



OVERCOMING TEST ANXIETY

Science-Backed Strategies for
Focus and Confidence

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"



HI! I'M **CASSIE BROWN,** FOUNDER OF MARIGOLD PREP

415 237 3377

cassie@marigoldprep.com



Add to contacts



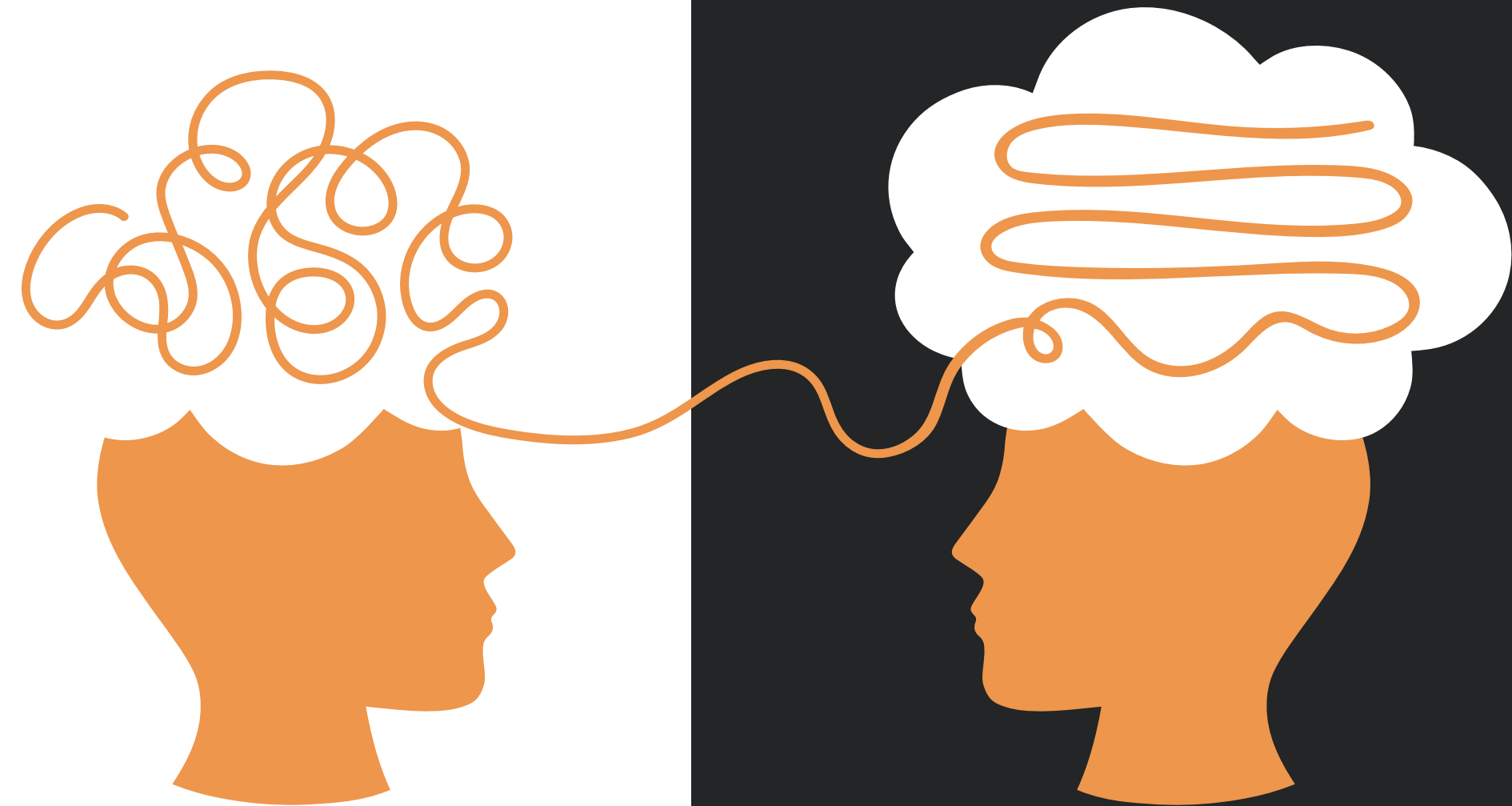
What We'll Cover Today

Understanding Test Anxiety

- What it is, how it affects learning, and what's happening in the brain and body.
- The role of the sympathetic and parasympathetic systems.
- The role of the amygdala and prefrontal cortex

