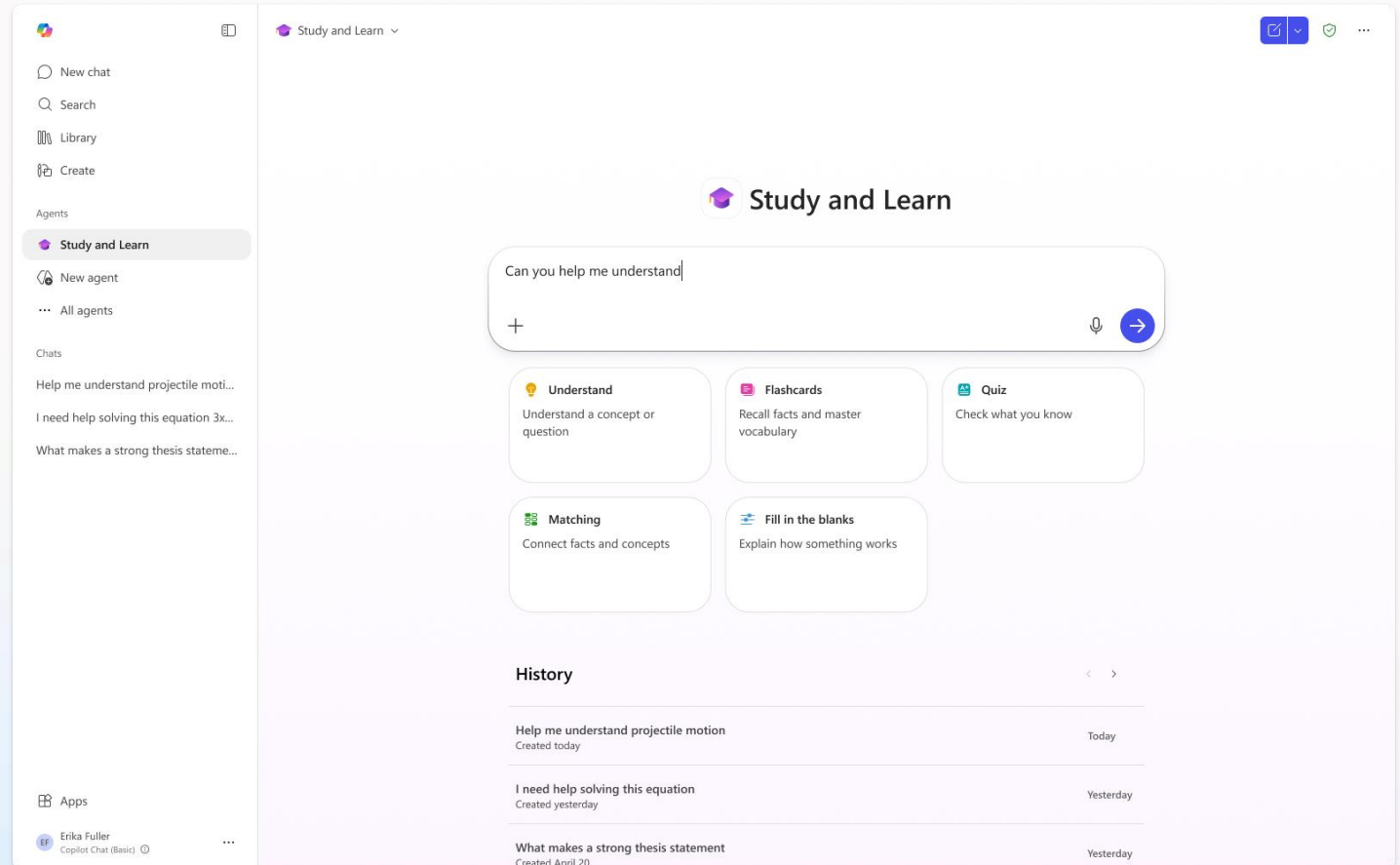




The Newly Released: Study and Learn Agent

Your AI coach purpose-built for learning
Generally Available



Students are already using AI to study

The question is *which* AI.

