



[Scan or click to download slides](#)



marigold prep

EXECUTIVE FUNCTIONING SKILLS

**STUDENT STRATEGIES FOR
ORGANIZATION, FOCUS, AND
FOLLOW-THROUGH**

Who is Marigold Prep?

- Personalized tutoring for the SAT/ACT, every major academic subject, and executive functioning.
- Proprietary curriculum and professional tutors.
- Provided online instruction "before it was cool".



Steps to Strengthen Executive Functions



Understand

The first step is understanding where executive functions come from and what is happening in the brain. When we know what is happening in our brains, challenges feel less personal and easier to problem-solve.



Identify

The next step is learning to identify which executive functions a student is struggling with. Everyone has different strengths and challenges in executive functioning. Identifying specifics is the key to building effective systems.



Build Systems

Once you identify specific challenges, you can help students build systems that strengthen neural pathways. Systems help reduce overwhelm by taking information out of our heads and creating a structure that makes it easier to start and finish tasks.



Adjust

The final step is to reflect on what is working and adjust when something is not. Executive functioning skills improve over time, and changing a system does not mean you or your students have failed. It means we are learning what works best.

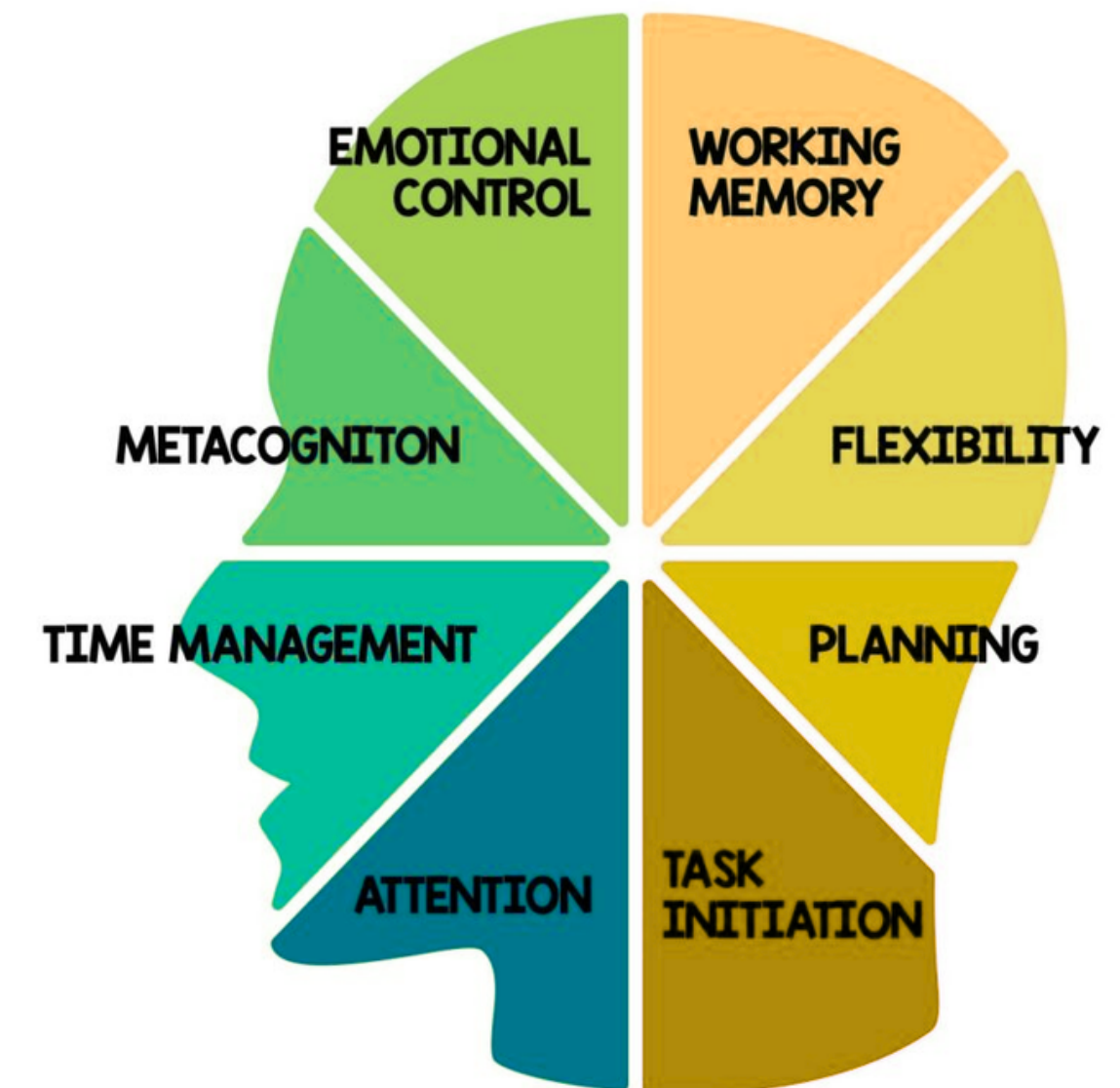
① Understand: What is Executive Functioning?

Harvard describes executive functioning skills as an **air traffic control system** that helps multiple planes land and take off simultaneously. Just like the air traffic control system, executive functioning skills enable us to **plan, initiate, organize, focus, manage time, and follow through** on tasks.

In academics, these skills help students:

- Decide what to work on
- Keep track of information
- Start tasks without procrastinating
- Shift attention when needed
- Complete work efficiently

Key Executive Functioning for Academic Success:



1 Understand: Where do executive functions come from?

Executive functioning skill development requires **more than just willpower**, because behavior does not occur in isolation. Executive functions **rely on brain and body-based processes**, some of which are impacted by genetics.



Our **genes** dictate the “default settings” of our brain chemistry, including chemicals that regulate the **prefrontal cortex** and **limbic system**.

Our **prefrontal cortex** is responsible for logic and self-control, while our **limbic system** is responsible for emotion, motivation, and stress.

The interactions between our **limbic system** and **prefrontal cortex** shape our behavior and decision-making, including executive functioning skills.

1 Understand: Where do executive functions come from?

LIMBIC SYSTEM *Emotional Center*

Responsible for emotion, motivation, fear, memory, and social behavior.

The part of the brain that asks, *"How do I feel about this?"*

Highly reactive, activates quickly, and more automatically

PREFRONTAL CORTEX *Thinking Center*

Responsible for planning, decision making, self-control, and goal-directed behavior.

The part of the brain that asks, *"What should I do about this?"*

Deliberate and reflective, it requires work to regulate



*The limbic system and prefrontal cortex are **functionally connected**; each can inhibit the other, playing a critical role in executive functioning.*

1 Understand: Who Struggles with Executive Functioning?

Many students struggle with executive functioning at some point, especially in middle and high school when academic demands increase.