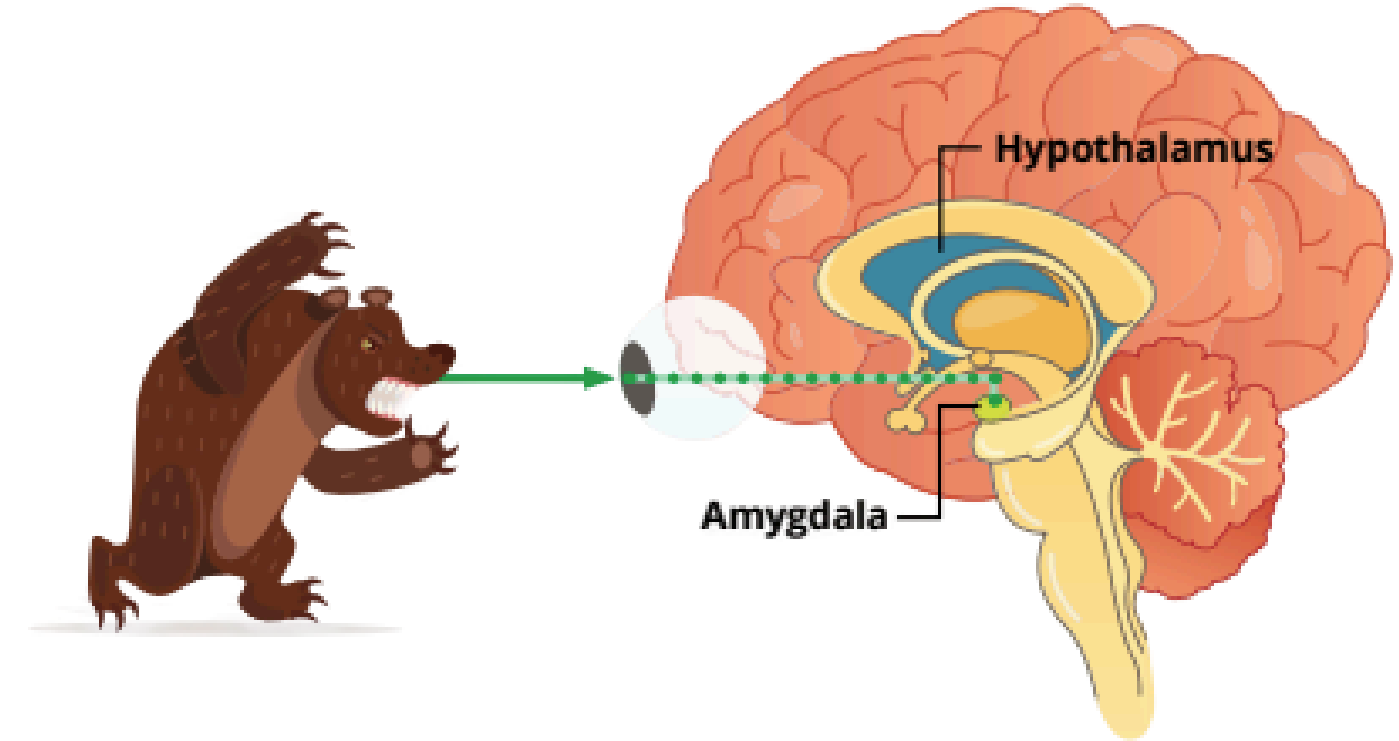
Steps to Overcoming Test Anxiety

- Identify, Understand, & Reframe
- Build Long-Term, Successful Habits
- Embrace a Growth Mindset
- In-the-Moment Techniques



What is Test Anxiety?

A physiological and psychological response (fight or flight) to a **perceived** danger or threat that interferes with performance. Our brain and body **react the same**, no matter the perceived “threat”, so a test can cause the same flood of hormones as a **bear attack**.



When we feel *stressed* or in *danger*, a part of our brain (*the amygdala*) sends a message to another part of our brain (*the hypothalamus*) to release stress hormones like **adrenaline** and **cortisol**.

These hormones activate our **sympathetic nervous system**, causing our heart to beat faster, our muscles to tense, and our breathing to quicken, preparing us to **fight, run, or freeze**.

This can impair the part of your brain responsible for reasoning and decision-making (*the prefrontal cortex*).

The Fear Center vs the Thinking Center

AMYGDALA *Fear Center*

The primary role is to detect threats and initiate the body's stress response.

The part of the brain that asks, *"Is this dangerous?"*

Highly reactive, activates quickly, and more automatically

PREFRONTAL CORTEX *Thinking Center*

The primary role is to regulate behavior and decision-making.

The part of the brain that asks, *"What's actually happening and how do I reasonably respond?"*

Deliberate and reflective, it requires work to regulate



*The brain's fear center and thinking center are **functionally connected**; each can inhibit the other, playing a critical role in how the brain manages stress.*

Sympathetic vs Parasympathetic Nervous System

SYMPATHETIC *Fight, Flight, Freeze*

Activates when we feel anxious or under pressure.

Increases heart rate, breathing, and alertness.

Helps us think quickly, but excessive activation can make it difficult to focus or think clearly.

PARASYMPATHETIC *Rest & Digest*

Calms our body after stress.

Slows heart rate, relaxes muscles, and allows us to think clearly again.

We can train this system to activate faster with breathing and grounding techniques.



Your brain and body work best when these two systems are in balance, alert enough to stay focused, but calm enough to think clearly.

Who Experiences Anxiety?

- 35% of students experience some test anxiety, with over 46% of all high school students reporting some level of test anxiety.
- **Good news!** With test anxiety and general anxiety being so common, scientists have discovered strategies that *really work*.
- Students can learn to **harness** and **shift** their anxiety instead of letting it take over, reducing its impact on both their *mental health* and their *academic results*.