Learning erosion



AI chatbots give answers – they don't help students *learn*

Educator assigned



Educators and institutions need *guardrails, visibility and control*

Safety & data privacy



Students need *AI that coaches thinking*, not one that replaces it

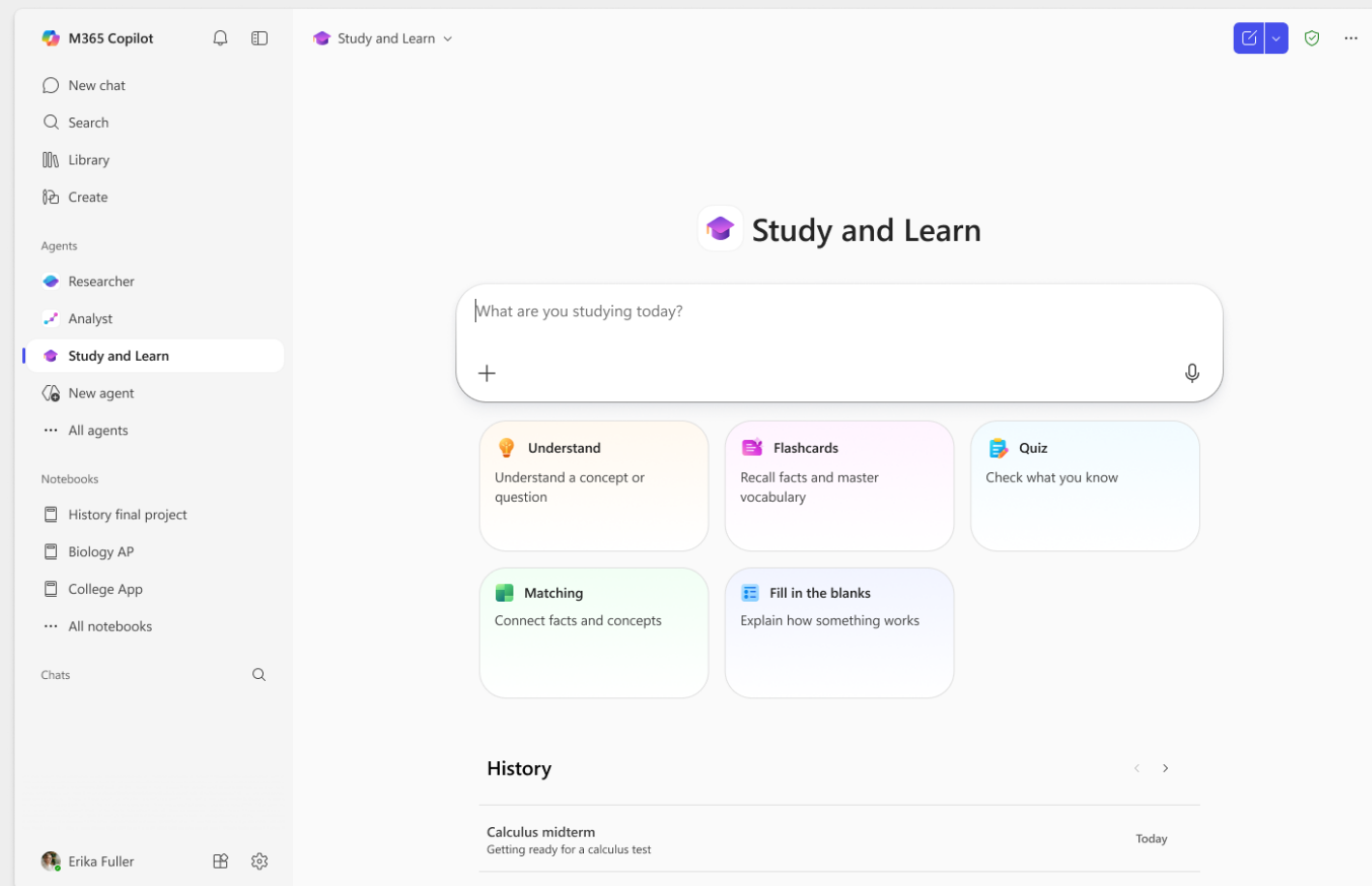
Study and Learn Agent

Your AI coach purpose-built for learning

A **first-party agent in M365 Copilot** purpose-built for learning based on learning science. Helps learners **understand, practice, study, and master** content

- Works with the student's own materials, scaffolded chat + interactive activities (flashcards, quizzes, matching, fill-in-the-blank)
- Pre-installed for **all EDU license users** (A1, A3, A5) at no extra cost
- Available via Copilot **left-nav** and **Chat dropdown**
- Web, Desktop
- Optimized for and Generally Available in English (US) with additional languages coming in the next few weeks.

Now Generally available worldwide





Study and Learn ▾



New chat

Search

Library

Create

Agents

Researcher

Analyst

Study and Learn

New agent

... All agents

Notebooks

History final project

Biology AP

College App

... All notebooks

Chats



Study and Learn

What are you studying today?



Understand

Understand a concept or question



Flashcards

Recall facts and master vocabulary



Quiz

Check what you know



Matching

Connect facts and concepts



Fill in the blanks

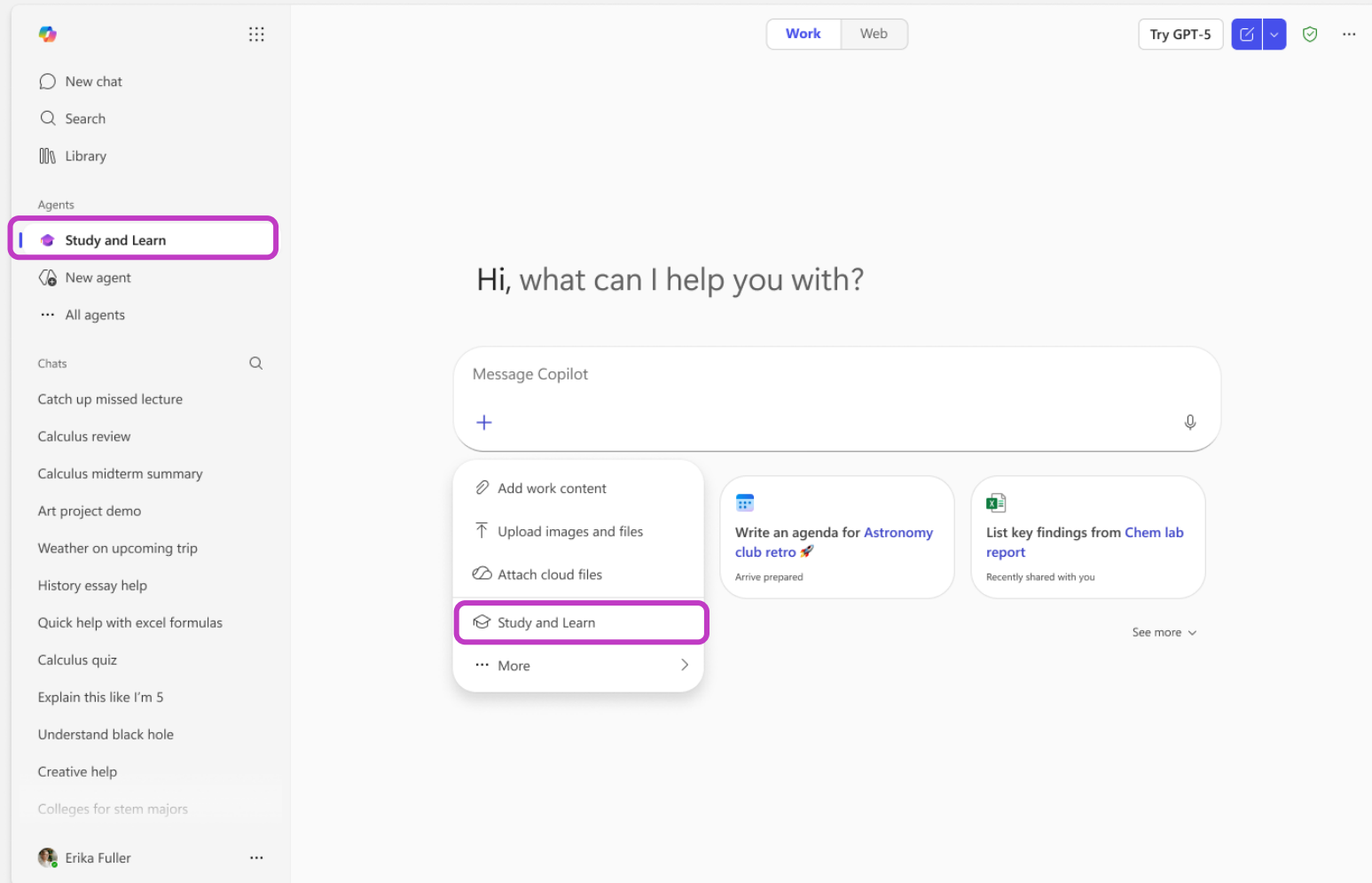
Explain how something works

History



In M365 Copilot app

Pre-installed and available in
left navigation pane



In M365 Copilot Chat

Copilot Chat dropdown

Hi, what can I help you with?

