



these are now only 10 questions ? but what we discussed is based on a series set we will change the questions into checking their brains and testing the capabilities and the stage. research everything and do the questions part

You're right: what you want is **not** just 10 linear questions, but a **branching, adaptive "brain + AI-usage" maze** where each person still answers ~10 questions, but the *questions change based on their choices*.

Below is exactly that: a **researched, structured question bank + branching map** focused on how people use ChatGPT / Claude / Gemini / Perplexity, while quietly testing their **reasoning, flexibility, and AI dependency**.

1. High-Level Quiz Structure (What actually happens)

Design principles from research:

- Branching / multistage adaptive tests = fewer questions but better insight. ^{[1] [2] [3]}
- AI literacy and dependency are best measured across dimensions like **interaction behavior, understanding capabilities & limits, trust, frequency of use, and impact on performance**. ^{[4] [5] [6] [7]}
- "Addiction/dependence" style instruments look at **compulsive use, preoccupation, withdrawal, continued use despite harm**. ^[8]

Using that, here's your structure:

- Each user sees **~10 questions**.
- Behind the scenes there is a bank of **24 questions**.
- Flow is **multistage** (testlet-style): ^[3]
 - **Stage 0 – Baseline AI Usage (Q1–Q2)** → classifies user into *Independent, Balanced, or Heavy AI Dependence*.
 - **Stage 1 – Cognitive Style Testlet (Q3–Q5)** → different testlets per group.
 - **Stage 2 – Deeper Brain Skills Testlet (Q6–Q9)** → again, different per group, probing reasoning / flexibility / verification.
 - **Stage 3 – Reflection (Q10)** → common to all, with small text variation based on their pattern.

You can think of it like this:

All users: Q1 → Q2

↓

Path A: "Independent-first" → Q3A-Q5A → Q6A-Q9A → Q10 (A)

Path B: "Balanced collaborator" → Q3B-Q5B → Q6B-Q9B → Q10 (B)

Path C: "Heavily AI-dependent" → Q3C-Q5C → Q6C-Q9C → Q10 (C)

Internally, you tag each option:

- I = Independent
- B = Balanced
- D = Dependent
- 0 = Over-outsourced / risky

Routing rule (simple and robust):

- After **Q1-Q2**, count tags:
 - Mostly I → Path A
 - Mostly B → Path B
 - Mostly D/0 → Path C

2. Stage 0 – Baseline AI Usage (Common to Everyone)

These 2 questions decide the path. Tone: fun, a bit sarcastic, but zero shame.

Q1 – How you start

Q1. A wild problem appears (bug, assignment, client mess). What's your *actual* first move?

- A. Stare at it, think on my own, maybe sketch or write, *then* consider AI. I
- B. Open AI and my brain side-by-side and think together from the start. B
- C. Paste the whole thing into my favorite model and wait for wisdom. D
- D. I don't even read it fully; straight to "Dear ChatGPT, save me." 0

Q2 – Frequency of use

Q2. On a normal work/study day, how often do you touch ChatGPT / Claude / Gemini / Perplexity?

- A. Rarely. Maybe a few times a week when it's really worth it. I
- B. A few times a day, but for very specific boosts (summaries, drafts, ideas). B
- C. Many tasks in my day run through some LLM at least once. D

- D. If the internet is on, an LLM is open. It's basically my second brain. 0

Routing after Q2:

- $I \geq B$ and $I \geq (D + 0) \rightarrow$ **Path A**
- B strictly highest \rightarrow **Path B**
- $(D + 0)$ highest \rightarrow **Path C**

3. Path A – “Independent-First Thinker” Branch

This branch assumes: you **think first, then use AI**. Now we test **depth, flexibility, and how/when you let AI in**.

Stage 1A – Cognitive Style (Q3A–Q5A)

Q3A. You're stuck on a logic puzzle or bug. What do you do *before* touching AI?

- A. Break it into smaller pieces and test each part. I
- B. Try a few experiments, then write down what seems to be the pattern. I
- C. Quickly search docs/StackOverflow first; AI is “last resort”. B
- D. Honestly, I usually cave and ask AI earlier than I planned. D

Q4A. You solved a tough problem *without* AI. Now a friend suggests, “Ask ChatGPT how it would do it.” Your reaction?

- A. Cool idea. I want to compare my reasoning with AI's version. I
- B. Meh, only if I have extra time; I'm already confident in my solution. I
- C. I'd check just in case I missed an obvious shortcut. B
- D. I regret not asking AI earlier; this took way too long. D

Q5A. You see AI produce a solution different from yours but both *work*. What matters more to you?