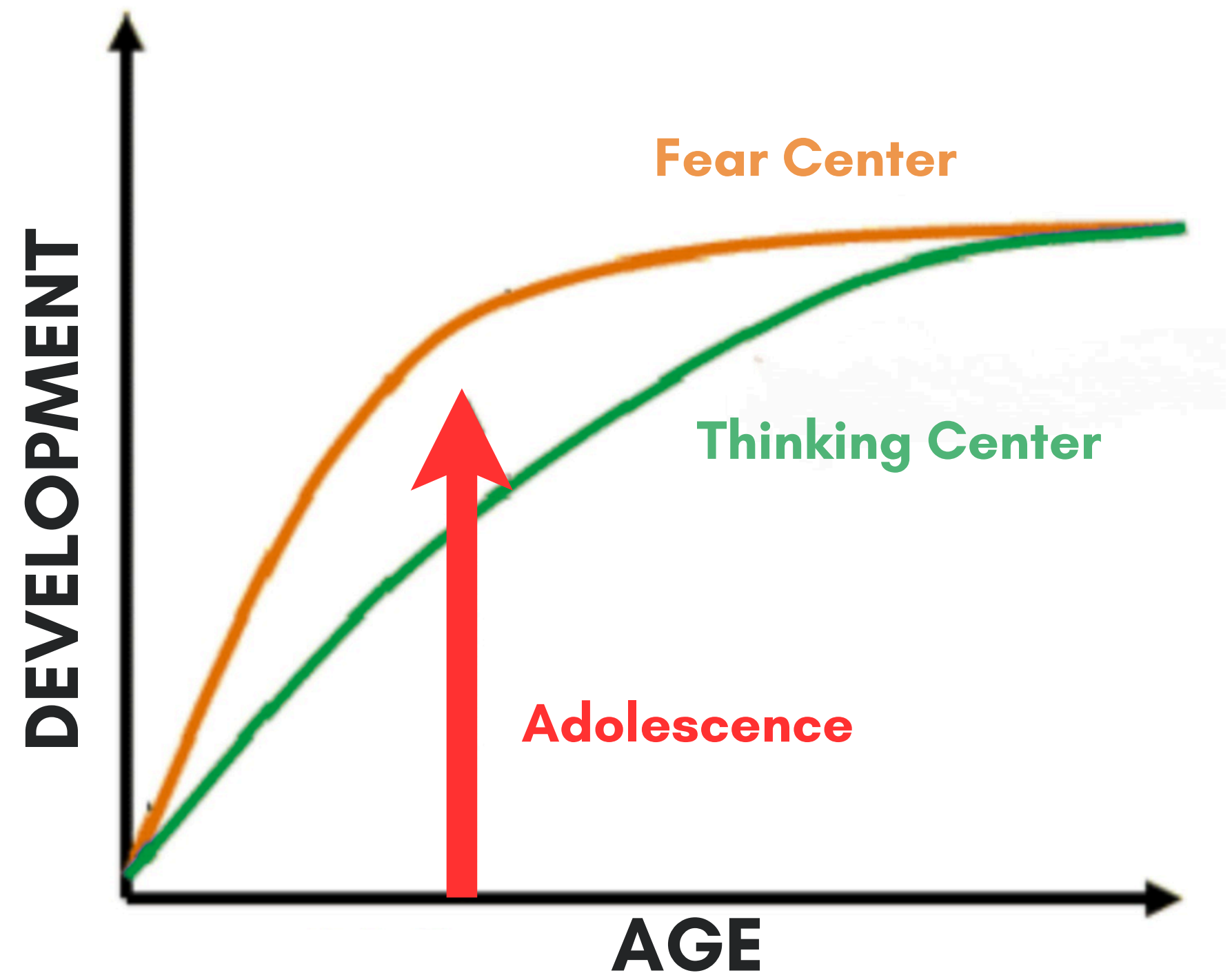


The Fear Center and Thinking Center: Development

Our **fear center** is well developed at birth, develops rapidly during childhood, and reaches **peak volume between ages 9 and 11**.

Our **thinking center** is the last part of the brain to fully develop, and often **does not reach maturity until our mid-20s to early 30s**.

This is why challenges with anxiety and emotional regulation are so **common among teenagers**. The fear-center of the teenage brain is biologically more functional than the thinking-center!



Steps to Overcoming Test Anxiety



Identify, Understand, & Reframe

The first step is to learn how to identify when we experience anxiety and how it affects our performance. Not all anxiety is bad anxiety!



Build Long-term, Successful Habits

Strong habits lower stress! Creating a study routine, getting enough rest, and practicing over time help our brains feel prepared. When we know what to expect, our confidence grows, and anxiety naturally decreases.



Embrace Growth Mindset

Mistakes don't mean failure; they mean learning. Every quiz, project, or test is a chance to grow skills. Believing we can improve with effort helps our brain stay calm and focused instead of anxious.



In-the-Moment Techniques

When anxiety shows up during a test, we can calm our body and refocus our mind. Visualizing test day, practicing slow breathing, and employing positive self-talk help our brain to rest.



IDENTIFY: What does test anxiety look like?