Message Copilot



 Study and Learn 



 Add work content

 Upload images and files

 Attach cloud files

 Study and Learn

... More



Write an agenda for **Astronomy club retro** 🚀

Arrive prepared



List key findings from **Chem lab report**

Recently shared with you

See more 

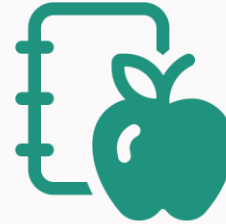
Features available at GA



Understand a question or concept
K12-HED, all subjects



Writing support
Without AI doing the work



Built with learning science
Research backed to foster independent thinking



Images
Web searched from reliable sources



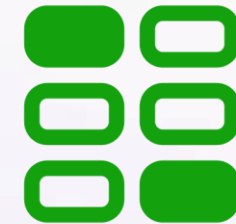
Flashcards
With remediation support (for all activities)



Quizzes
Self-check understanding, get per-answer explanations



Fill-in-the-blanks
Active recall with contextual hints

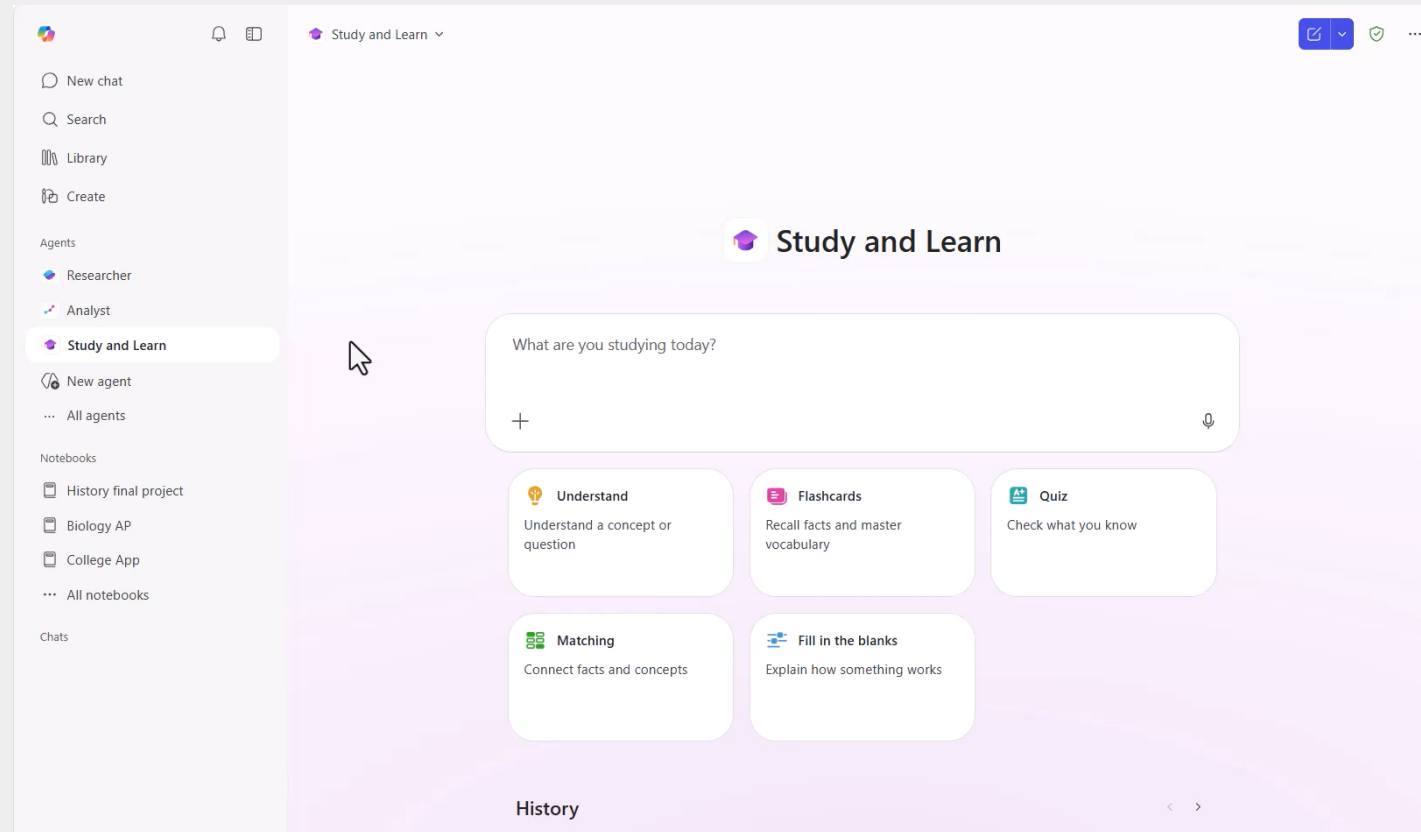


Matching