Common challenges include:

- Procrastination
- Forgetting assignments
- Feeling overwhelmed by big tasks
- Studying for long periods with little payoff
- Knowing what to do but struggling to start

Struggling with executive functioning does not mean students are lazy or incapable. **It means their brain needs better systems and routines.**

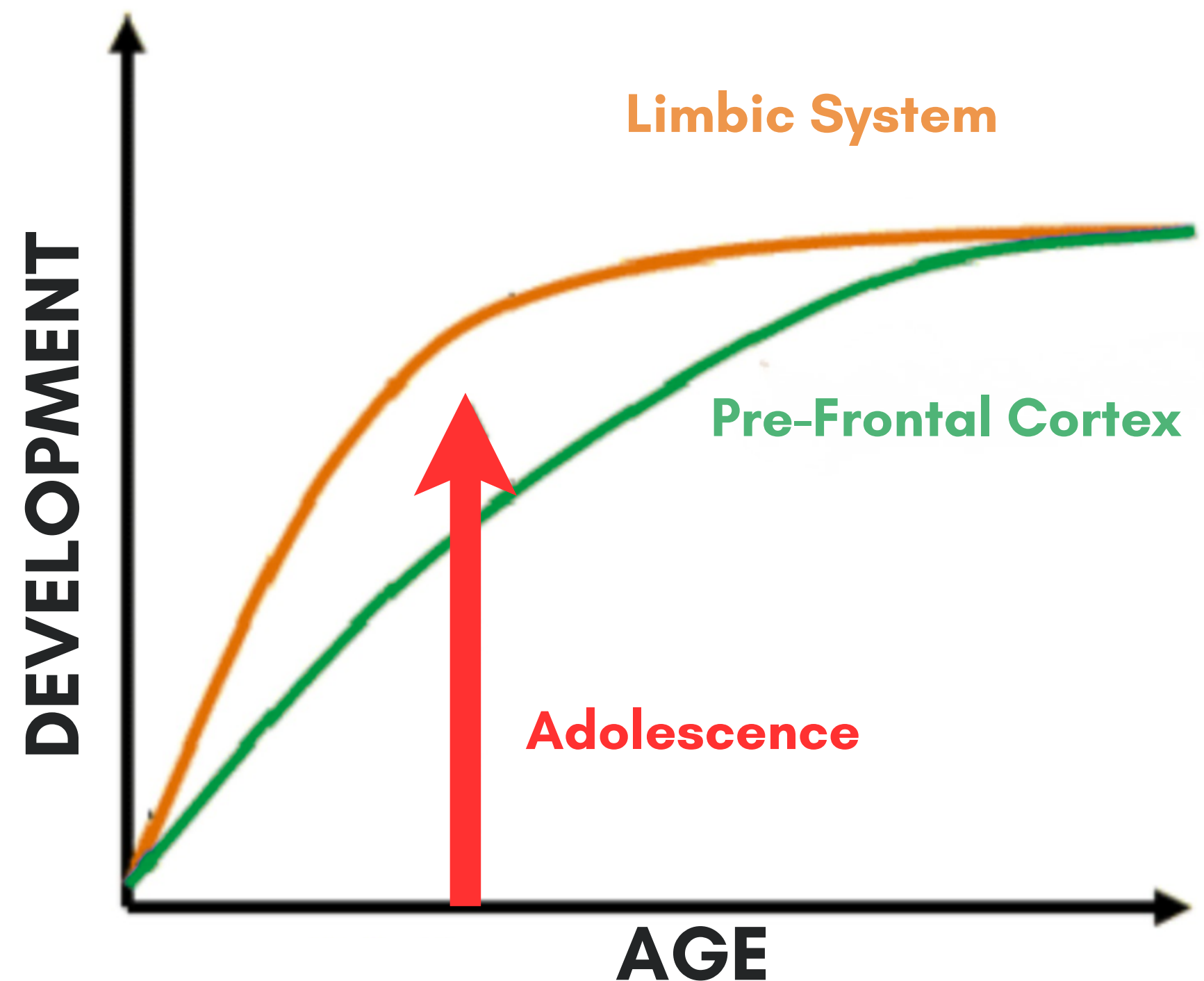


1 Understand: Executive Functioning & Brain Development

Our brain's thinking and reasoning center (**the prefrontal cortex**). This is the last part of our brain to develop, and often **does not reach full maturity until our mid-20s or early 30s**.

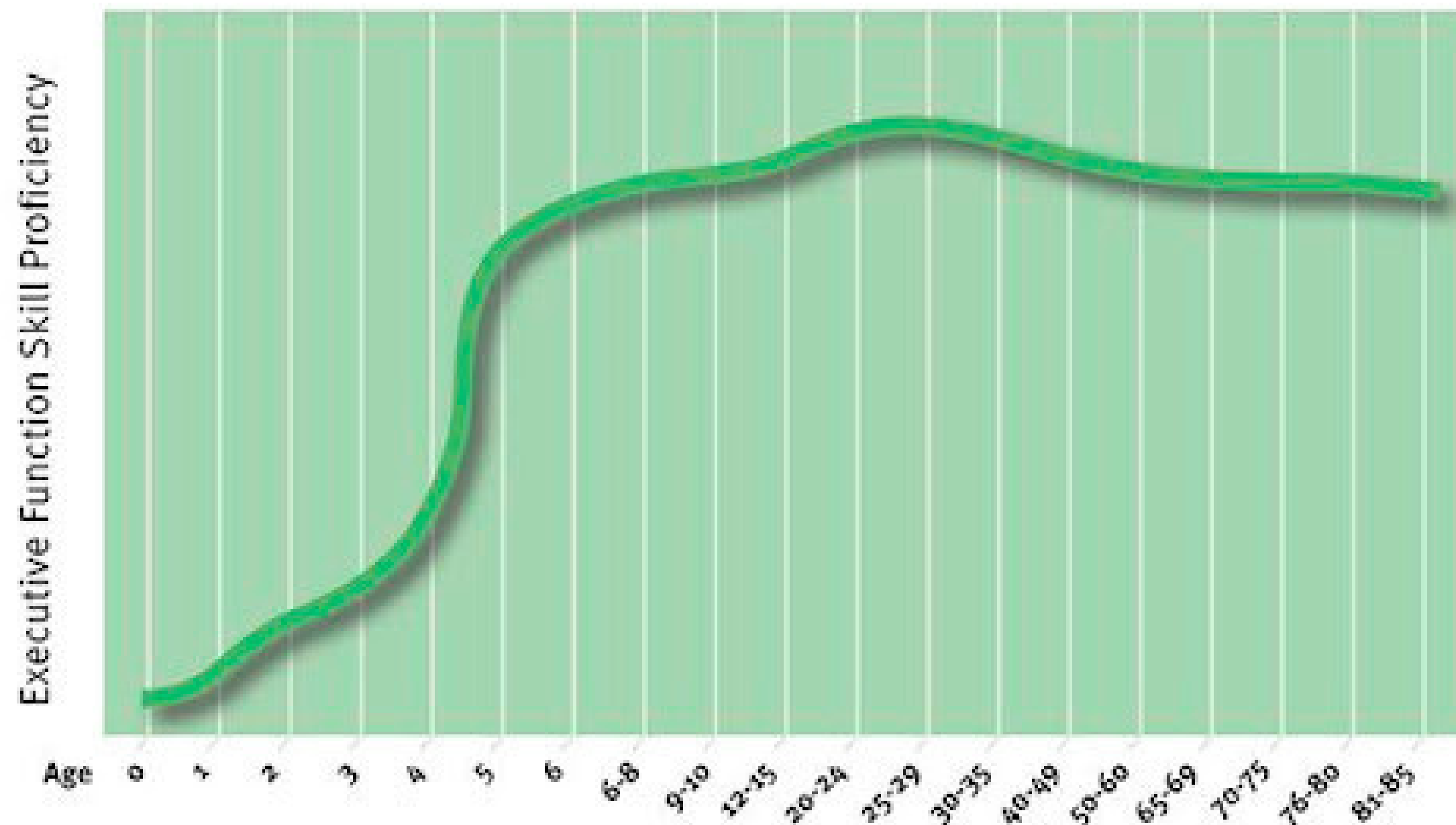
Our **brain's emotional center (the limbic system)** develops rapidly during childhood and reaches peak volume between ages 10 and 13.

This is why challenges with executive functioning are **so common among teenagers**. The emotional center of the teenage brain is biologically more functional than the thinking center!