Test anxiety can manifest in physiological and psychological symptoms and often looks different for different students, so it is essential to identify the various ways it can present.

PHYSIOLOGICAL SYMPTOMS

Upset stomach
Rapid breathing
Sleep problems
Headaches
Sweaty palms
Muscle tension
Increased heart rate

PSYCHOLOGICAL SYMPTOMS

Confusion
Memory blocks
Irritability
Impaired concentration
Poor judgement
Frustration
Blanking

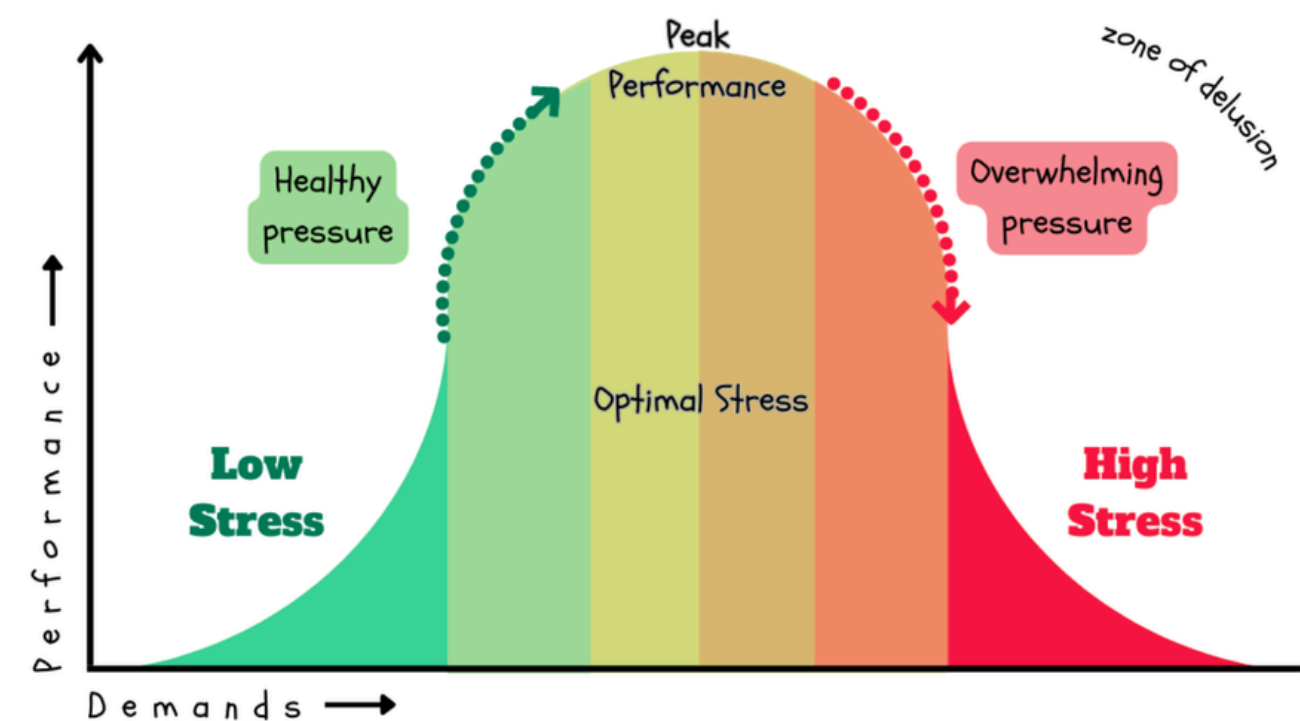


UNDERSTAND: Yerkes-Dodson Law Bell Curve

The Yerkes-Dodson Law: Finding Your “Just-Right” Stress Zone

- Some stress helps us perform better. A little bit of pressure boosts focus and motivation.
 - **Too little stress** → bored or unmotivated.
 - **Too much stress** → brain feels overloaded, making it harder to think clearly or remember information.
- The goal is to find the optimal level of stress, where we feel alert, but not overwhelmed.
- Think of it as a **“Goldilocks Zone”** for peak performance: not too calm, not too anxious, just right.

Stress Performance Curve



Stress Level

Low	Moderate	Optimal	High	Too high
Inactive Bored Unchallenged	Engaged Focused Motivated	Confident In control Productive	Distracted Fatigue Overwhelm	Exhaustion Anxiety Burnout
"I wish I had more to do!"	"I'm feeling focused & energised"	"Now I'm really in the zone"	"I feel anxious & unfocused"	"I can't take this anymore"

REFRAME It for Good

When we view a test as a threat, our brain activates the **sympathetic nervous system**, the same one that prepares us to run from danger. But we can **reframe** that *threat* as a **challenge** instead. This small mental shift changes our body's response.

THREAT MINDSET

"This test will expose me. I can't mess up."



Fear center activates



Body floods with stress hormones



It becomes harder to think clearly.

CHALLENGE MINDSET

"This is a chance to show what I know!"



Thinking center engages



Stress hormones are regulated



Memory and problem-solving sharpen.