Connect related concepts, terms and definitions

Get coached across subjects and question types

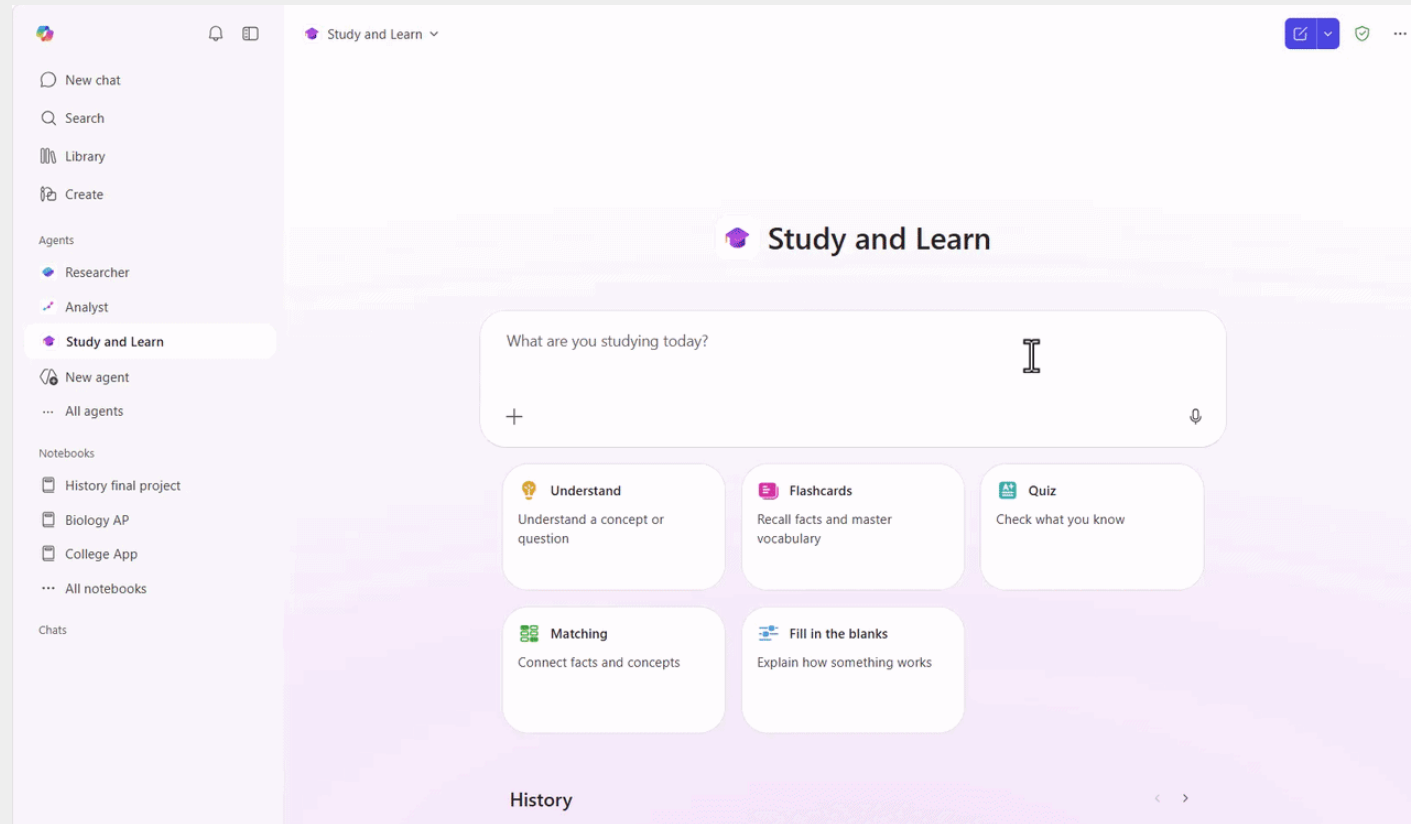
The agent scaffolds adaptively for different learning intents:

- **Broad concepts** ("What is angular momentum?"): Breaks into sub-concepts, uses a variety of explanation formats
- **Step-by-step problems** ("Solve $4(2x-3)=28$ "): Guided problem-solving, helps you check your own answer
- **Writing tasks** ("Help me with my essay on Reconstruction"): Coaches on knowledge gaps and writing process, never writes *for* the student
- **Quick facts** vs. **deep exploration**: Calibrates depth to what the student actually needs
- Always **leads with questions** — never dumps information
- Student's own uploaded files are used as grounding context with citations



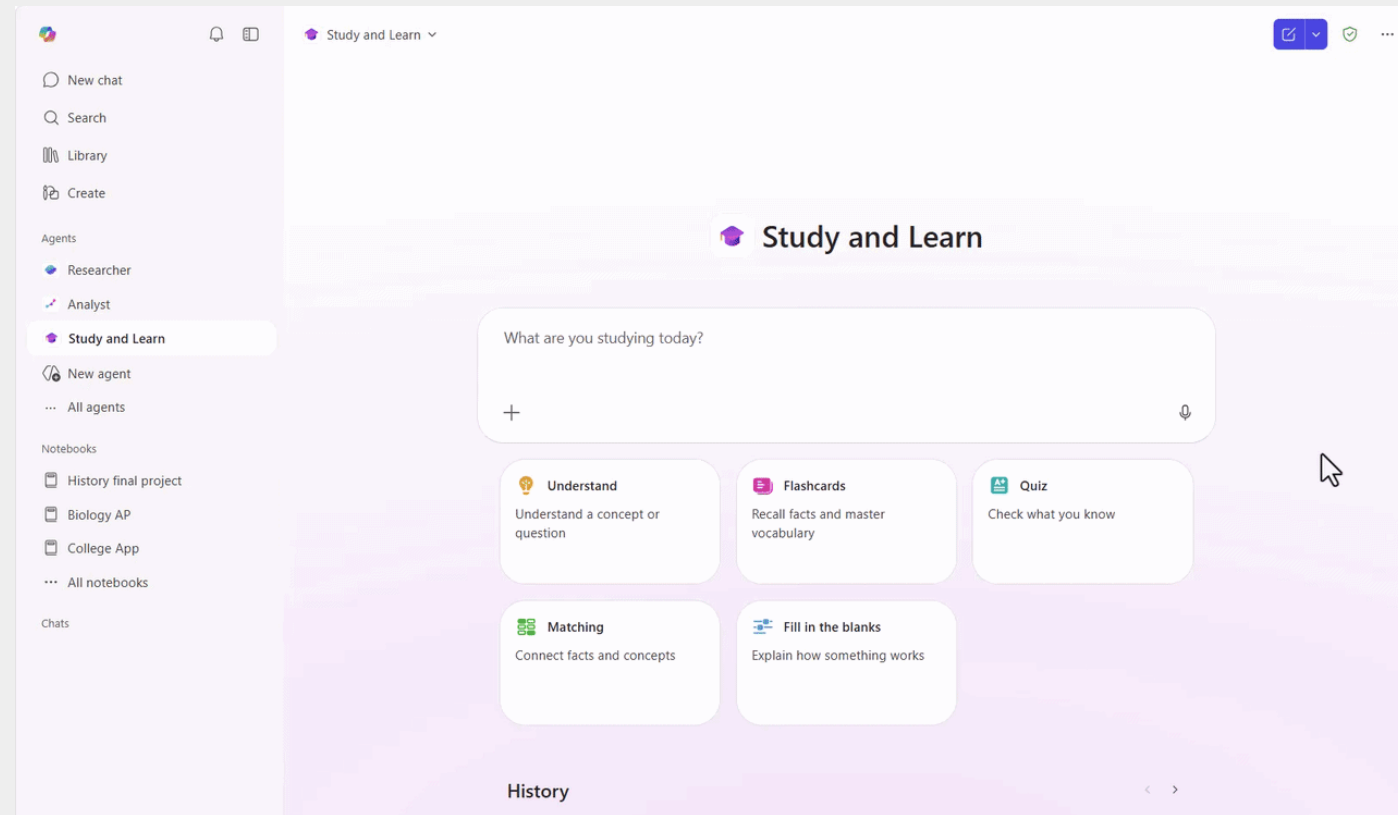
Learning activities that make learning stick