Executive Functions Build Over Time

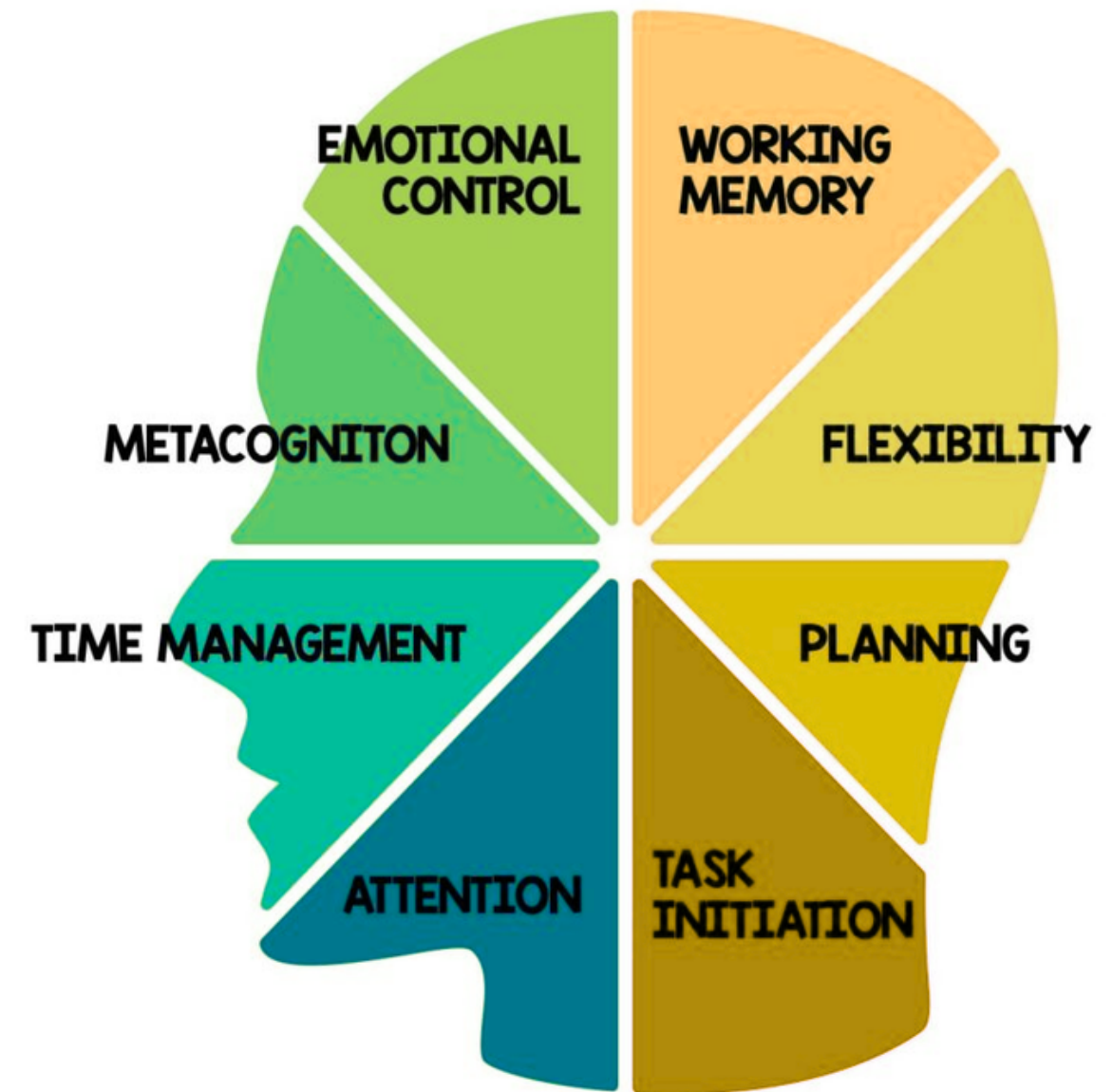
Good news! Executive functioning skills are **learned skills, not personality traits**, and they can be strengthened over time.



② Identify: Distinct Executive Functioning Skills

Today, we will learn how to identify challenges and support student skill development across **eight distinct executive functions key to academic success.**

Everyone has strengths and challenges across these areas. **Understanding which ones feel hardest for students helps us choose strategies that work for their brains.**



2 Identify Skills & Challenges

Skills

Planning: thinking ahead, breaking tasks into steps, and deciding when and how to get things done.

Task Initiation: starting a task without excessive delay, even when the task feels boring, difficult, or overwhelming.

Time Management: estimating how long tasks will take, planning time, and pacing effectively.

Working Memory: holding information in the brain while using it, such as remembering steps while solving a problem.

Challenges

Planning: reactive decision-making, lack of routine, forgetting deadlines and materials, and cramming.

Task Initiation: procrastination, knowing what needs to be done but struggling to get started, difficulty turning plans into actions.

Time Management: time-blindness, inability to balance multiple commitments, late or incomplete work.

Working Memory: forgetting or struggling to follow instructions, difficulty juggling multiple tasks, losing focus mid-task.

Identify Skills & Challenges

Skills

Attention: focusing on what matters, ignoring distractions, and staying engaged long enough to complete a task.

Metacognition: thinking about thinking, understanding what is working, what is not, and how to adjust.

Emotional Control: managing strong feelings like stress, frustration, and disappointment while maintaining clear thinking and decision-making.

Flexibility: adjusting plans and shifting strategies without getting stuck or derailed.

Challenges

Attention: being unable to filter out distractions or maintain focus, especially when tired, stressed, or overstimulated.

Metacognition: struggling to self-monitor or self-correct, over- or underestimating mastery, difficulty shifting strategies.

Emotional Control: allowing emotions to override logical decision making and problem solving, difficulty managing setbacks.

Flexibility: experiencing anxiety and overwhelm while shifting plans or transitioning between tasks.

3 Building Systems: Executive Functioning & Cognitive Load

Because the teenage brain's emotional center (**the limbic system**) is biologically more developed than its thinking center (**the prefrontal cortex**), building systems is key to academic success in middle and high school.

Executive functioning success requires the prefrontal cortex to regulate emotions, delay impulses, tolerate stress, think logically, and stay goal oriented simultaneously. **That's a heavy lift for a functionally underdeveloped part of the brain!**

When students build systems to support executive functioning, they are **reducing their cognitive load**, allowing their brains to think and focus with clarity.