- A. Understanding *why* both work and what's going on under the hood. I
- B. Choosing the one that's clearer for future humans to maintain. B
- C. Choosing the one that's shortest, even if I don't fully get it. D
- D. Whichever AI says is “better” when I ask it to self-review. 0

Stage 2A – Brain Skills with Limited AI (Q6A–Q9A)

Q6A. You're forbidden from using AI for one critical task this week. Strategy?

- A. Plan more up front, allocate focus time, and rely on fundamentals. I
- B. Ask colleagues/mentors instead; human GPTs still exist. B
- C. Try to sneak AI into “allowed” parts (drafting, checking) anyway. D
- D. I'd procrastinate, hoping the rule “magically” changes. 0

Q7A. How do you usually verify an idea *you* came up with (no AI yet)?

- A. Try to break it: edge cases, worst-case scenarios, “what if” attacks. I
- B. Compare it with known patterns, best practices, or standards. B
- C. Ask AI later if it sees any risks I’ve missed. D
- D. If I like it, I trust it. Overthinking is for other people. O

Q8A. Imagine you *must* teach a concept to someone else **without** AI. What’s your plan?

- A. Build small examples and analogies until it really clicks for them. I
- B. Use visuals, demos, and questions to make them think actively. B
- C. I’d rehearse with AI first, then redo it from memory. D
- D. Honestly, teaching without AI feels scary. I’d avoid that job. O

Q9A. Which sentence feels most like you?

- A. “AI is my accelerator, not my driver.” I
- B. “AI is my co-pilot; I still fly the plane.” B
- C. “AI is my GPS; without it, I’m lost 70% of the time.” D
- D. “AI is my autopilot. I mostly just enjoy the flight.” O

Q10A (Final Reflection – Independent):

“If all LLMs went offline for a month, what would you *actually* gain?”

- A. Stronger raw problem-solving stamina. I
- B. Better focus and less distraction hopping. B
- C. A headache... but also a reminder of skills I’d forgotten I had. D
- D. Honestly? Mostly stress. But maybe that’s a sign to rebuild some muscles. O

4. Path B – “Balanced AI Collaborator” Branch

You think *with* AI, not instead of your brain. Now check **how strategic and critical** that collaboration is.

Stage 1B – Collaboration Style (Q3B–Q5B)

Q3B. You’re planning a new project. How do you involve AI?

- A. I outline my own plan, then ask AI to poke holes in it. I
- B. I ask AI for 2–3 plans and merge them with my own ideas. B
- C. I ask AI for “the best plan” and follow it mostly as-is. D
- D. I ask multiple models until they mostly agree, then follow that. O

Q4B. AI suggests a solution that feels wrong to you, but you’re not sure why. What do you do?

- A. Trust my gut, reject it, and investigate alternatives. I
- B. Cross-check with docs, data, or another human. B
- C. Try it anyway “just to see what happens”. D
- D. If 2+ models agree, I override my own discomfort. 0

Q5B. How do you feel when you solve something *faster* because of AI?

- A. Great, as long as I still fully understand the solution. I
- B. Great, and I’m okay not knowing every detail if results are solid. B
- C. I mostly care about speed; deep understanding is nice but optional. D
- D. If AI saved time, I don’t care how it worked under the hood. 0

Stage 2B – Cognitive Flexibility with AI (Q6B–Q9B)

Q6B. AI gives you a solution. What’s your *next* move?

- A. Re-explain it in my own words to check if I truly get it. I
- B. Modify it and see if it still works in edge cases. B
- C. Save it to my snippets and reuse it as a template. D
- D. Archive it in my brain as “the standard way now”. 0

Q7B. You and AI disagree on the “best” option. How do you resolve it?

- A. Set up a small experiment to test both. Data wins. I
- B. Ask AI to argue *against* its own suggestion; then decide. B
- C. Ask a second model and go with the majority vote. D
- D. Go with AI; it’s probably seen more data than me. 0

Q8B. When you’re tired, how does your AI usage change?

- A. I reduce AI usage because my judgment is weaker. I
- B. I use AI more, but only for low-risk tasks. B
- C. I lean heavily on AI and trust it more than usual. D
- D. I let AI basically run the show; I’m just clicking buttons. 0

Q9B. What do you expect from “future you” with AI?

- A. To be even more skilled, using AI to tackle harder problems. I
- B. To be faster and smarter as a team (me + AI). B
- C. To be mostly an AI orchestrator, not a deep specialist. D
- D. To be replaceable by AI if I don’t keep up... and I’m half-okay with that. 0

Q10B (Final Reflection – Balanced):

“What’s one area where you’d deliberately **turn AI off** to grow your own brain?”