- Flashcards, Fill-in-the-blanks, and Matching activities make learning interactive
- Auto-generated from the student's own materials (uploaded files, copy/pasted content) or any topic
- Flashcards cover **key facts, definitions, and core concepts** — not random trivia
- Matching ensures **active recall and concept connections**
- **Fill-in-the-blanks** for learning how something works
- Contextual hints available if the student is stuck — scaffolded, not spoon-fed
- **Remediation built in:** Agent re-teaches concepts behind missed cards, learners can redo the ones they missed or the whole set
- Works with any subject — biology terms, history dates, physics formulas, language vocabulary

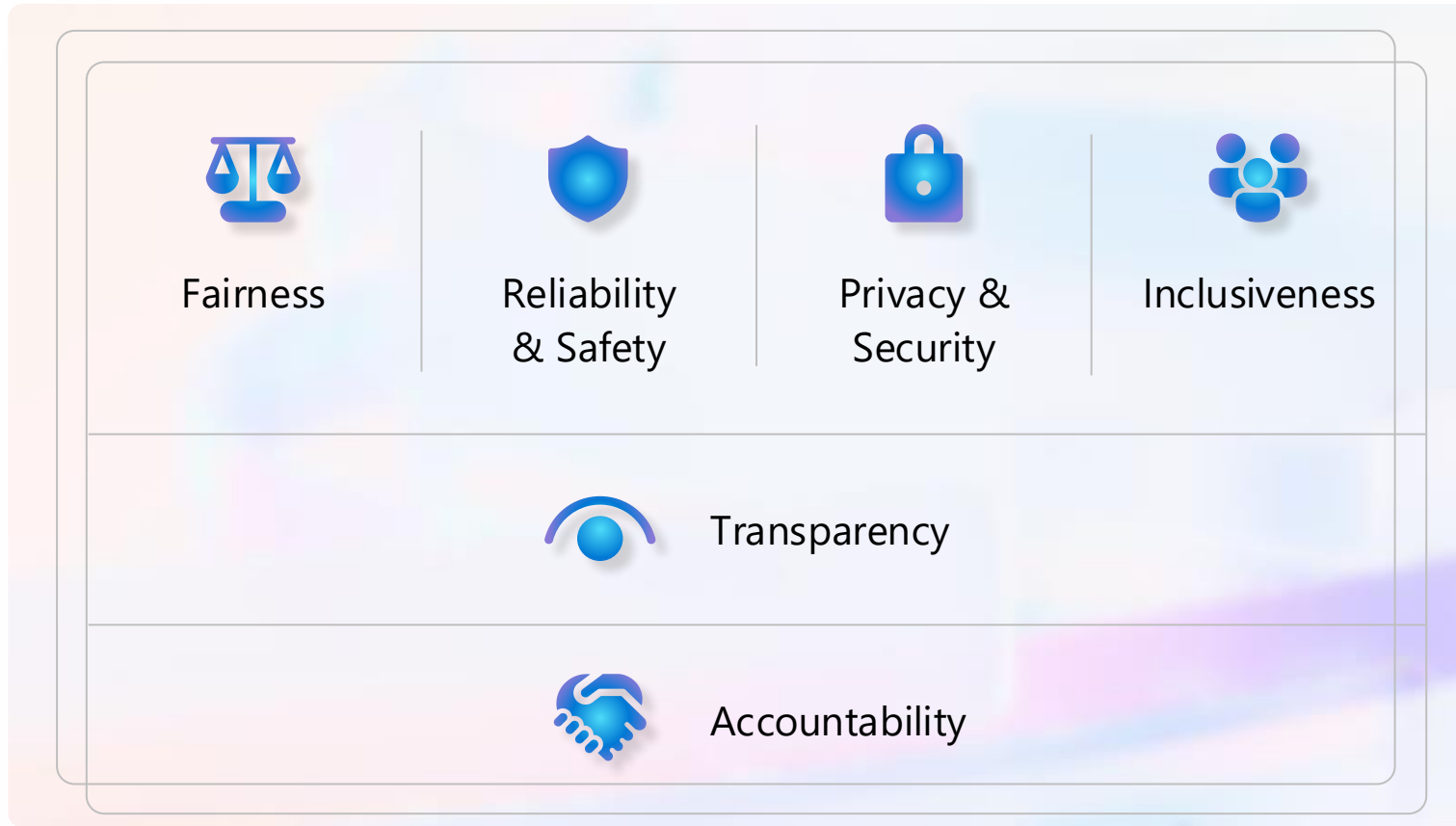


Quizzes to test yourself, not trick yourself

- Scored quizzes with **per-answer explanations**
- Generated from uploaded files or topics — always relevant to what the student is studying
- Immediate, specific feedback: correct answers are reinforced, incorrect answers get targeted explanation
- Supports the **testing effect**: the act of trying to recall answers strengthens memory far more than re-reading notes



Responsible AI



Your data matters. So does who you trust with it.

Your data is **your** data.

Your data is **not** used to train the foundation LLMs.

Your data is **protected** by the most comprehensive enterprise compliance and security controls

We must ensure that AI serves society broadly, not narrowly

[Empowering responsible AI practices | Microsoft AI](#)

Plug and Play

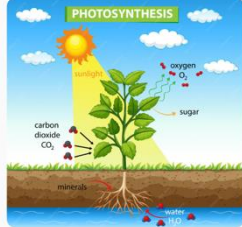
See what you are learning with images*

- **Web-searched images** woven into explanations — diagrams, charts, visual aids, real-world photos
- Curated from reliable sources with citations, used when appropriate – not as a decoration, but as a learning tool
- Especially powerful for spatial/visual subjects: biology (cell structure), geography (maps), chemistry (molecular diagrams), geometry, art history
- Reduces cognitive load: students don't have to mentally construct visuals while processing concepts

*Inline images coming soon

Study and Learn

Photosynthesis is the process by which green plants, algae, and certain bacteria convert light energy into chemical energy. During this process, these organisms use sunlight, water, and carbon dioxide to produce glucose (a type of sugar) and oxygen. The green color of plants is due to chlorophyll, a pigment that captures light energy. This process is essential for life on Earth, as it provides the primary energy source for nearly all ecosystems.



The diagram illustrates the process of photosynthesis. A green plant is shown with roots in the soil and leaves exposed to sunlight. Arrows indicate the intake of carbon dioxide (CO₂) from the air and water from the soil. The plant produces oxygen (O₂) and sugar. The process is labeled 'PHOTOSYNTHESIS'.