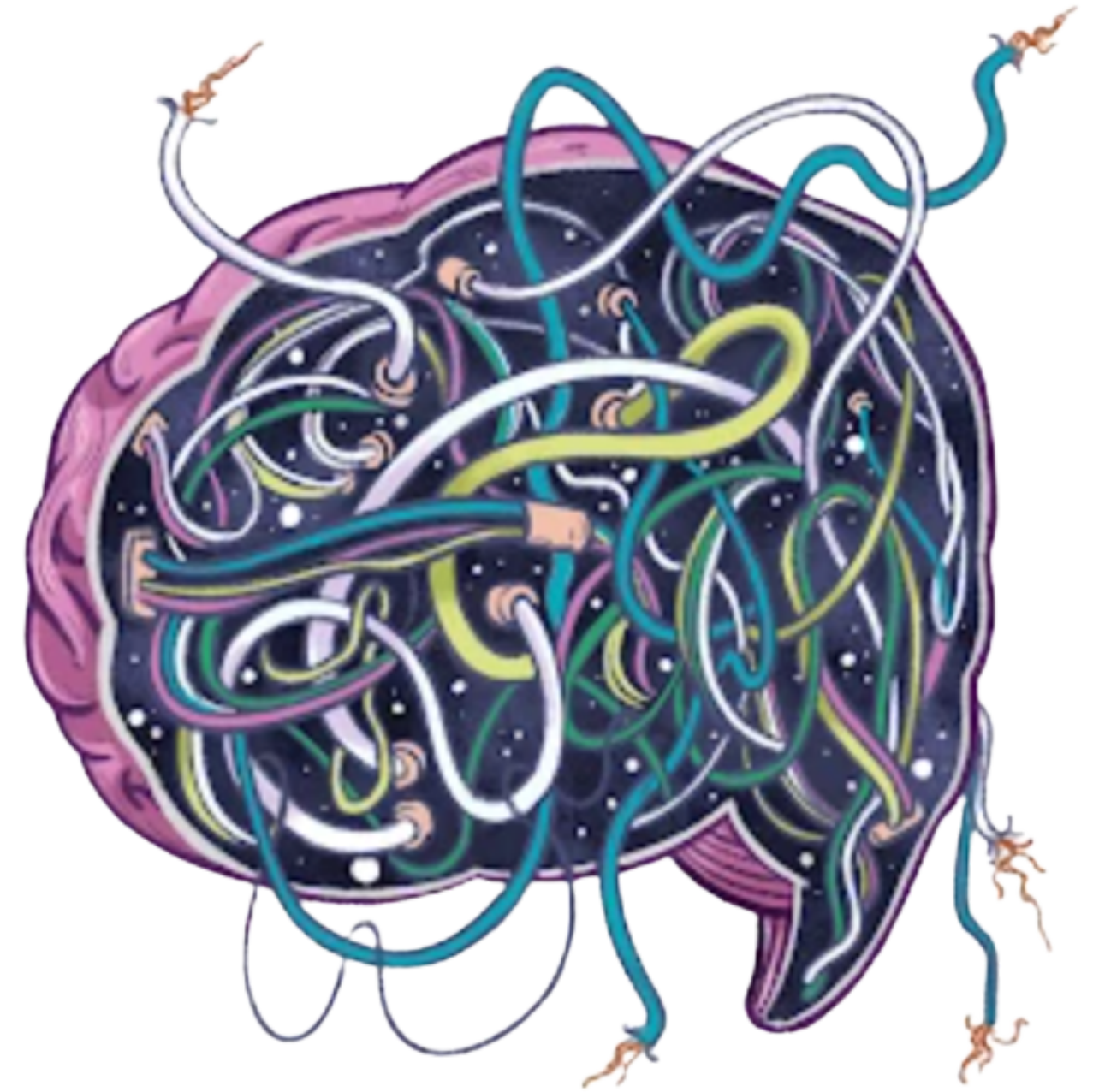


3 Building Systems: Executive Functioning & Neuroplasticity

While our genetic “defaults” can make certain executive functions easier or harder for a given person, they are **learned skills, not fixed personality traits**.

Neuroplasticity is the brain’s ability to rewire itself through experience and repetition. Each time a student practices a new skill, they are helping their brain build stronger, more efficient **neural pathways**.

Not only does building systems free up mental real estate to improve executive functions, but it also **physically rewires the prefrontal cortex more automatically regulate the limbic system**. Just like we exercise our bodies to build physical muscles, we can exercise our brains to build “mental muscles”.



③ Planning System: Brain Dumping

Help your students get their to-do lists out of their heads and onto paper to reduce cognitive load.

There are no rules to brain dumping, but a *few questions* can help students start and keep their thinking organized:

- What is at the **top of your mind**?
- What needs to be **completed today** or this week?
- What did **you learn** this week?



BRAIN DUMPING TEMPLATE

There are no rules to brain dumping, but a few questions can help you get started and keep your thinking organized:

- What is at the top of your mind?
- What needs to be completed today or this week?
- What did you learn this week?

Use the answers to the questions on the left to determine your top 3 priorities:

- 1.
- 2.
- 3.

Brain dump thoughts, feelings, ideas, and questions in this space:

3 Planning System: Daily & Weekly Planning

Students should use planners and calendars to plan what needs to be done, **rather than reacting in the moment**. Encourage them to plan not only what they will do, but also **the date and time of day** they will do it.

Most students benefit from a **combination of analog and digital planning systems**. Physically writing out tasks can reduce overwhelm and increase retention, while digital planning tools include automated **reminders and redundancies**.

The tool or combination of tools that works for one student may differ from what works for another student.

	SUN 20	MON 21	TUE 22	WED 23	THU 24	FRI 25	SAT 26
8 AM		In school 8am - 3:30pm	In School 8am - 3:30pm	In School: Min Day 8am - 1:30pm	In School 8am - 3:30pm	In School 8am - 3:30pm	Swim Meet 8am - 2pm
9 AM							
10 AM	Watch football w/ friends 10am - 1pm	Physics Test 10 - 11am					
11 AM							
12 PM							
1 PM	Physics Group Study Session 1 - 3pm		Debate Club Meeting 12:30 - 1:30pm				
2 PM				Downtime: DON'T SCHEDULE ANYTHING 1:30 - 3:30pm			
3 PM							
4 PM	SAT Tutoring 3:30 - 5pm	Swim Practice 4 - 6pm	Swim Practice 4 - 6pm	Swim Practice 4 - 6pm			
5 PM							
6 PM							
7 PM		Read Ch 1-3 Great Gat 6:15 - 7:15pm	Babysitting 6 - 7:30pm	Read Ch 3-6 Great 6:15 - 7:15pm			
8 PM		Algebra 2 Homework 7:15 - 8:15pm	Brainstorm for APUSH 7:30 - 8:30pm	Algebra 2 Study Se 7:15 - 8:15pm			
9 PM				SAT Homework 8:15 - 9:15pm			



WEEKLY PLANNING TEMPLATE

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
6:00 AM						
7:00 AM						
8:00 AM						
9:00 AM						
10:00 AM						
11:00 AM						
12 NOON						
1:00 PM						
2:00 PM						
3:00 PM						
4:00 PM						
5:00 PM						
6:00 PM						
7:00 PM						
8:00 PM						
9:00 PM						
10:00 PM						
11:00 PM						

NOTES

3 Planning System: SMART Goals

SMART is an acronym that frames goals in five tangible ways: Specific, Measurable, Achievable, Relevant, and Time Bound.

Breaking down big-picture goals into smaller chunks ensures students set **realistic, meaningful objectives.**

Encourage students to plan ahead by writing down **action items and potential obstacles** on a goal-setting template or in your planner.



S	SPECIFIC WHAT DO I WANT TO ACCOMPLISH?	
M	MEASURABLE HOW WILL I KNOW WHEN IT IS ACCOMPLISHED?	
A	ACHIEVABLE WHAT AM I ABLE TO DO TO ACHIEVE IT?	
R	RELEVANT WHY IS IT WORTH MY TIME AND EFFORT?	
T	TIME BOUND WHEN CAN I REASONABLY ACCOMPLISH IT BY?	

PLAN OF ACTION WHAT ARE MY ACTIONABLE NEXT STEPS? WHEN DO THEY NEED TO BE COMPLETE?	ACTION ITEM	DUE DATE

OBSTACLES & SOLUTIONS WHAT OBSTACLES DO I EXPECT AND HOW WILL I PREVENT OR SOLVE THEM?	OBSTACLES	SOLUTIONS

③ Planning System: Prioritization Matrix

A prioritization matrix can help students **distinguish between urgent and important tasks and prioritize them accordingly.**

Organizing a to-do list into four separate buckets helps students **avoid the psychologically proven “Mere-Urgency Effect”**, which compels them to focus on the “urgent, non-important” at the peril of the “important, non-urgent”!



3 Task Initiation System: Breaking Down the Big Stuff

Students can break large tasks and assignments into **manageable chunks** to reduce cognitive load and avoid the resulting task paralysis.

