Education & Learning / Quiz Generation

Generate questions at different cognitive levels — from recall to creation — for comprehensive assessment.
Difficulty: Advanced
Model: GPT-4 / Claude / Gemini
Use Case: Assessment Design, Cognitive Testing
Updated: June 2026
Why This Prompt Exists
Most quizzes test only recall — memorization, not understanding. Students can pass without genuine comprehension. True assessment requires questions at multiple cognitive levels.

You get:

- quizzes that only test memorization (not real understanding)
- students who pass but can’t apply knowledge
- no visibility into depth of comprehension
- assessment that doesn’t predict real-world performance
- teaching to the test instead of teaching for understanding

But Bloom’s Taxonomy provides levels:

- Remember: recall facts and basic concepts
- Understand: explain ideas or concepts
- Apply: use information in new situations

- Analyze: draw connections among ideas
- Evaluate: justify a stand or decision
- Create: produce new or original work

Without cognitive level variety, quizzes measure surface learning.
This prompt generates questions at all Bloom’s levels.

The Prompt

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Assume the role of an assessment designer who uses Bloom's Taxonomy.

Your task is to generate questions at different cognitive levels.

Generate:

1. CONTENT SPECIFICATION
   - Topic: [subject area]
   - Key concepts: [what students should know]
   - Learning objectives: [what they should be able to do]

2. BLOOM'S LEVEL REFERENCE

| Level | Cognitive Demand | Question Verbs | Question Type | Weight |
|-------|------------------|----------------|---------------|--------|
| Remember | Recall facts | Define, list, identify, name | Multiple choice, matching | 20% |
| Understand | Explain ideas | Summarize, describe, explain | Short answer, true/false | 20% |
| Apply | Use in new situations | Solve, demonstrate, use | Problem-solving, scenario | 20% |
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Analyze	Draw connections	Compare, contrast, categorize	Short answer, diagram	15%
Evaluate	Justify decisions	Critique, justify, evaluate	Essay, recommendation	15%
Create	Produce new work	Design, construct, formulate	Project, proposal	10%

3. QUESTION SET

Remember (recall)
Question 1: [multiple choice or fill-in]
- Correct answer: [response]
- Distractors: [common wrong answers]

Understand (explain)
Question 2: [short answer or true/false with explanation]
- Correct answer: [response]
- Common error: [misunderstanding to watch for]

Apply (use in new context)
Question 3: [scenario-based problem]
- Correct answer: [response]
- Required steps: [what students must do]

Analyze (compare/contrast)
Question 4: [relationship or comparison question]
- Correct answer: [response]
- Key distinctions: [what to notice]

Evaluate (justify)
Question 5: [decision or critique question]
- Correct answer: [response with reasoning]
- Evaluation criteria: [what makes a good answer]

Create (produce)
Question 6: [open-ended design or construction]
- Success criteria: [what a good answer includes]
- Rubric: [scoring dimensions]

4. QUESTION WEIGHTING BY ASSESSMENT TYPE

Assessment Type	Remember	Understand	Apply	Analyze	Evaluate	Create
Quiz (10 min)	40%	30%	20%	10%	0%	0%
Test (30 min)	25%	25%	20%	15%	10%	5%
Exam (60 min)	20%	20%	20%	15%	15%	10%
Capstone	0%	10%	20%	20%	20%	30%

5. COMMON BLOOM'S MISTAKES

Mistake	Why It Fails	Correct Approach
All remember questions	Measures only memorization	Include higher levels
"Apply" that's still recall	Not truly application	Use new scenarios

| Vague "analyze" questions | Students don't know what's expected | Use specific verbs (compare, contrast) |
| No creation assessment | Can't measure synthesis | Include open-ended tasks |

INPUTS:

Topic/subject:
[PASTE TOPIC]

Key concepts to assess:
[PASTE CONCEPTS]

Assessment time available:
[E.G., "30 minutes"]

Question format preference:
[MULTIPLE CHOICE / SHORT ANSWER / MIXED]

RULES:
- Remember questions test recall (facts, definitions, lists)
- Understand questions test explanation (summaries, descriptions)
- Apply questions test use in new contexts (scenarios, problems)
- Analyze questions test relationships (comparisons, categories)
- Evaluate questions test judgment (critiques, justifications)
- Create questions test synthesis (designs, proposals)
- Higher-weight higher-level questions for summative assessments
- Match verbs to cognitive level (don't say "analyze" when you mean "remember")

How To Use It

- Remember questions test recall — facts, definitions, lists, identification.
- Understand questions test explanation — summaries, descriptions, paraphrasing.
- Apply questions test use in new contexts — scenarios, problems, demonstrations.
- Analyze questions test relationships — comparisons, contrasts, categories, cause-effect.
- Evaluate questions test judgment — critiques, justifications, recommendations, prioritization.
- Create questions test synthesis — designs, proposals, plans, formulations.
- Higher-weight higher-level questions for summative assessments — finals should have more analysis and evaluation.
- Match verbs to cognitive level — don’t say “analyze” when you actually mean “remember.”

Example Input

Topic/subject:
“Photosynthesis (High School Biology)”

Key concepts to assess:
“Light-dependent reactions, Calvin cycle, chloroplast structure, factors affecting rate”

Assessment time available:
“45 minutes”

Question format preference:
“MIXED (multiple choice, short answer, and one scenario)”

Why It Works
Most quizzes test only the lowest level of learning — recall. Students can memorize and pass without understanding.

This framework improves outcomes by forcing: cognitive level classification, question generation at each level, appropriate weighting by assessment type, verb matching, and common mistake prevention.
Failure modes this prevents: Memorization-only assessment, students who pass without understanding, no visibility into comprehension depth.
This improves on: Single-level questioning. Bloom's taxonomy reveals genuine understanding.
Related to: QZ-02 (Distractor) for multiple-choice quality; QZ-04 (Rubric) for creation assessment.

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