- A. Deep problem-solving / algorithms / complex reasoning. I
- B. Writing & communication (my authentic voice). B
- C. Planning & decision-making (learning to trust my own judgment). D
- D. Honestly, I haven't thought about that before, but maybe I should. 0

5. Path C – “Heavily AI-Dependent” Branch

Here the focus is **safety, over-reliance, and hidden cognitive strength** that may be asleep under all the LLM sugar.

Stage 1C – Dependence Pattern (Q3C–Q5C)

Q3C. When AI is *temporarily down* or slow, what happens to you?

- A. Mild annoyance. I can still continue on my own. I
- B. I keep working but feel slower and less confident. B
- C. I pause important work until AI is back. D
- D. I basically freeze. My brain keeps saying, “We can’t do this without it.” 0

Q4C. You submit work that’s 80% AI-generated and your manager asks, “Walk me through your thinking.” You:

- A. I explain the logic clearly; I understood what AI produced. I
- B. I can explain most of it, but a few parts are fuzzy. B
- C. I give a high-level story and hope they don’t ask for details. D
- D. Panic mode. I mainly remember which prompt I used. 0

Q5C. After using AI heavily for months, how do your *own* skills feel?

- A. Sharper: I use AI to stretch my limits and learn more. I
- B. Mixed: some skills improved, some feel a bit lazy. B
- C. Rusty: I notice I struggle more without AI. D
- D. Atrophied: I’ve outsourced so much that I avoid tasks without AI. 0

Stage 2C – Underlying Cognitive Capabilities (Q6C–Q9C)

Q6C. You’re forced to do a task AI-free as a “brain gym” challenge. Which one would secretly be *easiest* for you?

- A. Solving a pure logic puzzle or math/algorithm problem. I
- B. Explaining a concept to a beginner using your own words. B
- C. Planning a project step-by-step from scratch. D
- D. Honestly, none feel easy right now. That’s my wake-up call. 0

Q7C. You discover that an AI answer you trusted was confidently wrong and caused issues. What changes?

- A. I build a new habit of always verifying with independent sources. I
- B. I set clear rules: where AI is allowed and where it isn't. B
- C. I keep using AI but with more doubt and anxiety. D
- D. I still use it the same way; I just hope it doesn't happen again. 0

Q8C. How often do you intentionally **practice** solving things without AI?

- A. Regularly. I treat it like a workout for my brain. I
- B. Sometimes, when I notice I'm leaning too hard on AI. B
- C. Rarely; life feels too busy to "practice suffering". D
- D. Never. If AI exists, why voluntarily struggle? 0

Q9C. Imagine you must prove to someone that you are *more* than your prompts. What do you show them?

- A. A problem I solved from scratch, step-by-step. I
- B. A project where I used AI, but the vision and decisions were mine. B
- C. A collection of AI-assisted outputs I've curated well. D
- D. I'm not sure what I'd show yet—and that actually bothers me. 0

Q10C (Final Reflection – Dependent):

"If AI is your 'superpower suit', what's the part of **you** underneath it that you most want to rebuild?"

- A. Raw problem-solving and reasoning. I
- B. Confidence in my own judgment. B
- C. Patience to think deeply before asking AI. D
- D. Discipline to learn without instant shortcuts. 0

6. How This Tests "Brain Skills" Without Calling Answers Wrong

Under the hood, this branching question set measures:

- **Independent problem-solving**
 - High I on questions about planning, verifying, teaching, and working AI-free.
- **Critical thinking & verification**
 - Choices about fact-checking, experiments, handling AI being wrong.
- **AI tool dependency**
 - Frequency of use, panic when AI is gone, copy-paste behavior, "autopilot" answers (D/O), aligned with dependency dimensions like trust, exclusivity, and impact. ^[9] ^[7]

- **Cognitive flexibility**

- Willingness to switch off AI, to compare ideas, to re-explain in own words.

You never say “wrong”. You only compute **profiles** like:

- “Independent Builder with High Critical Thinking”
- “Balanced Collaborator with Strong Experimentation”
- “Heavy AI Reliance with Hidden Analytical Strength”
- “On-Autopilot; Time to Reactivate Your Brain Core”

If you want, the next step can be:

- A **JSON schema** for this entire branching bank (IDs, text, options, tags, next_question_id) so you can plug it directly into your frontend/DB logic.

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1. <https://www.youtestme.com/kb/how-to-create-branching-questions/>
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15. <https://cat.fiu.edu/resources/teaching-with-ai/design-strategies-for-assessing-learning-with-ai/>