- **Write down** what needs to get done.
- **Divide it** into chronological steps.
- Divide those steps into smaller, **manageable tasks**.
- **Work backward from deadlines** to set due dates for smaller tasks.
- Put **due dates for smaller tasks** in a planner!



BREAK DOWN THE BIG STUFF

DATE: --	DUE DATE: -- --
WHAT DO YOU NEED TO DO? .	
BREAK IT INTO 3 STEPS: 1. 2. 3.	STEP 1: 1. 2. 3.
NOW BREAK THE STEPS INTO SMALLER TASKS. →	
STEP 2: 1. 2. 3.	STEP 3: 1. 2. 3.

③ Task Initiation System: Project Outlining

Outlining organizes ideas into categories using numbers and bullet points.

Outlining is a more systematic way to break down the big stuff, and is particularly useful for **essays, projects, or presentations.**



OUTLINING TEMPLATE

Topic: _____ Class: _____

Source: _____ Date: _____

Subtopic 1

Supporting Ideas A. _____
B. _____
C. _____
D. _____
E. _____

Subtopic 2

Supporting Ideas. A. _____
B. _____
C. _____
D. _____
E. _____

Subtopic 3

Supporting Ideas. A. _____
B. _____
C. _____
D. _____
E. _____

Summary:

③ Time Management System: Time Tracking

In a weekly planner, students can **estimate the time** it will take them to complete the task, then **write down the actual time after they complete it.**

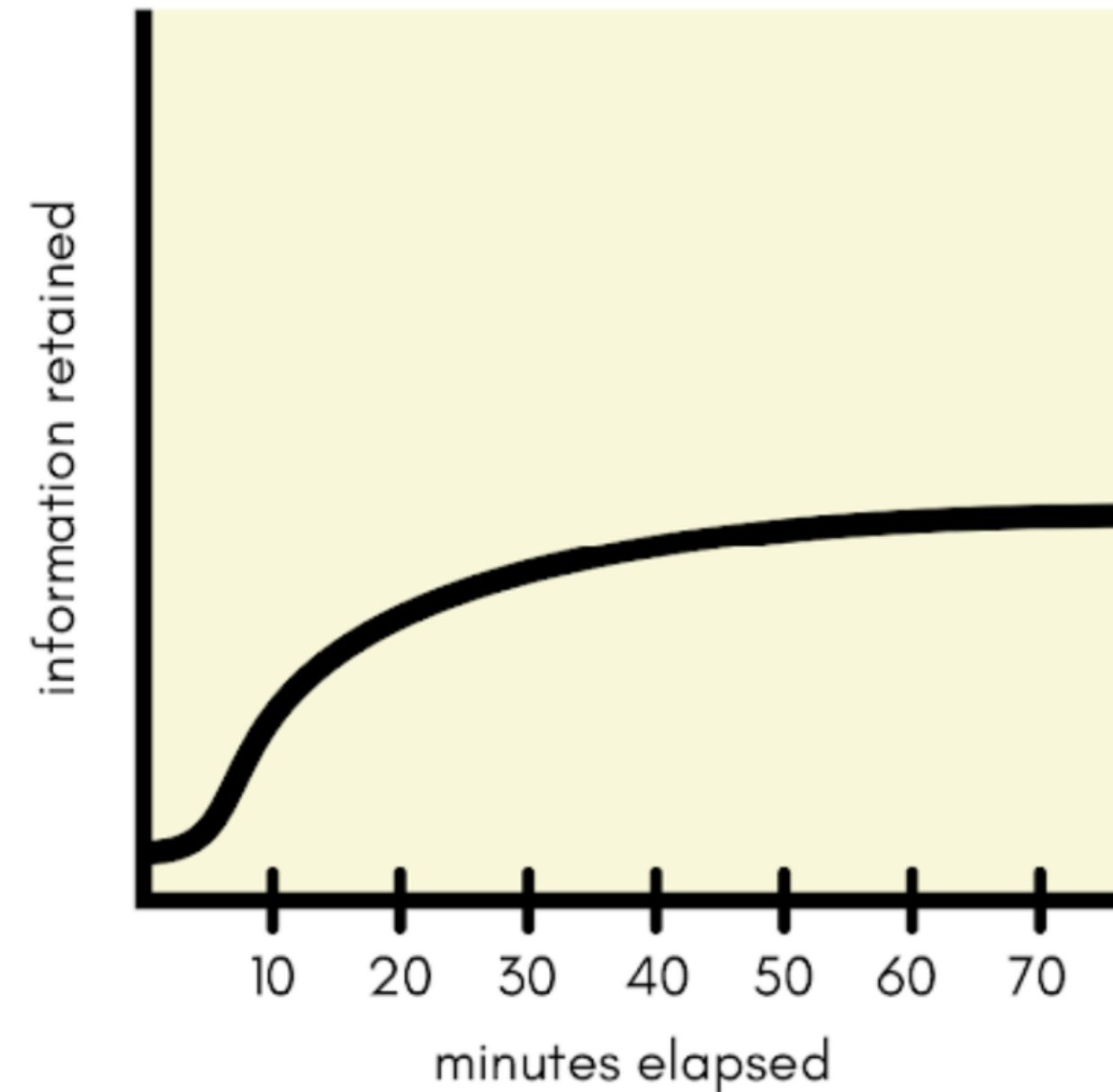
The goal is not to complete things as quickly as possible, but to **develop an awareness** of how much time it actually takes to finish tasks, so they can **plan more effectively** in the future.



③ Time Management System: Time Blocking

Hours-long productivity blocks are not the most efficient use of time.

In any given study session, the **learning curve** looks something like this: it **starts slowly, speeds up, and then levels off around 30 minutes.**