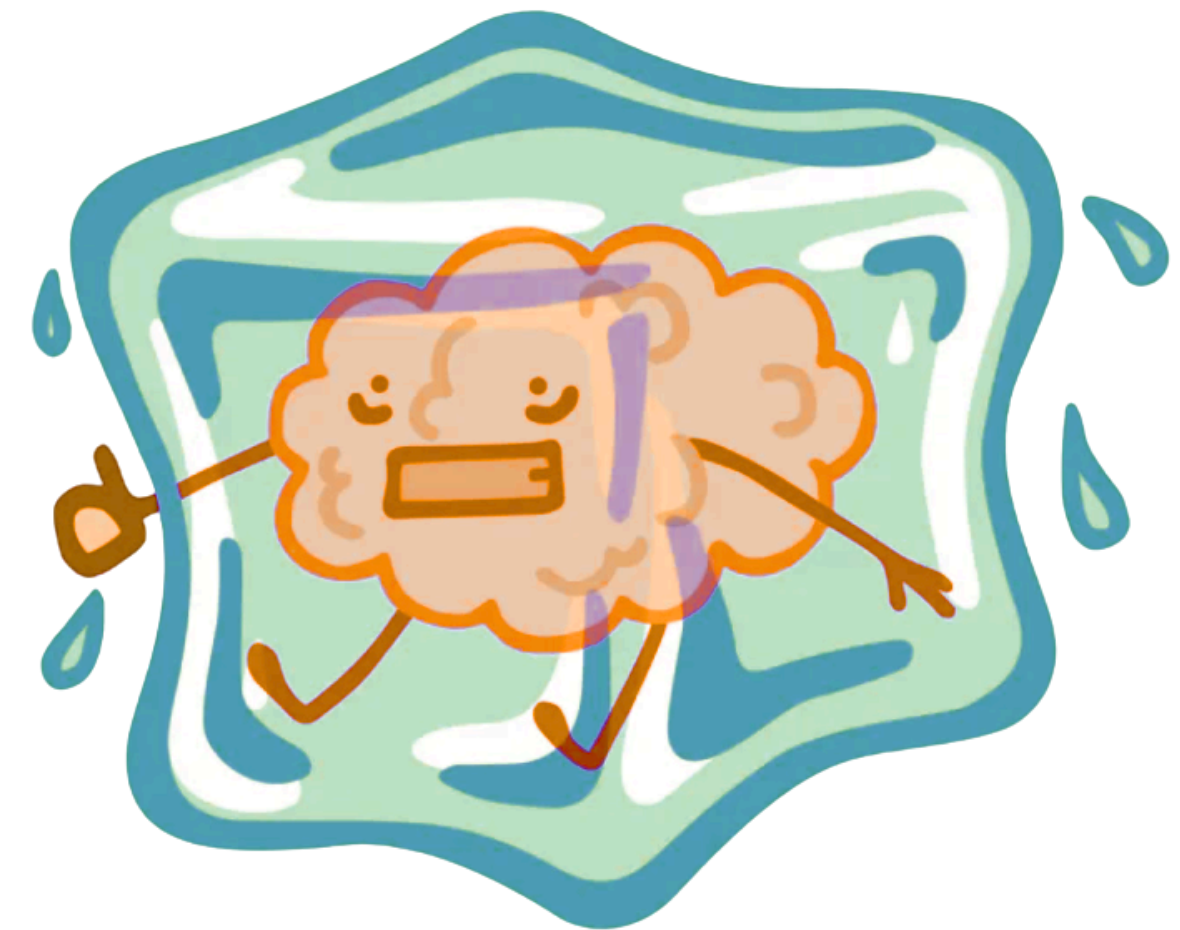
1 REFRAME It for Good: Why it Works

Our brains are complex systems that do many things at once! When we interpret something as a threat, our brain's fear center triggers a stress response, while the thinking and reasoning center **interprets the situation more rationally and regulates the fear center's reactivity.**

When we reframe a test from a threat to a challenge, our brain's thinking center essentially tells the fear center to **CHILL OUT**, allowing us to **shift from survival mode to performance mode.**

But without the right habits and strategies, **the fear center can literally hijack the thinking center**, leaving us feeling stuck in "fight, flight, or freeze" mode during a test.

JUST CHILL OUT





Student Reflection: Identify, Understand, Reframe

Identify

- When does test anxiety show up for you? Before, during, or after a test?
- What signs do you notice in your body or thoughts?

Understand

- Looking at the Yerkes Dodson "Stress Performance Curve." Where do you fall?
- What might help you fall closer to the optimal range?

Reframe

- When your brain sees a test as a threat, how can you reframe it as a challenge instead?