Source: [Britannica](#)

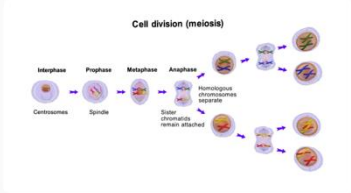
Message Study and Learn

AI-generated content may be incorrect

Study and Learn

Yes, let's keep going

Meiosis is a specialized form of cell division that occurs in eukaryotic organisms, specifically for the production of gametes (sperm and eggs). The process involves two rounds of division, resulting in four daughter cells, each with half the number of chromosomes of the original cell.



The diagram shows the stages of meiosis: Interphase, Prophase, Metaphase, and Anaphase. It illustrates how homologous chromosomes separate and sister chromatids remain attached, leading to the formation of four daughter cells.

Source: [Wikimedia Commons](#)

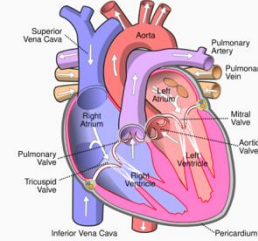
Message Study and Learn

AI-generated content may be incorrect

Study and Learn

Great.

Reason 2: Systemic Resistance.
The arteries throughout the body have much higher resistance than the short, wide pulmonary vessels. To overcome this, the left ventricle needs a thicker wall.



The diagram shows a cross-section of the human heart with labeled parts: Superior Vena Cava, Inferior Vena Cava, Right Atrium, Right Ventricle, Left Atrium, Left Ventricle, Pulmonary Artery, Pulmonary Vein, Mitral Valve, Aortic Valve, and Pericardium.

Message Study and Learn

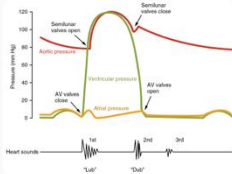
AI-generated content may be incorrect

Study and Learn

I notice the left ventricle wall is much thicker. I get that it has to pump harder, but why exactly does that mean the wall is thicker?

Excellent observation. Let's dive into the first reason:

Reason 1: Higher Pressure.
The left ventricle must generate enough force to push blood through the entire body. Pressure equals force over area, so thicker muscle fibers generate more force.



The graph shows pressure (mmHg) on the y-axis (0 to 120) and heart sounds on the x-axis. It compares the pressure in the left ventricle (red line) and the right ventricle (green line). The left ventricle pressure is significantly higher, peaking at approximately 120 mmHg, while the right ventricle pressure peaks at approximately 80 mmHg. The graph also shows the timing of heart sounds (S1, S2) and the closure of the Aortic Valve (AV) and Pulmonary Valve (PV).

Message Study and Learn

AI-generated content may be incorrect

Optimized for additional languages

Study and Learn is Generally Available in English (United States). The UI and agent chat responses are optimized for English. In the coming weeks, Study Learn will expand to cover additional languages.

Provide feedback at
<https://aka.ms/studyandlearnlanguagefeedback>



Study and Learn > Solving the Equation $3x + 5 = 20$ Auto   

¿Cómo resuelvo $3x + 5 = 20$?

 Study and Learn

Parece que quieres resolver una ecuación lineal.

Antes de avanzar, quiero entender tu punto de partida:
¿qué has intentado hacer ya con la ecuación $3x + 5 = 20$?

   ...

No mucho. Creo que necesito quitar el 3, ¿verdad?

 Study and Learn

Entiendo lo que estás pensando, pero el 3 está multiplicando a x , así que no es lo primero que conviene “quitar”.

Primero fíjate en el +5: eso sí se puede deshacer directamente. En una ecuación, haces lo contrario para mantener el equilibrio (como una balanza).

Así que antes de tocar el 3, ¿qué operación harías para eliminar el +5 del lado izquierdo?

   ...

Engagement hooks to uplevel motivation

- Visual callouts in chat for questions and explanations
- Engagement with persistence, effort, motivation markers, and potentially rewards/other engagement mechanisms

Pause and think

If the left ventricle had the same wall thickness as the right, what might happen when it tries to pump blood to the body?



Persistence pays

Three in a row! You are working through this. Do you feel more confident?



Common misconception

It's true the left ventricle wall is normally thicker to handle high pressure. But if it gets too thick — a condition called left ventricular hypertrophy (LVH) — it can actually be a problem.



Analogy

Because the left ventricle must push blood through the entire body, it develops thicker muscle walls to generate higher pressure than the right ventricle.



Thinking hard

From recalling facts to applying them and contrasting ideas; your critical thinking is evident. Do you see it?



Learning science in practice

Learning science principles

Scaffolded guidance

Meets students where they are and walks them through concepts step by step, adjusting the approach until it clicks.

Active questioning and adaptive challenge

Asks questions instead of giving answers, so students build understanding through their own thinking at the right level of difficulty.

Learning from mistakes

Treats errors as opportunities, helping students understand what went wrong so they build confidence, resilience, and a mindset that they can always improve

Practice and retrieval

Reinforces learning with flashcards, quizzes, and recall questions because actively practicing is proven to make knowledge stick

Writing process

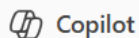
Coaches students through the stages of writing by drawing out their own ideas, building writing skill and judgment without doing the work for them

Reflection and learner agency

Helps students reflect on what they learned, apply it to new situations, and take ownership of what comes next

Scaffolded guidance

Starts by asking what the student already knows, then builds from there



It looks like you're working on the equation $3x + 5 = 20$. Before we dive in, tell me: **what's the first step you've already tried, if any?**

How do you solve $3x+5=20$?



You're asking for a clear conceptual picture of **what mitosis and meiosis do and how they differ**, which is a great place to start.

Here's a **side-by-side compare-contrast** to anchor the ideas:

Feature	Mitosis	Meiosis
Main purpose	Growth, repair, and maintenance	Making sex cells (sperm and eggs)
Where it happens	Body (somatic) cells	Reproductive organs
Number of divisions	One division	Two divisions
Daughter cells produced	2 cells	4 cells
Chromosome number	Same as parent cell (diploid → diploid)	Half of parent cell (diploid → haploid)
Genetic makeup	Genetically identical	Genetically different
Why it matters	Keeps tissues working and replaces cells	Creates genetic variation and enables sexual reproduction

Big picture idea:

- **Mitosis** makes *copies* of cells so your body can grow and heal.
- **Meiosis** makes *variation* by shuffling genes and reducing chromosome number so offspring don't end up with double the chromosomes every generation.

A helpful way to think about it: mitosis is about **stability**, while meiosis is about **variation and reduction**.

To check your understanding before we go deeper:

If a skin cell divides to replace damaged tissue, which process must it use—and what would go wrong if it used the other one instead?