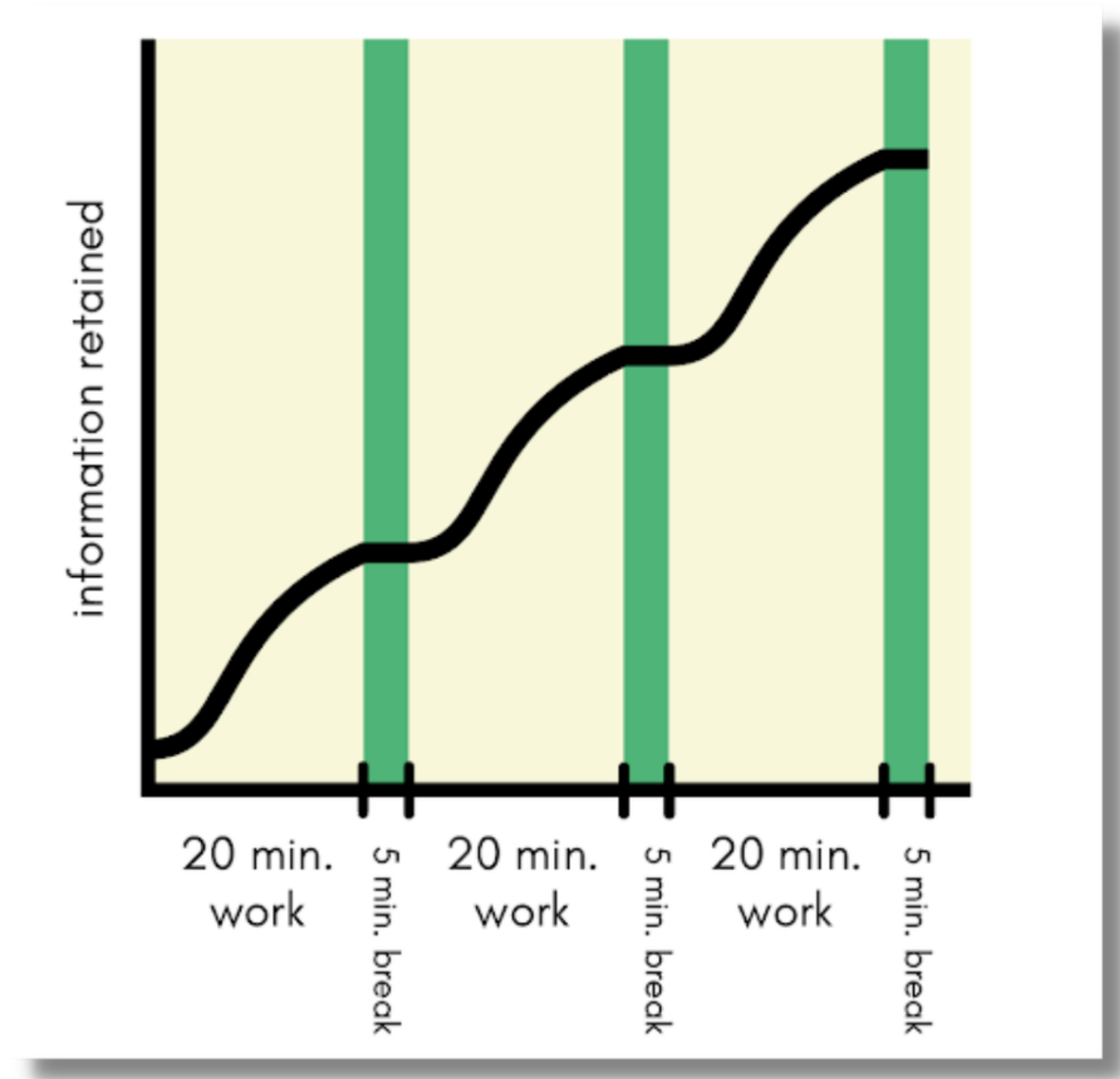


③ Time Management System: The Pomodoro Method

Encourage students to use the Pomodoro Method, which interrupts the learning curve in order to restart it:

- Set a timer for 20 minutes
- **Study hard** during those **20 minutes**
- Take a 5-minute break, and do something **non-academic.**
- Come back refreshed and ready for another **20-minute study session.**

The breaks give the new learning a chance to settle into the brain and take hold, allowing students to **retain more information over time.**



3 Working Memory System

Cornell Notetaking

Cornell notes require students to **record, reduce, and summarize** what they've learned in class.

Encourage students to complete Cornell notes within a day of class and **review them before a test.**

These are best for fact-heavy classes to prevent **rote memorization** of isolated names and dates.



CORNELL NOTE-TAKING TEMPLATE

Topic: _____

Class: _____

Source: _____

Date: _____

Step 1: Record Notes

Use this section to **record** as much information as possible **during class**, like names and dates, charts and formulas, examples and case studies. Put notes into your **own words**, using symbols and abbreviations when necessary.

Step 2: Reduce Notes

Use this section to **reduce your notes into main ideas** shortly after class so you can practice **recall**. Write down key words, concepts and facts from the right column, then **formulate concise questions** based on your reduced notes.

Step 3: Summarize Main Ideas

Review the main ideas and **reflect** on their importance. Briefly summarize the main points in your notes and try to **draw 2-3 conclusions** about their importance.

③ Working Memory System: Spaced & Spiraled Studying

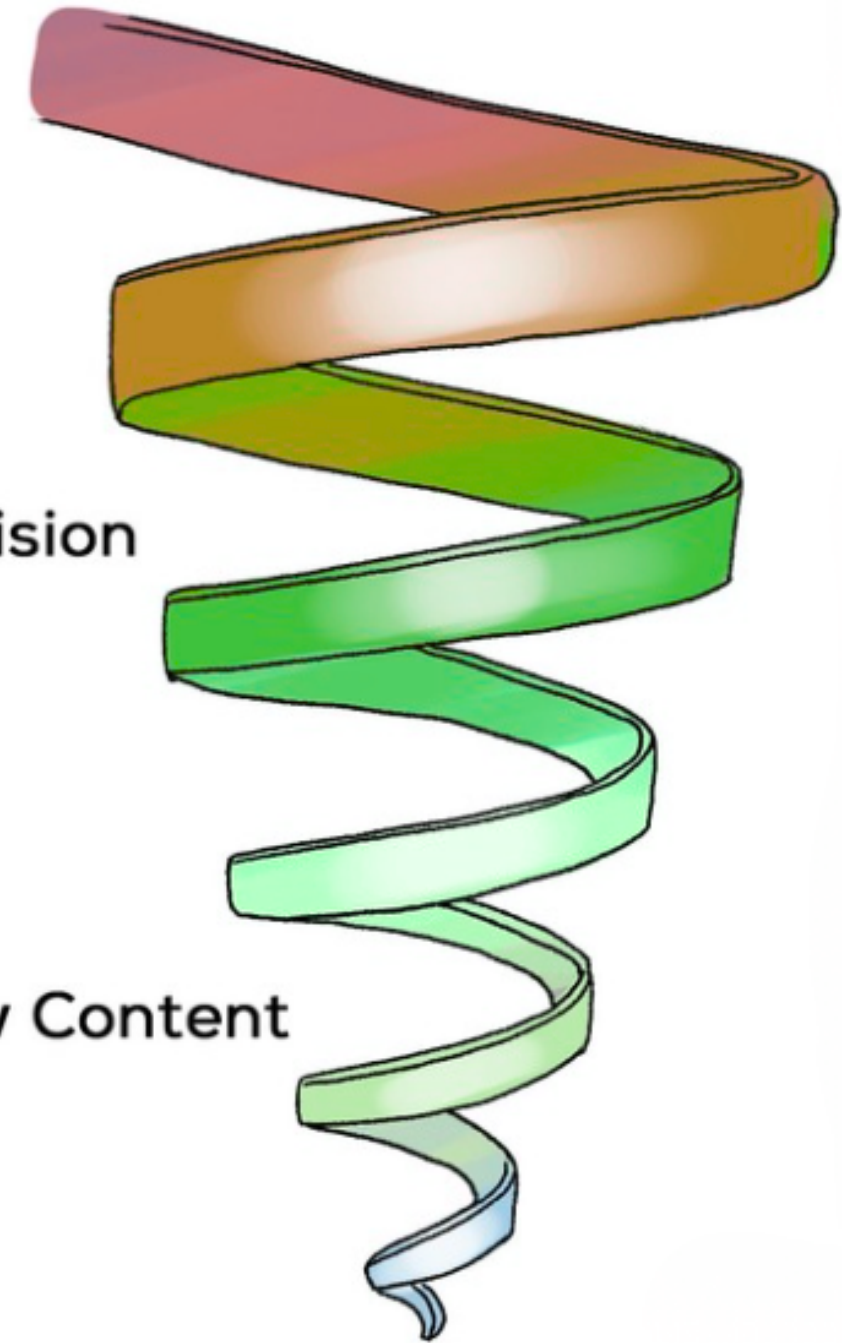
Students should study for short periods each day the week before a test, rather than in one large block the night before. Help them to structure each study session by **reviewing what they've learned the day before to improve working memory.**

Within each study session, students should **chunk information** into groups. For example, read a subsection of a textbook, then **stop and summarize** it before moving on to the next set of ideas.

