Using Bloom's Taxonomy to Move Our Students toward More Critical and Reflective Thinking

Level of Competence	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Verb Examples that Represent Intellectual Activity	Arrange, define, tell, describe, identify, show, collect, examine, tabulate, duplicate, label, list, memorize, name, quote, order, recognize, relate, recall, repeat, reproduce, state (Who, when, where, etc.)	Classify, discuss, explain, express, indicate, locate, report, restate, review, select, translate, summarize, interpret, contrast, predict, associate, distinguish, estimate, differentiate, extend	Apply, demonstrate,calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment , discover, choose, dramatize, employ, operate, practice, schedule, sketch, solve, use, write	Analyze, separate, order, connect, arrange, divide, compare, select, explain, infer, appraise, calculate, categorize, contrast, criticize, discriminate, question, test	Assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize, appraise, argue, attach, choose, compare, defend, estimate, predict, rate, core, select, support, value, evaluate	Compose, construct, create, design, develop, integrate, invent, make, organize, perform, plan, produce, propose, revwrite
Skills Demonstrated	-Observation and recall of information -Knowledge of dates, events, places -Knowledge of major ideas -Mastery of subject matter	-Understanding information - Grasp meaning - Translate knowledge into new context - Interpret facts, compare, contrast - Order, group, infer causes - Predict consequences	-Use information - Use methods, concepts, theories in new situations -Solve problems using required skills or knowledge	-Seeing patterns -Organization of parts • Recognition of hidden meanings • Identification of components	-Compare and discriminate between ideas -Assess value of theories , presentations -Make choices based on reasoned argument -Verify value of evidence -Recognize subjectivity	-Use old ideas to create new ones • Generalize from given facts • Relate knowledge from several areas • Predict, draw, conclusions
Products/Activities	Examples: Most traditional tests-multiple-choice, true/false, fill in the blank, matching, etc. -Fill in the blank worksheets -Discussions/lectures that focus on recall of information -Create a timeline -List main events -Write definitons -Recall a process or a procedure	Activities that require students to explain or interpret meaning from a given scenario or statement, suggest treatment, reaction or solution to given problem, create examples or metaphors -Summaries -Venn diagram -Create an outline -Flow chart -Illustration	Activities that put a theory into practical effect, demonstrate, solve a problem, manage an activity Examples: -Create a map -Construct a model -Design a market strategy	Activities that identify constituent parts and functions of a process or concept, or de-construct a methodology or process, making qualitative assessment of elements, relationships, values and effects; measure requirements or needs Examples: -Design a questionaire -Write a PSA to raise awareness about an issue -Conduct an investigation to support a view -Construct a graph to illustrate selected material -Construct/Administer/Analyze results of a survey -Report	Review strategic options or plans in terms of efficiency, return on investment, or cost effectiveness,practicability; assess sustainability; perform a SWOT analysis in relation to alternatives, calculate the effects of a strategy or plan, perform a detailed analysis with recommendations and justifications Examples: -Reaction paper -Opinion Paper -Journal -Debate -Develop criteria to judge a... -Panel discussion	Develop plans or procedures, design solutions, integrate methods, resources, ideas, parts; create teams or new approaches, write protocols or contingencies Examples: Generate alternate hypotheses Write a journal from another person's view Design a scientific study Create a...

Level of Competence	Remembering *What?*	Understanding *What?*	Applying *So What?*	Analyzing *So What?*	Evaluating *Now What?*	Creating *Now What?*
Writing Test Items Using Blooms Taxonomy-Sample Test Questions	*Remembering: factual information* -Define ... List the ... Who wrote a Midsummer Night's Dream? What year did it take place? Who were the main characters?	*Understanding the meaning* In Midsummer Night's Dream, what was the author trying to say? Summarize the play.	*Application: using information, principles, to solve problems* -Given what you know about the authenticity of the first quarto and weather conditions in England in the summer of 1594, when do think the play Midsummer Night's Dream was written?	*Analysis: arriving at an understanding by looking at individual parts* -Find the most basic metaphors in Act 1 and explain their meaning.	*Evaluation: arriving at value judgments* Do you agree with the statement that A Midsummer Night's Dream is Shakespeare's first undisputed masterpiece? Explain your answer.	Creating: Identify the four themes in a Midsummer Night's Dream and discuss how they contribute to the central action. If you could change or add a theme to the play, what would it be and how would it contribute to the central action?
Question Stems	What is . . . ? How is . . . ? Where is . . . ? When did ____ happen? How did ____ happen? How would you explain . . ? Why did . . . ? How would you describe . ? When did . . . ? Can you recall . . . ? How would you show . . . ? Can you select . . . ? Who were the main . . . ? Can you list three . . . ? Which one . . . ? Who was ...?	How would you classify the type of . How would you compare/contrast... State or interpret in your own words ... How would you rephrase the meaning . . . ? What facts or ideas show . .? What is the main idea of . . . ? Which statements support .? Can you explain what is happening . . . what is meant . . .? What can you say about . . . ? Which is the best answer . . . ? How would you summarize . . . ?	How would you use . . . ? What examples can you find to . . . ? How would you solve ____ using what you have learned ? How would you organize _____ to show . . ? How would you show your understanding of . . . ? What approach would you use to . . . ? How would you apply what you learned to develop . . . ? What other way would you plan to . . . ? What would result if . . . ? Can you make use of the facts to . . . ? What elements would you choose to change . . . ? What facts would you select to show . . . ? What questions would you ask in an interview with . . . ?	What are the parts or features of . . . ? How is _____ related to . . . ? Why do you think . . . ? What is the theme . . . ? What motive is there . . . ? Can you list the parts . . . ? What inference can you make . .. What conclusions can you draw . How would you classify . . . ? How would you categorize . . . ? Can you identify the difference parts . . . ? What evidence can you find . . . What is the relationship between .? Can you make a distinction between . . . ? What is the function of . . . ? What ideas justify . . . ?	Do you agree with the actions/ outcomes . . . ? What is your opinion of . . . ? How would you prove . . . ? disprove . . . ? Can you assess the value or importance of . . . ? Would it be better if . . . ? Why did they (the character) choose . . . ? What would you recommend . . . How would you rate the . . . ? What would you cite to defend the actions . . . ? How would you evaluate . . . ? How could you determine . . . What choice would you have made . . . ? What would you select . . . ? How would you prioritize . . . ? What judgment would you make about . . . ? Based on what you know, how would you explain . . . ? What information would you use to support the view . . . ? How would you justify . . . ? What data was used to make the conclusion . . . ? Why was it better that . . . ? How would you prioritize the facts . . . ? How would you compare the ideas . . . ? people . . . ?	What changes would you make to solve . . . ? How would you improve. .. What would happen if . . . ? Elaborate on the reason . . . ? Propose an alternative . . . ? Invent ... ? How would you adapt _____ to create a different . . . ? How could you change (modify) the plot (plan) . . . ? What could be done to minimize (maximize) . . . ? What way would you design . . . What could be combined to improve change) . . . ? Suppose you could _____ what would you do . . . ? How would you test . . . ? Formulate a theory for . . . ? Predict the outcome if . . . ? How would you estimate the results for . . . ? What facts can you compile . . . ? Construct a model that would change . . . ? Think of an original ... Create a ...

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