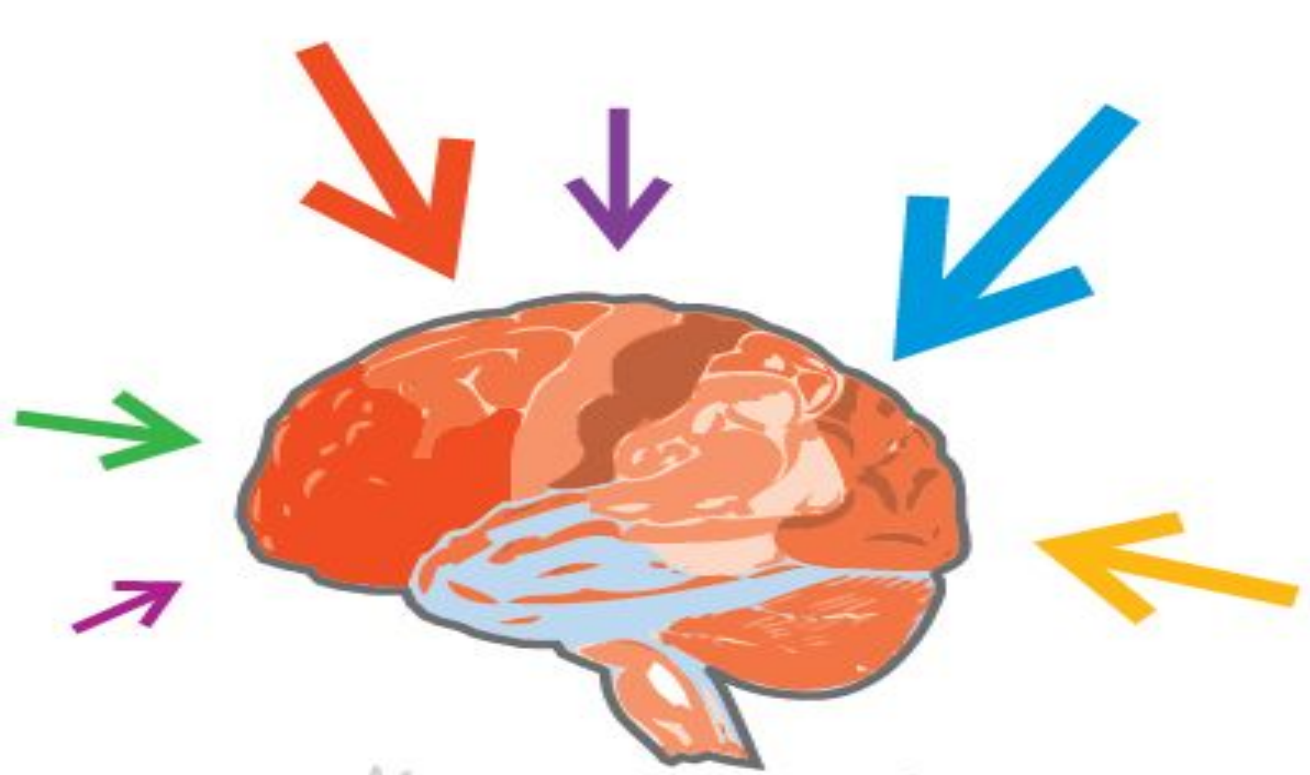
Social Brains







Make It Multisensory









**How could you make
a lesson
multisensory (e.g.
have learners use
play-doh to make a
sculpture of the
main point they
remember from a
reading).**

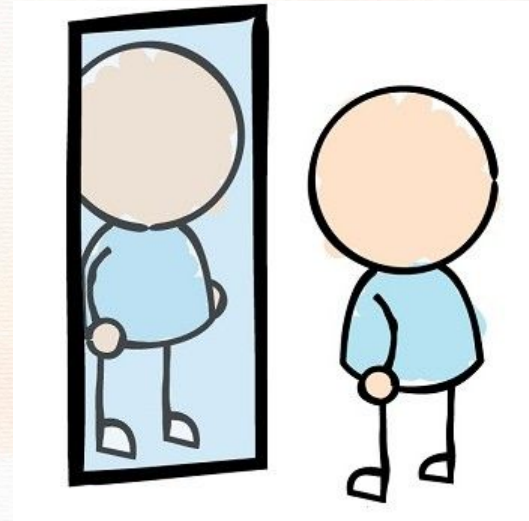




English for beginners | Czego szukasz w Święta? - YouTube

Reflection Questions

1. What are your top three takeaways from the training?
2. How will the information from this in-service impact your teaching?
3. How will the information from this in-service impact your learning?





Andrea Echelberger
adechelberger@gmail.com