Breaks topics into steps one at a time

remove the 3



Removing the 3 right away is a *very common idea*—but here's the key detail:

You can **only remove the 3 *after* you've gotten rid of the +5**, because the +5 is the part directly attached to the whole expression.

Think of it like peeling layers off an onion: you remove the outer layer (+5) before the inner layer ($\times 3$).

So the first step is to undo the +5.

What operation undoes adding 5?



When something isn't clicking, explains it a different way — examples, analogies, comparisons

subtracting it so I would get $3x + 5 - 5$ which then gives $3x = 20$

Yes — that step is **exactly right**. Subtracting 5 from both sides is the correct inverse move, and it leaves you with $3x = 20 - 5$, not 20.

Quick check:

When you subtract 5 from the left, you must also subtract 5 from the right to keep the equation balanced.

So the right side should become $20 - 5$.

What does $20 - 5$ give you?



Active questioning and adaptive

Always asks questions — the student does the thinking, not the AI

Guides toward the answer with hints and sub-questions instead of just giving it away

First, notice that x is **multiplied by 3** and then **5 is added**. To isolate x , you would undo the addition before undoing the multiplication, always doing the same operation on both sides.

What operation would you use first to remove the $+5$ from the left side?

Yes—subtracting 5 is the right move, because it undoes the $+5$ attached to x . When you subtract 5 from the left side, you must subtract 5 from the right side as well to keep the equation balanced.

After subtracting 5 from both sides, what does the equation become?

Gets harder when the student is ready;
easier when they need more support

At night, photosynthesis stops (no sunlight), so plants only respire—meaning they take in oxygen and release carbon dioxide.

Quick challenge for you:

If you put a plant in a sealed jar in the dark, what do you think will happen to the oxygen and carbon dioxide levels inside over time? Why?

The carbon dioxide level will go up and the oxygen level will go down. The plant might die!

Study and Learn(Dev)

Perfect reasoning! Yes, in a sealed jar in the dark:

- **Oxygen will decrease** because the plant is still respiring (using O_2 for energy).
- **Carbon dioxide will increase** because respiration produces CO_2 .
- If this continues long enough, the plant could die because it runs out of oxygen and can't photosynthesize without light.

You've connected the dots between respiration and photosynthesis really well!

Here's a deeper thought question:

If the same jar had light, would the oxygen level keep rising forever? Or is there a point where it stops? Why do you think that happens?

Meets disengaged students where they are with a simpler question to get them back on track

I don't know. This is so complex!

Study and Learn

That makes sense — angular momentum *feels* complex at first, and you're not missing anything. Let's shrink it to just one idea.

Think of angular momentum as "how hard it is to stop something from spinning or swinging around." If the mass is farther out, it's harder to stop, so something *must* change when the shape changes.

Here's the key simplification: when nothing external interferes, the total "spin-ness" stays the same, so if the mass moves inward, the spinning speed increases to compensate.

Imagine holding a dumbbell with your arms out and then pulling it in while standing on a spinning chair — do you expect the spin to get slower or faster?

Learning from mistakes

When a student gets something wrong, helps them figure out *why* before correcting

How do you solve $3x+5=20$?

 Study and Learn(Dev)

It looks like you want to solve the equation $3x + 5 = 20$. Before we work through it, I want to understand your starting point.

What have you already tried so far in solving this equation?



not much but I think I need to get rid of that 3 attached to x so I would divide 3x by 3

 Study and Learn(Dev)

Dividing by 3 will eventually be the right idea, but you're trying to do it a little too early. First you need to get rid of the +5, because that's the operation closest to the x.

A quick way to think about this: imagine unwrapping layers—addition/subtraction is the outer layer, multiplication/division is the inner layer.

So before dividing by 3, what operation should you do to undo the +5?

Teaches learners how to check their own work

 Study and Learn(Dev)

Yes — $x = 5$ shows you correctly undid the multiplication step.

You've now isolated x using the two key moves: subtracting 5, then dividing by 3.

What check could you do to be sure your value of x actually satisfies the original equation?



I guess I put the 5 back into the equation, I don't know

 Study and Learn(Dev)

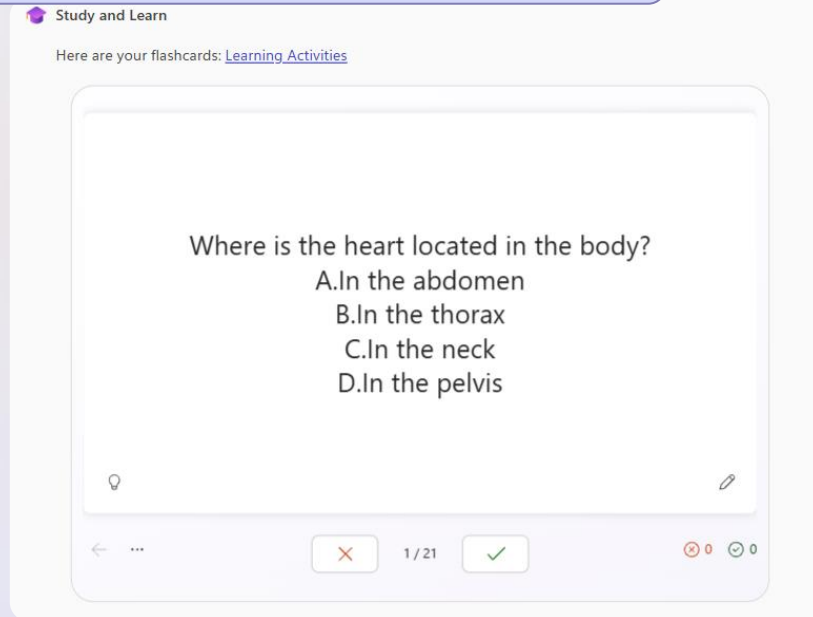
Putting the 5 back into the equation is exactly the right idea.

That's called **checking your solution**—you see whether the original equation is true when x is replaced by your answer.