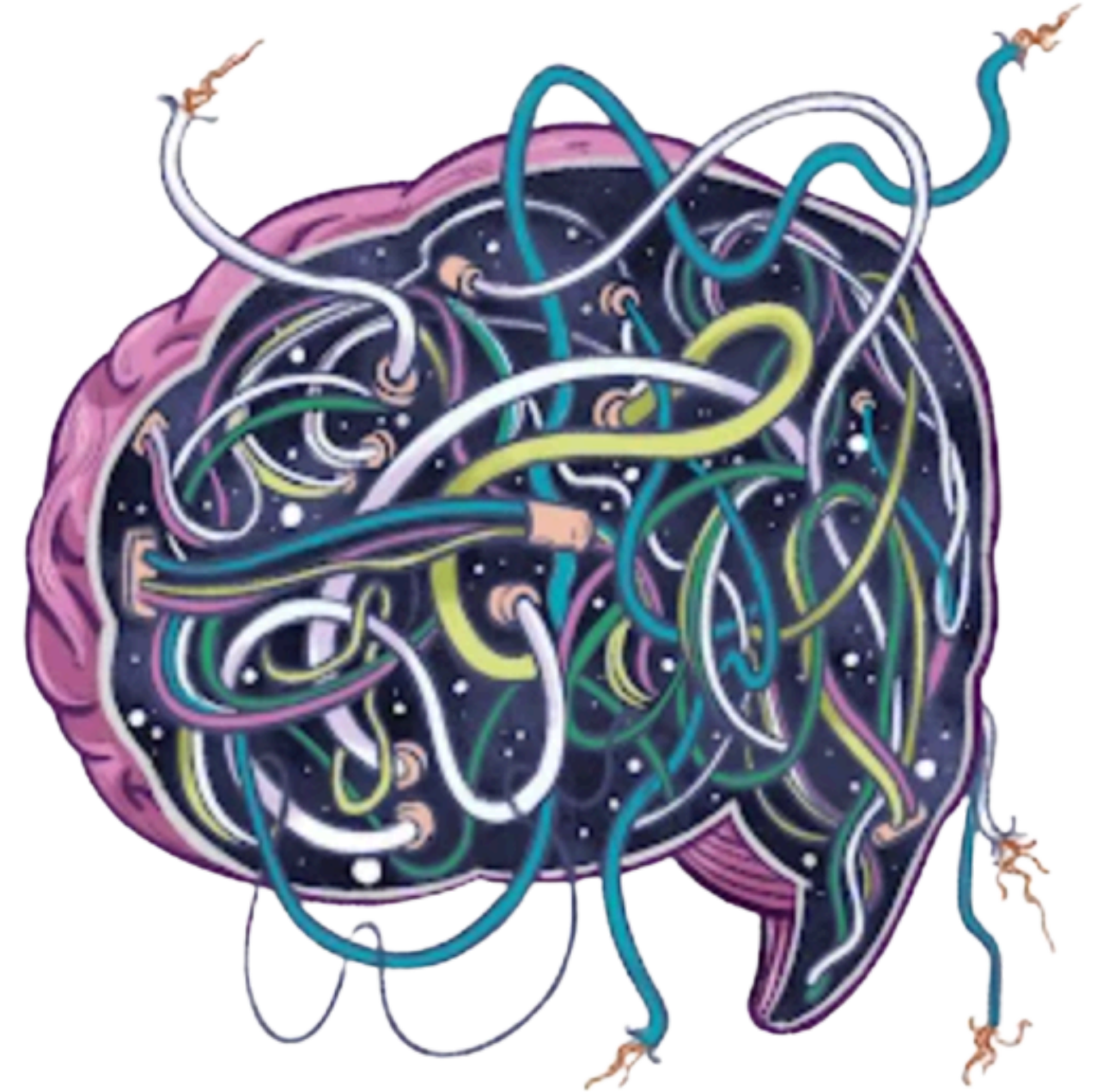
*Example:
Instead of *"I'm going to blank on the math section,"* try **"I've practiced this; I can slow down and use what I know."**

