

Bloom's Taxonomy of Cognitive Levels

TABLE OF VERBS

<p>1 Knowledge</p> <ul style="list-style-type: none"> list name identify show define recognize recall state 	<p>2 Comprehension</p> <ul style="list-style-type: none"> summarize explain put into your own words interpret describe compare paraphrase differentiate demonstrate visualize find more information about restate 	<p>3 Application</p> <ul style="list-style-type: none"> solve illustrate calculate use interpret relate manipulate apply classify modify put into practice
<p>4 Analysis</p> <ul style="list-style-type: none"> analyze organize deduce choose contrast compare distinguish 	<p>5 Synthesis</p> <ul style="list-style-type: none"> design hypothesize support schematize write report discuss plan devise compare create construct 	<p>6 Evaluation</p> <ul style="list-style-type: none"> evaluate choose estimate judge defend criticize justify

Bloom's Taxonomy: Model Questions and Key Words

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Based on *Bloom's Taxonomy, Developed and Expanded* by John Maynard

I. KNOWLEDGE (drawing out factual answers, testing recall and recognition)

Who	Where	Describe	Which one
What	How	Define	What is the best one
Why	Match	Choose	How much
When	Select	Omit	What does it mean

II. COMPREHENSION (translating, interpreting, and extrapolating)

State in your own words	Classify	Which are the facts
What does this mean	Judge	Is this the same as
Give an example	Infer	Select the best definition
Condense this paragraph	Show	What would happen if
State in one word	Indicate	Explain what is happening
What part doesn't fit	Tell	Explain what is meant
What expectations are there	Translate	Read the graph, table
What are they saying	Select	This represents
What seems to be	Match	Is it valid that
What seems likely	Explain	Show in a graph, table
Represent	Demonstrate	Which statements Support
What restrictions would you add		

III. APPLICATION (to situations that are new, unfamiliar, or have a new slant)

Predict what would happen if
Choose the best statements that apply
Select
Judge the effects
What would result
Explain
Identify the results of
Tell what would happen
Tell how, when, where, why
Tell how much change there would be

(over)

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IV. ANALYSIS (breaking down into parts or forms)

Distinguish	What is the function of
Identify	What's fact, opinion
What assumptions	What statement is relevant
What motive is there	Related to, extraneous to, not applicable
What conclusions	What does author believe, assume
Make a distinction	State the point of view of
What is the premise	What ideas justify conclusion
What ideas apply	The least essential statements are
What's the relationship between	What inconsistencies, fallacies
What's the main idea, theme	What persuasive technique
What literary form is used	Implicit in the statement is

V. SYNTHESIS (combining elements into a pattern not clearly there before)

Create	How would you test	Make up
Tell	Propose an alternative	Compose
Make	Solve the following	Formulate
Do	Plan	How else would you
Choose	Design	State a rule
Develop	Dance	

VI. EVALUATION (according to some set of criteria, and state why)

Appraise	What fallacies, consistencies, inconsistencies appear
Judge	Which is more important, moral, logical, valid, appropriate
Criticize	Find the errors
Defend	Compare



Bloom's Revised Taxonomy Planning Framework

		<i>Learning Activities</i>	
		<i>Products</i>	<i>Actions</i>
Higher-order thinking	<u>Creating</u> (Putting together ideas or elements to develop an original idea or engage in creative thinking).	Film Story Project Plan New game Song Media product Advertisement Painting	Designing Constructing Planning Producing Inventing Devising Making
	<u>Evaluating</u> (Judging the value of ideas, materials and methods by developing and applying standards and criteria).	Debate Panel Report Evaluation Investigation Verdict Conclusion Persuasive speech	Checking Hypothesizing Critiquing Experimenting Judging Testing Detecting Monitoring
	<u>Analyzing</u> (Breaking information down into its component elements).	Survey Database Mobile Abstract Report Graph Spreadsheet Checklist Chart Outline	Comparing Organizing Deconstructing Attributing Outlining Structuring Integrating
Lower-order thinking	<u>Applying</u> (Using strategies, concepts, principles and theories in new situations).	Illustration Simulation Sculpture Demonstration Presentation Interview Performance Diary Journal	Implementing Carrying out Using Executing
	<u>Understanding</u> (Understanding of given information).	Recitation Summary Collection Explanation Show and tell Example Quiz List Label	Interpreting Exemplifying Summarizing Inferring Paraphrasing Classifying Comparing Explaining

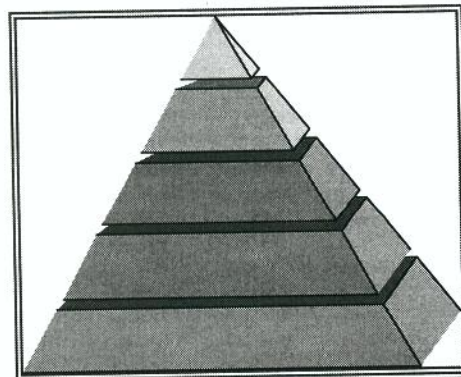
<p><u>Remembering</u> (Recall or recognition of specific information).</p>	<p>Recognizing Listing Describing Identifying Retrieving Naming Locating Finding</p>	<p>Outline Quiz Definition Fact Worksheet Test Label List Workbook Reproduction</p>
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COGNITIVE



COMPLEXITY

BLOOM'S TAXONOMY	WEBB'S DEPTH OF KNOWLEDGE
<p>KNOWLEDGE "The recall of specifics and universals, involving little more than bringing to mind the appropriate material"</p>	<p><i>Recall</i> – Recall of a fact, information, or procedure (e.g., What are 3 critical skill cues for the overhand throw?)</p>
<p>COMPREHENSION "Ability to process knowledge on a low level such that the knowledge can be reproduced or communicated without a verbatim repetition."</p>	
<p>APPLICATION "The use of abstractions in concrete situations."</p>	<p><i>Basic Application of Skill/Concept</i> – Use of information, conceptual knowledge, procedures, two or more steps, etc. (e.g., Explain why each skill cue is important to the overhand throw. "By stepping forward you are able to throw the ball further.")</p>
<p>ANALYSIS "The breakdown of a situation into its component parts."</p>	<p><i>Strategic Thinking</i> – Requires reasoning, developing a plan or sequence of steps; has some complexity; more than one possible answer; generally takes less than 10 minutes to do (e.g., Design 2 different plays in basketball and explain what different skills are needed and when the plays should be carried out.)</p>
<p>SYNTHESIS AND EVALUATION "Putting together elements & parts to form a whole, then making value judgments about the method."</p>	<p><i>Extended Thinking</i> – Requires an investigation; time to think and process multiple conditions of the problem or task; and more than 10 minutes to do non-routine manipulations (e.g., Analyze 3 different tennis, racquetball, and badminton strokes for similarities, differences, and purposes. Then, discuss the relationship between the mechanics of the stroke and the strategy for using the stroke during game play.)</p>