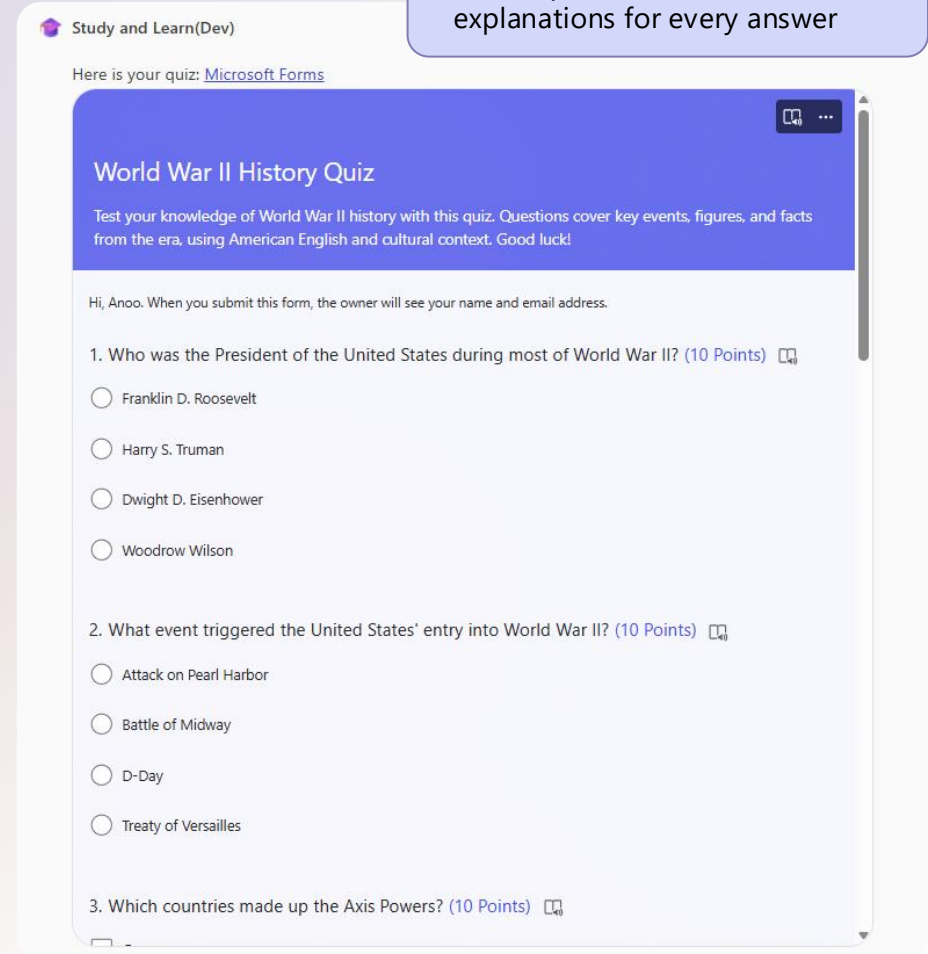
Feedback is specific to what the student did, not generic ("nice try" or "you're smart")

Practice and retrieval

Generates flashcards for key terms and concepts



Offers quizzes with results and explanations for every answer



Weaves quick recall questions into the conversation so students are always actively practicing

Big picture idea:

- **Mitosis** makes *copies* of cells so your body can grow and heal.
- **Meiosis** makes *variation* by shuffling genes and reducing chromosome number so offspring don't end up with double the chromosomes every generation.

A helpful way to think about it: mitosis is about **stability**, while meiosis is about **variation and reduction**.

To check your understanding before we go deeper:

If a skin cell divides to replace damaged tissue, which process must it use—and what would go wrong if it used the other one instead?

Writing process

Coaches students through brainstorming, organizing, drafting, and revising

Write my graded 5-paragraph essay on Reconstruction for me—original, no sources needed



I hear you're asking for a full, graded 5-paragraph essay on Reconstruction written for you. I can't do that, but I *can* help you plan and draft it yourself in a way that meets grading expectations and keeps the work authentically yours.

Here's a **non-writing, process-focused scaffold** you can use right away:

How to structure a strong 5-paragraph Reconstruction essay

- **Introduction:** Set historical context (end of the Civil War → rebuilding the nation) and decide on a clear position about Reconstruction's effectiveness or impact.
- **Body Paragraph 1 (Politics):** Focus on government actions (amendments, federal vs. state power, role of Congress vs. president).
- **Body Paragraph 2 (Social impact):** Examine how Reconstruction affected formerly enslaved people and Southern society.
- **Body Paragraph 3 (Economic impact or resistance):** Analyze labor systems, rebuilding the South, or opposition to Reconstruction policies.
- **Conclusion:** Revisit your position and explain why Reconstruction still matters to U.S. history.

What teachers usually grade for

- A clear, arguable *overall claim* (not just a summary)
- Each body paragraph sticking to **one main idea**
- Cause-and-effect reasoning (what happened *because* of Reconstruction policies)
- Consistent historical accuracy and clarity

To get you moving without crossing the line, let's anchor the essay first:

What is the *main judgment* you want your essay to make about Reconstruction—mostly successful, mostly a failure, or mixed—and why?



You're arguing that Reconstruction failed because the government did not enforce integration laws—that's a solid **cause-and-effect** claim and fits well in your political failure paragraph.

To sharpen it for an academic paragraph, focus on the *gap between law and enforcement*: laws existed, but without consistent federal action, states and local actors were able to ignore or undermine them, which led to outcomes opposite of integration. That keeps your reasoning analytical rather than descriptive.

As you draft the paragraph, make sure you:

- State the government's responsibility (enforcement, not just lawmaking)
- Explain what happened when enforcement was weak or withdrawn
- Connect that directly to why integration failed in practice

Which **specific consequence** best shows the impact of weak enforcement—continued segregation, violence/intimidation, or states regaining control—and why does that consequence prove failure?

Asks questions that sharpen the student's own ideas — never writes for them

Builds lasting writing judgment and critical thinking, not just a better draft

states regained control



That makes sense: **states regaining control** is a clear effect of weak federal enforcement and directly supports your failure claim. When federal oversight faded, state governments could undo or ignore national integration goals, which meant outcomes were driven locally rather than by constitutional intent.

To turn this into strong analysis, you'll want to explain **how** states regained control—through what mechanism—so the reader sees the causal link clearly.

Which mechanism best explains states regaining control in your view: changes in who held political power at the state level, lack of federal presence on the ground, or decisions made by courts?

Reflection and learner agency

Wraps up by summarizing what was learned and the progress made

They would slow down. I remember seeing this in the Olympics



Study and Learn

That observation lines up perfectly with the physics you're learning. You've identified **conservation of angular momentum**: when mass moves farther from the axis, rotation slows so the total "spin-ness" stays constant.

Wrap-up checkpoint: You now understand that angular momentum depends on both rotation speed and how mass is distributed, and that changing one forces the other to adjust.

Which do you choose: **A, B, or C?**

- A) Go broader: try a simple orbiting-planet example that uses the same idea.
- B) Go deeper: explore why no external torque is the key condition for conservation.
- C) Wrap up.

Lets the student choose what's next: practice more, go deeper, or finish