A Guide for Using
Webb's Depth of Knowledge
with
Common Core State Standards

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A Guide for Using Webb's Depth of Knowledge with the Common Core State Standards

Overview

At the heart of College and Career Readiness is the need to increase the level of rigor in our classrooms. The Common Core State Standards are a step in the right direction. But, the standards alone will not bring rigor to our classrooms. The implementation of those standards requires using tools to develop assessments and curricula aligned to the higher levels of cognitive demand.

Webb's Depth of Knowledge (DOK) is one of the key tools educators need to employee. The tool assists educators in better analyzing the cognitive expectation demanded by the standards, curricular activities and assessment tasks.

Webb (1997) developed the process and criteria for systematically analyzing the alignment between standards and standardized assessments. Since then the process and criteria have demonstrated application to reviewing curricular alignment as well. The model categorizes tasks by the different levels of cognitive expectations, or depth of knowledge, required to complete the task. The table below outlines the model:

DOK Level	Title of Level
1	Recall & Reproduction
2	Skills & Concepts
3	Short-term Strategic Thinking
4	Extended Thinking

The DOK level is assigned to each course objective and assessment using the following general guidelines.

- The DOK level assigned should reflect the level of work students are most commonly required to perform in order for the response to be deemed acceptable.
- The DOK level should reflect the complexity of the cognitive processes demanded by the task outlined by the objective, rather than its difficulty. Ultimately the DOK level describes the kind of thinking required by a task, not whether or not the task is "difficult."
- If there is a question regarding which of two levels a statement addresses, such as Level 1 or Level 2, or Level 2 or Level 3, it is appropriate to select the higher of the two levels.
- The DOK level should be assigned based upon the cognitive demands required by the central performance described in the objective.
- The objective's central verb(s) alone is/are not sufficient information to assign a DOK level. Developers must also consider the complexity of the task and/or information, conventional levels of prior knowledge for students at the grade level, and the mental processes used to satisfy the requirements set forth in the objective. *(Webb's Depth of Knowledge Guide, Mississippi Department of Ed with Mississippi University)*

Level 1: Recall & Reproduction

Curricular elements that fall into this category involve basic tasks that require students to recall or reproduce knowledge and/or skills. The subject matter content at this level usually involves working with facts, terms and/or properties of objects. It may also involve use of simple procedures and/or formulas. There is little transformation or extended processing of the target knowledge required by the tasks that fall into this category. A student answering a Level 1 item either knows or does not; that is, *the answer does not need to be "figured out" or "solved."*

Verbs	Teacher Role	Student Role
arrange, calculate, define, draw, identify, list, label, illustrate, match, measure, memorize, repeat, report, recall, recite, recognize, state, tell, tabulate, use, quote, who, what, when, where, why	directs, shows, questions, demonstrates, compares, examines, tells, examines, evaluates, listens, contrasts	responds, remembers, memorizes, explains, restates, interprets, absorbs, recognizes, describes, translates, demonstrates

Possible Products

Quiz	List	Collection	Explanation	Podcast	Social bookmarking
Definition	Workbook	Show and Tell	Categorizing/Tagging	Searching
Fact	Reproduction	Outline	Commenting	Googling
Worksheet	Vocabulary quiz	Blog	Bulleting	
Test	Recitation	Wiki	Highlighting	
Label	example		Social networking	

Potential Activities

• Develop a concept map showing a process or describing a topic. • Make a timeline • Write a list of keywords you know about… • Make a chart showing … • Recite a fact related to … • Write in your own words … • Cut out, or draw a picture that illustrates an event, process or story. • Report or present to the class. • Make a cartoon strip showing the sequence of an event, process or story. • Write and perform … • Write a brief outline and explain the event, process or story. • Write a summary report of the event. • Prepare a flow chart that illustrates the sequence of events. • Paraphrase a chapter in the book. • Retell in your own words • Outline the main points	• Recall, restate remember, or recognize a fact, term property (recognizing, listing, describing, identifying, retrieving, naming, locating, finding) • Using basic calculation tasks involving only one step (i.e., addition, subtraction, etc.), complete the following … • Locate or retrieve information in verbatim form. • Straight-forward recognition tasks related to identifying features, objects and/or steps that don't vary greatly in form (i.e. recognizing features of basic tools). • Writing tasks that involve applying a standard set of conventions and/or criteria that should eventually be automated (i.e. using punctuation, spelling, etc.) • Basic measurement tasks that involve one step (i.e. using a ruler to measure length) • Use this simple formula where at least one of the unknowns are provided to … • Locating information in maps, charts, tables, graphs, and drawings

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ELA, History & Social Studies Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 1 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	• Recall, recognize, or locate basic facts, details, events, or ideas explicit in texts • Read words orally in connected text with fluency & accuracy
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Identify or describe literary elements (characters, setting, sequence, etc.) • Select appropriate words when intended meaning/definition is clearly evident • Describe/explain who, what, where, when, or how • Define/describe facts, details, terms, principles • Write simple sentences
Apply Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Use language structure (pre/suffix) or word relationships (synonym/antonym) to determine meaning of words • Apply rules or resources to edit spelling, grammar, punctuation, conventions, word use • Apply basic formats for documenting sources
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g. for bias or point of view)	• Identify whether specific information is contained in graphic representations (e.g. map, chart, table graph, T-chart, diagram) or text features (e.g., headings, subheadings, captions) • Decide which text structure is appropriate to audience and purpose
Evaluate Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	Not Applicable
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Brainstorm ideas, concepts, problems, or perspectives related to a topic or concept