Mastery

Revision

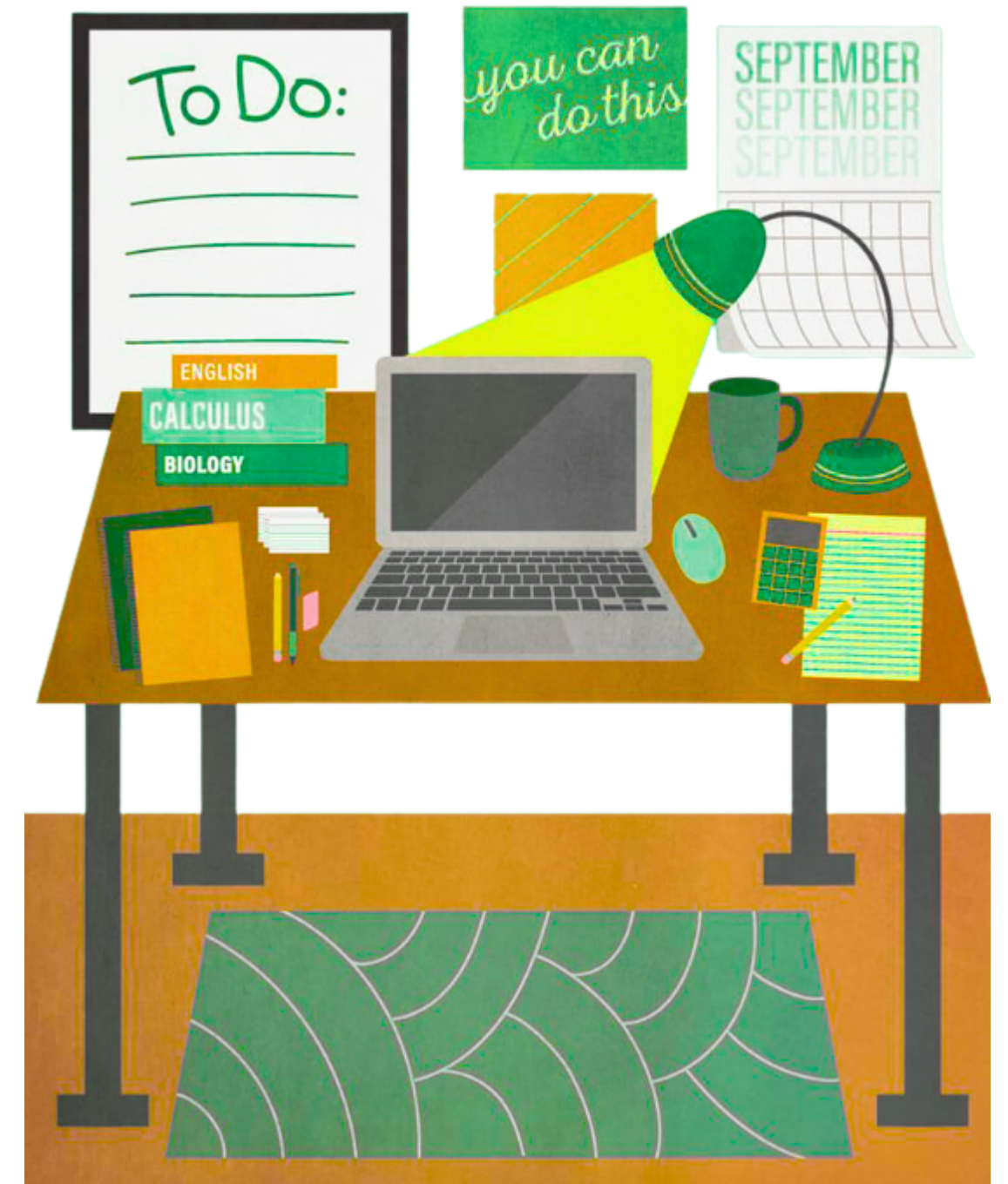
New Content



③ Attention Regulating System: Reducing Physical & Digital Distractions

To create a **distraction-reduced environment**, have students ask themselves the following questions about where they currently study and do homework:

- Do I have a **dedicated workspace**?
- What is in my workspace? How can I reduce distractions?
- Where do I complete my work? On **paper, tablet, or computer**? How many tabs do I have open?
- When I am working, is my **phone near**?
- If I need my phone or computer to complete work, are those **also organized to reduce distractions**?



3 Attention Regulating System: Active Recall & Reading

Studying should be **active, not passive.**

Students can practice active recall by:

- **Quizzing themselves!** Answer past test or chapter questions without referring to their notes or textbook.
- **Reduce** notes or a textbook chapter into their own words.
- **Teach concepts back** to a peer, parent, or tutor.

Students can practice active reading by:

- Highlighting, annotating, and **taking notes while reading.**
- **Re-stating** confusing statements **out loud** and in their own words.
- Ask themselves questions while reading to guide understanding and make connections.



ACTIVE READING TEMPLATE

Source: _____ Class: _____ Date: _____

Make Connections

What does this reading remind me of in my own life?

Visualize the Text

What does the "movie in my head" show when I read this?

Anticipate Questions

What questions will a teacher/test ask about the reading?

Read Between Lines

What "clues" can I find to help me read between the lines?

Find the Main Idea

What's the main idea and why does it matter?

Summarize

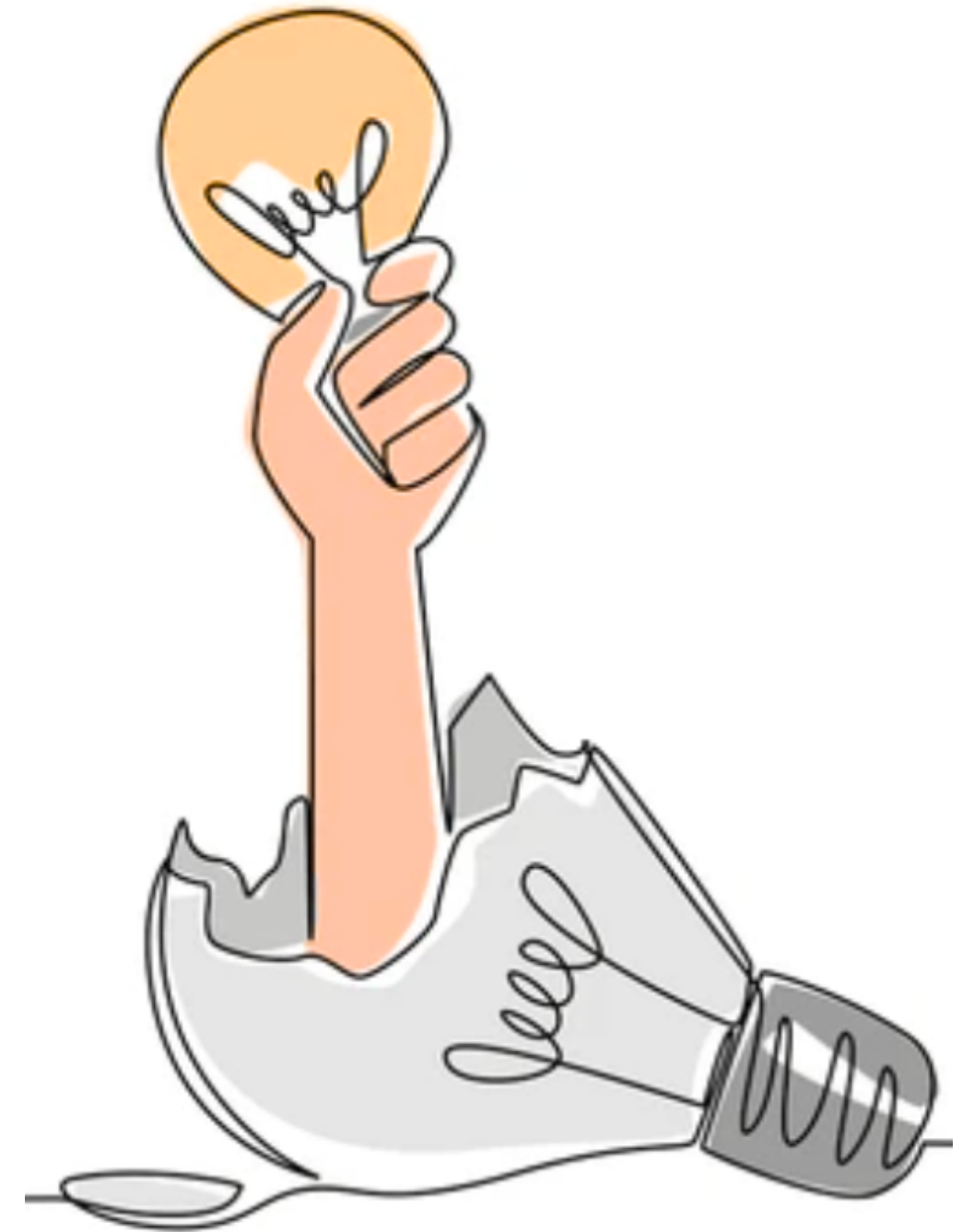
How would I tell someone else about what I just read?