② Long-term habits: Building Mental Muscles

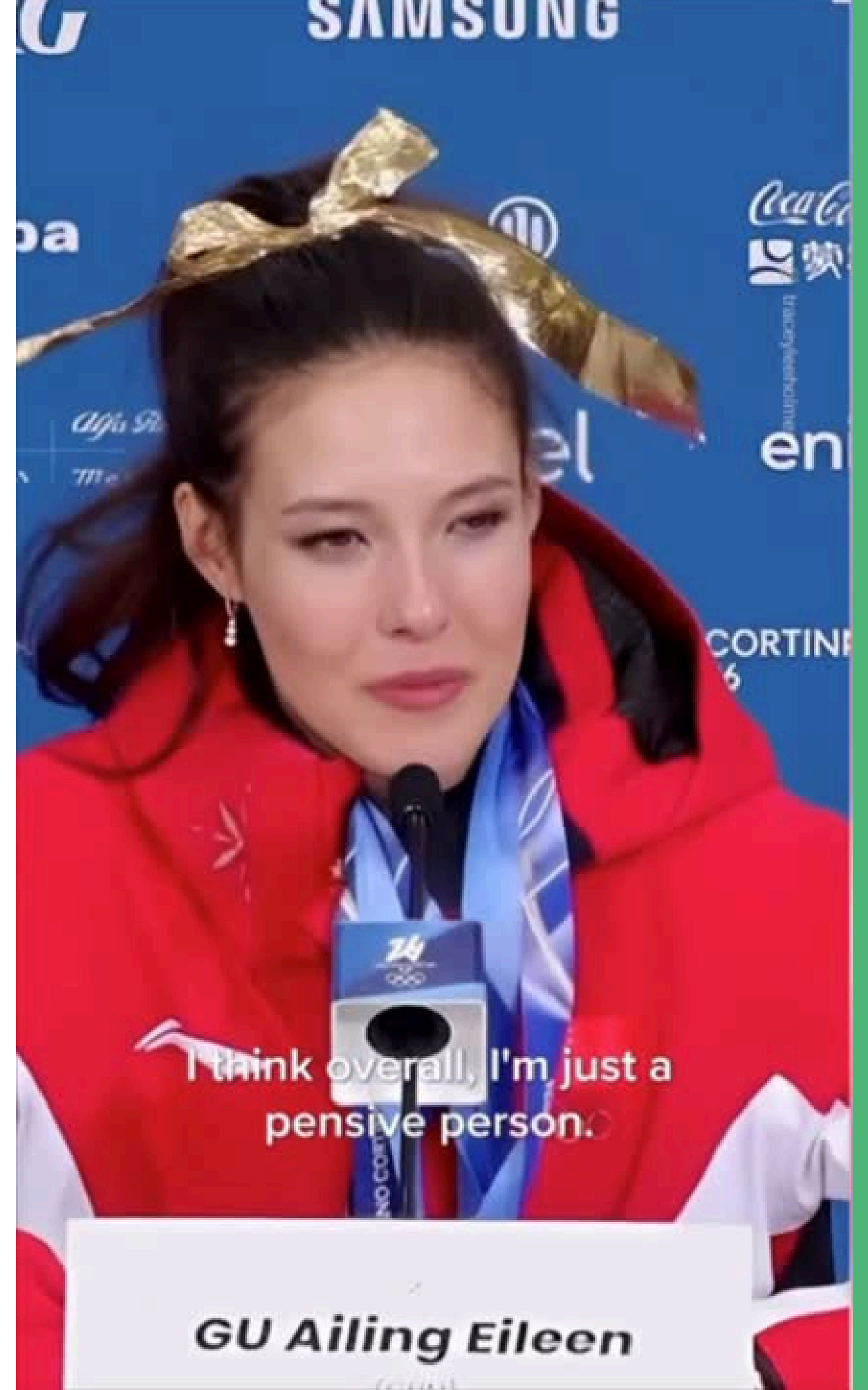
The Strategy: Practicing strategies that reframe tests from challenges to threats **train our brain so its thinking center more automatically regulates the fear center on test day.** Just like we exercise our bodies to build physical muscles, we can exercise our brains to build mental muscles.

Why it Works: Our brain can rewire itself through experience and repetition. Every time we practice a skill or reframe a thought, we strengthen the neural pathways (mental muscles) that make that behavior more automatic. This is called **neuroplasticity**.

Practice doesn't just reinforce content knowledge; **it physically rewires the brain** so that its thinking center takes control when we see familiar information, rather than its fear center.



Eileen Gu, the most decorated female freeskier of all time, says that **neuroplasticity** is her **biggest flex!**



② Long-term habits: **Turn Practice Into Power**

The Strategy: Regular practice familiarizes our brains with concepts and patterns, thereby interpreting them as **predictable, rather than threatening.**

Why it Works: Brain scans show that the **fear center activates when exposed to uncertainty.** Our brains are wired to interpret uncertainty as a threat, which triggers the release of stress hormones!

Regular practice doesn't just help us remember what we are being tested on; it also **reduces uncertainty and prevents our brain's fear center from hijacking our thinking center** on test day.



② Long-term habits: Reflection

The Strategy: After each study session or practice test, spend 3–5 minutes writing a Reflection Notecard.

On a notecard, write down:

1. One **newly learned concept** or strategy.
2. One **rule, equation, or pattern** that showed up.
3. One **moment of progress** or success.
4. One **question**.

Why it works: Reflective practices help to move our memories from our brain's **short-term storage center to its long-term storage center**.

When test content is moved into long-term storage, we strengthen our thinking center's mental muscles, and reduce uncertainty on test day!



② Long-term habits: Routines to Rewire Your Brain

The Strategy: Maintain a consistent study schedule (same time, same **calm and organized** space). Pair studying with calming rituals (music, tea, short walks) that cue the brain it's time to focus.

Why it Works: Consistent, calm study routines strengthen the mental muscles that tell our brains that **testing is safe** rather than threatening.

As the Navy Seals say, "***you play like you practice and you practice like you play***".

Calm, consistent study routines **train your brain** to automatically associate testing with calmness and consistency. Chaotic study routines can **physically rewire your brain** to associate testing with chaos and fear!



② Long-term habits: Rest to Rewire Your Brain

The Strategy: Get 7–9 hours of sleep per night to **strengthen memory and emotional regulation.**

Why it Works: Sleep has been proven to support **long-term memory storage**, a critical process in **minimizing uncertainty on test day!**

Sleep is also crucial for strengthening the prefrontal cortex's (thinking center) regulation of the amygdala (fear center).

A Harvard-based study indicates that brain scans show that “**sleep deprivation amplified amygdala reactivity by over 60 percent...** and this increase was associated with a loss of functional connectivity between the amygdala and the medial prefrontal cortex.”

