

BLOOM'S TAXONOMY

of Educational Objectives Developed by Dr. Benjamin Bloom 1956

1. <u>KNOWLEDGE</u>	Descriptors	
Involves bringing to mind appropriate material that requires little or no re-organization. It does not imply being able to <u>understand</u> or <u>apply</u> the information.	recall list cite locate label	quote name repeat recognize
2. <u>COMPREHENSION</u>	explain identify choose define sort	paraphrase summarize itemize outline describe
It is the lowest level of understanding. Information can be reordered or rearranged. The ability to <u>apply</u> the information is not required.	apply perform diagram verify operate	demonstrate map structure illustrate solve
3. <u>APPLICATION</u>	compare/contrast analyze separate appraise simplify test	differentiate organize reconstruct question solve
Ability to use abstractions in specific and concrete situations; general ideas, rules of procedures, or generalization.	create design predict modify compose	generalize integrate formulate assemble organize
4. <u>ANALYSIS</u>	judge asses measure collect describe praise assist	evaluate criticize defend isolate value react select
Ability to breakdown information into its elements or parts and be able to express it (<u>whole to-parts</u>).	5. <u>SYNTHESIS</u>	Describe Identify
It is the highest level of understanding – abstractly. It is the ability to put together elements or parts to form a whole when the whole is not known (<u>parts-to-whole</u>). It requires the processing or working with pieces, parts, elements, etc. and arranging them into a structure not clear before.	6. <u>EVALUATION</u>	Master
Ability to judge the value of materials and methods for a specified purpose – quantitatively and qualitatively.		

BASIC

Describe
Identify

Intermediate

Elimination of 'why' word

use
what, how, Tell me, explain, show

Bloom's Taxonomy *

Benjamin Bloom created this taxonomy for categorizing level of abstraction of questions that commonly occur in educational settings. The taxonomy provides a useful structure in which to categorize test questions, since professors will characteristically ask questions within particular levels, and if you can determine the levels of questions that will appear on your exams, you will be able to study using appropriate strategies.

Competence	Skills Demonstrated
Knowledge	<ul style="list-style-type: none"> • observation and recall of information • knowledge of dates, events, places • knowledge of major ideas • mastery of subject matter • <i>Question Cues:</i> list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.
Comprehension	<ul style="list-style-type: none"> • understanding information • grasp meaning • translate knowledge into new context • interpret facts, compare, contrast • order, group, infer causes • predict consequences • <i>Question Cues:</i> summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend
Application	<ul style="list-style-type: none"> • use information • use methods, concepts, theories in new situations • solve problems using required skills or knowledge • <i>Questions Cues:</i> apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Analysis	<ul style="list-style-type: none"> • seeing patterns • organization of parts • recognition of hidden meanings • identification of components • <i>Question Cues:</i> analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer
Synthesis	<ul style="list-style-type: none"> • use old ideas to create new ones • generalize from given facts • relate knowledge from several areas • predict, draw conclusions • <i>Question Cues:</i> combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what it?, compose, formulate, prepare, generalize, rewrite
Evaluation	<ul style="list-style-type: none"> • compare and discriminate between ideas • assess value of theories, presentations • make choices based on reasoned argument • verify value of evidence • recognize subjectivity • <i>Question Cues</i> assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize

* Adapted from: Bloom, B.S. (Ed.) (1956) Taxonomy of educational objectives: The classification of educational goals: Handbook I, cognitive domain. New York: Toronto: Longmans, Green.

Knowledge		Comprehend	
Count	Read	Classify	Interpret
Define	Recall	Cite	Locate
Describe	Recite	Conclude	Make sense of
Draw	Record	Convert	Paraphrase
Enumerate	Reproduce	Describe	Predict
Find	Select	Discuss	Report
Identify	Sequence	Estimate	Restate
Label	State	Explain	Review
List	Tell	Generalize	Summarize
Match	View	Give examples	Trace
Name	Write	Illustrate	Understand
Quote			

Apply		Analyze	
Act	Imitate	Break down	Focus
Administer	Implement	Characterize	Illustrate
Articulate	Interview	Classify	Infer
Assess	Include	Compare	Limit
Change	Inform	Contrast	Outline
Chart	Instruct	Correlate	Point out
Choose	Paint	Debate	Prioritize
Collect	Participate	Deduce	Recognize
Compute	Predict	Diagram	Research
Construct	Prepare	Differentiate	Relate
Contribute	Produce	Discriminate	Separate
Control	Provide	Distinguish	Subdivide
Demonstrate	Relate	Examine	
Determine	Report		
Develop	Select		
Discover	Show		
Dramatize	Solve		
Draw	Transfer		
Establish	Use		
Extend	Utilize		

Synthesize		Evaluate	
Adapt	Intervene	Appraise	Interpret
Anticipate	Invent	Argue	Judge
Categorize	Make up	Assess	Justify
Collaborate	Model	Choose	Predict
Combine	Modify	Compare & Contrast	Prioritize
Communicate	Negotiate	Conclude	Prove
Compare	Organize	Criticize	Rank
Compile	Perform	Critique	Rate
Compose	Plan	Decide	Reframe
Construct	Pretend	Defend	Select
Contrast	Produce	Evaluate	Support
Create	Progress		
Design	Propose		
Develop	Reorganize		