③ Emotional Control & Flexibility System: Creating Plan B

Not everything goes according to plan, and when our brains don't know what to do next, obstacles can feel overwhelming. Students can reduce stress by **preparing for obstacles** before they happen.

1. Create and review the original plan- this should be in your weekly planner!
2. Ask yourself: **What obstacles may arise** that would interfere with this plan? Running out of time, getting stuck, feeling tired, distractions?
3. **Create one realistic backup:** If plan A doesn't work, what else could I do to complete the task? Write this in your planner!

Having a plan B doesn't mean plan A will fail. It just helps your **brain feel more prepared** and calm!



③ Emotional Control & Flexibility System: If-Then Thinking

Have automatic next steps when challenges come up!

Think of potential challenges that may come up while you are working towards completing a task: Distraction, frustration, confusion, and low motivation? What other ideas do you have?

Create an if-then statement

If _____ happens, then I will _____

Make sure the then is a concrete action:

reset timer, ask for help, take a short break,
switch strategies, etc

Put it all together:

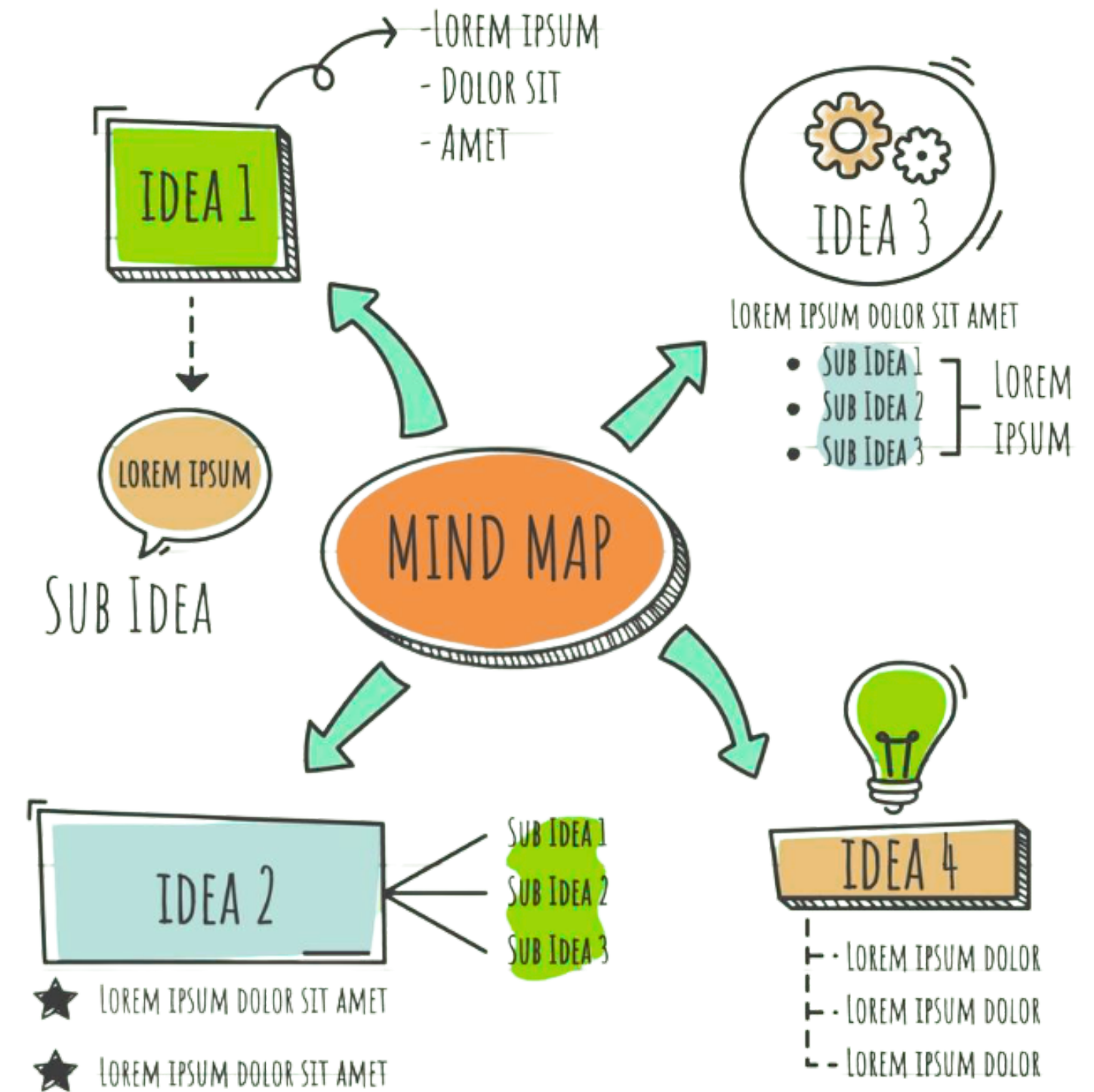
- **If** I get distracted, **then** I will reset my timer.
- **If** I feel confused, **then** I will ask my teacher for help.



3 Metacognition System: Mindmapping

Mind-mapping allows students to visualize their thinking and make connections.

- **Choose a focus:** one concept, assignment, or problem set.
- Draw **branches to connect** supporting ideas, steps, and questions.
- **Pause for reflection** throughout the process: What feels clear? What parts feel confusing? How do the ideas connect?
- **Be creative and take ownership**– use colors and shapes!



Metacognition System: Assignment Reflections

After completing assignments, students can **engage in guided reflection** with the following questions:

- Explain an idea that you found **confusing**.
- Identify an area of increased **confidence**.
- What **advice** would you give yourself now if you were to start this assignment again?
- What went well?
- What could have gone better?
- What could you do to **improve things in the future**?

Encourage students to **consider their own executive functioning** strengths and areas for improvement when answering these questions!

4 Adjust as Needed

The measure of a successful executive functioning system is **how well it serves a student's needs**. There is **no shame in adjusting systems** as needed.

Notice

- Which of these strategies was the most helpful for my brain?
- Was anything unhelpful for my brain?
- Are my grades improving?
- Am I meeting deadlines more often?

Reflect

- What tasks still feel challenging or uncomfortable?
- Are my stress levels going down?
- Do I feel more confident?
- Do I feel like I have more time for hobbies and rest?

Adjust

- What is one thing that is *really working*? Are there other ways I can apply this system to my tasks and assignments?
- What is one small adjustment that you would try next time?

Thank you for joining!



Scan or click to download slides

[Click here](#) to download the templates and handouts featured in this presentation

Contact info:

Cassie@marigoldprep.com

415 237 3377