— Yoo, S. S., Gujar, N., Hu, P., Jolesz, F., & Walker, M. P., 2007, The Human Emotional Brain Without Sleep





Student Reflection: Long Term, Successful Habits

Make a Plan

- When will I complete my homework?
- How often can I commit to regular practice?
- Why is it important to consistently practice?

Reflection

- How and when will I record my post-session reflections?
- How else can I implement reflection into my daily habits?

Routine Reset

- What daily or weekly routines will help me feel focused and steady?
- How can I create a consistent sleep routine that supports focus and calm?

3 Embrace Growth Mindset: Believe You Can Improve

The Strategy: A growth mindset means understanding that **our abilities aren't fixed – they grow through effort, practice, and strategy.**

- Students with a fixed mindset think, "I'm just not a math person."
- Students with a growth mindset think, "I can get better at math with the right approach and persistence."

Why it works: In Carol Dweck's famous study, students were given a challenging task and randomly assigned praise for either intelligence ("**You're smart**") or effort ("**You work hard**").

- Students praised for their intelligence avoided challenges and demonstrated less persistence after setbacks.
- Students praised for their effort demonstrated more resilience and challenge-seeking behavior.
- Students **praised for effort showed improved performance over time** relative to those praised for intelligence.

A growth mindset **turns a threat into a challenge!**

3 Growth Mindset: Turn Practice into Power

The Strategy: Reward effort, not just results. Review old tests or assignments and celebrate progress.

Why it Works: Rewarding effort activates **the reward center and “feel good” chemical (dopamine)** in our brain.

When we feel good about our effort, rather than fearful of our failure, we strengthen the mental muscles that frame tests as safe rather than threatening.

Dopamine has also been proven to support memory and focus!



3 Growth Mindset: Progress over Perfection

The Strategy: Learning is about iteration — seeing each question, mistake, or grade as information, not proof of our limits. After a study session, **reflect on growth** by writing:

- An area of increased confidence.
- A newly recognized pattern.
- An area for growth.

Why it Works: When we **reframe mistakes from “failures” to “learning tools,”** we strengthen mental muscles to view challenges as safe rather than threatening. Instead of fearing failure, we train our brains to interpret mistakes as opportunities for growth.

When we put ourselves down for our mistakes, we train our brains to **associate difficulty with danger**, which can put our brain’s fear center into overdrive before we even start testing!



3 Student Reflection: Embrace a Growth Mindset

Reframe the Challenge

- What's one area of an upcoming test that feels tough right now, and how can you reframe it using "yet" language?

Example:

"I don't feel confident with algebra questions... yet."

Recognize Effort

- What's one effort, strategy, or habit you've been building that shows progress?

Example:

"I've been doing 10 practice questions each morning."

Celebrate Growth

- What's one small win or improvement you've noticed in focus, confidence, or accuracy?

Example:

"I used to panic on essay questions, but now I slow down and so I can read and plan my answer carefully."

4 In the Moment:

Visualization- Preparing for Test Day

The Strategy: Visualization means mentally rehearsing success before it happens.

- Find a **quiet space**.
- With eyes closed, picture calmly entering the test room.
- Imagine **breathing steadily, posture confident, and focus sharp**.
- **Visualize solving** a challenging problem successfully.

Why it Works: Visualization helps us to **reduce uncertainty**, thereby suppressing our fear center's reactivity on test day. When we visualize ourselves as calm and confident in a testing environment, we strengthen the mental muscles that **associate calmness and confidence with testing**.



4 In the Moment:

Box Breathing: Calm Your Body, Focus Your Mind

The Strategy:

- Inhale through the nose for 4 seconds.
- Hold breath for 4 seconds.
- Exhale slowly through the mouth for 4 seconds.
- Pause for 4 seconds, then repeat.

Why it Works: Slow, diaphragmatic breathing activates the “rest and reset” part of our nervous system, which improves focus and reasoning.

Rapid breathing activates the “fight or flight” part of our nervous system, which can cause fear-based thinking to overtake logic and reasoning!



4 In the Moment:

Grounding: Stay Present When Anxiety Hits

The Strategy: Grounding helps us reconnect with the present when our minds start racing with “what ifs.” It brings our focus away from worries and back to what’s actually happening right now.

- 5 things we see
- 4 things we can touch
- 3 things we can hear
- 2 things we can smell
- 1 thing we can taste or imagine tasting

The Science: Grounding **activates our brain’s thinking center** because it requires deliberate, sustained attention.

It also forces us to focus on the tangible instead of the ambiguous; **ambiguity activates our brain’s fear center!**



4 Student Reflection: In the Moment

Visualize Success

- What does a calm, confident test day look like for you?

Example:

"I'm sitting tall, breathing slow, and focusing on one question at a time."

Choose Your Reset Tool

- Which in-the-moment technique (box breathing, grounding, visualization) feels easiest for you to try first?

Plan Your Practice

- When and how will you practice your calming strategy before test day?

Example:

"I'll do one round of box breathing before every SAT practice section."

Thank you for joining!

Contact info:

Cassie@marigoldprep.com

415 237 3377