Math & Science Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 1 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	• Recall, observe & recognize facts, principles, properties • Recall/identify conversions among representations or numbers (e.g. customary and metric measures)
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion (such as from examples given), predict, compare/contrast, match like ideas, explain, construct models	• Evaluate an expression • Locate points on a grid or number on a number line • Solve a one-step problem • Represent math relationships in words, pictures, or symbols • Read, write, compare decimals in scientific notation
Apply Carry out or use a procedure in a given situation, carry out (apply to a familiar task), or use (apply) to an unfamiliar task	• Follow simple procedures (recipe-type directions) • Calculate, measure, apply a rule (e.g. rounding) • Apply algorithm or formula (e.g. area, perimeter) • Solve linear equations • Make conversions among representations or numbers, or within and between customary and metric measures
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct	• Retrieve information from a table or graph to answer a question • Identify whether specific information is contained in graphic representations (e.g. table graph, T-chart, diagram) • Identify a pattern/trend
Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique	Not Applicable
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, construct, produce	• Brainstorm ideas, concepts, or perspectives related to a topic

Level 2: Skill/Concept

Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response. This level generally requires students to contrast or compare people, places, events and concepts; convert information from one form to another; classify or sort items into meaningful categories; describe or explain issues and problems, patterns, cause and effect, significance or impact, relationships, points of view or processes. A Level 2 "describe or explain" would require students to go beyond a description or explanation of recalled information to describe or explain a result or "how," or "why." The learner should make use of information in a context different from the one in which it was learned.

Elements found in a curriculum that fall in this category involve working with or applying skills and/or concepts to tasks related to the field of study in a laboratory setting. The subject matter content at this particular level usually involves working with a set of principles, categories, heuristics, and protocols. At this level students are asked to transform/process target knowledge before responding. Example mental processes that often denote this particular level include: summarize, estimate, organize, classify, and infer.

Key Words	Teacher Role	Student Role
Infer, categorize, collect & display, identify patterns, organize, compare, construct, modify, predict, interpret, distinguish, estimate, identify patterns, interpret, use context clues, make observations, summarize, show, graph, classify, separate, cause/effect, estimate, relate, separate, show	shows, observes, organizes, facilitates, evaluates, questions	solves problems, calculates, completes, constructs, demonstrates use of knowledge, compiles, illustrates

Possible Products

Photograph	Presentation	Reverse-Engineering	Blog Commenting
Illustration	Interview	Cracking Codes	Blog Reflecting
Simulation	Performance	Linking	Moderating
Sculpture	Diary	Mashing	Testing (Alpha/Beta)
Demonstration	Journal	Relationship Mind Maps	Validating

Potential Activities

- Classify a series of steps - Construct a model to demonstrate how it looks or works - Practices a play and perform in class - Make a diorama to illustrate an event - Write a diary/blog entry - Make a scrapbook about the area of study - Make a topographic map - Make up puzzle or game about the topic - Write an explanation about this topic for others - Make a model . . . - Routine application tasks (i.e. applying a simple set of rules or protocols to a laboratory situation the same way each time) - Explaining the meaning of a concept and/or explaining how to perform a particular task	- Stating relationships among a number of concepts and or principles - More complex recognition tasks that involve recognizing concepts and processes that may vary in how they "appear" - More complex calculation tasks (i.e. multi-step calculations such as standard deviation) - Research projects and writing activities that involve locating, collecting, organizing and displaying information (i.e. writing a report with the purpose to inform, meeting all steps of the writing process) - Measurement tasks that occur over a period of time and involve aggregating/organizing the data collected into basic presentation forms such as a simple table or graph

Potential Questions

How would you use . . . ?	What other way would you plan to . . . ?
What examples can you find to . . . ?	What would result if . . . ?
How would you organize ___ to show . . . ?	Can you make use of the facts to . . . ?
How would you show your understanding of . . . ?	What elements would you choose to change . . . ?
What approach would you use to . . . ?	What facts would you select to show . . . ?
How would you apply what you learned to develop . . . ?	What questions would you ask in an interview with . . . ?

ELA, History & Social Studies Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 2 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Specify, explain, show relationships, explain why, cause-effect • Give non-examples/examples • Summarize results, concepts, ideas • Make basic inferences or logical predictions from data or texts • Identify main ideas or accurate generalizations of texts • Locate information to support explicit-implicit central ideas
Apply Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Use context to identify the meaning of words/phrases • Obtain and interpret information using text features • Develop a text that may be limited to one paragraph • Apply simple organizational structures (paragraph, sentence types) in writing
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g. for bias or point of view)	• Categorize/compare library elements, terms, facts/details, events • Identify use of literary devices • Analyze format, organization & internal text structure (signal words, transitions, semantic cues) of different texts • Distinguish relevant-irrelevant information, fact/opinion • Identify characteristic text features; distinguish between texts, genres
Evaluate Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	Not Applicable
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Generate conjectures or hypothesis based on observations or prior knowledge and experience

Math & Science Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 2 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion (such as from examples given), predict, compare/contrast, match like ideas, explain, construct models	• Specify and explain relationships (e.g. non-examples/examples, cause-effect) • Make and record observations • Explain steps followed • Summarize results or concepts • Make basic inferences or logical predictions from data/observations • Use models (diagrams to represent or explain mathematical concepts) • Make and explain estimates
Apply Carry out or use a procedure in a given situation, carry out (apply to a familiar task), or use (apply) to an unfamiliar task	• Select a procedure according to criteria and perform it • Solve routine problem applying multiple concepts or decision points • Retrieve information from a table, graph, or figure and use it to solve a problem requiring multiple steps • Translate between tables, graphs, words, and symbolic notations (e.g. graph data from a table) • Construct models given criteria
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct	• Categorize, classify materials, data, figures based on characteristics • Organize or order data • Compare/contrast figures or data • Select appropriate graph and organize & display data • Interpret data from a simple graph • Extend a pattern
Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique	Not Applicable
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, construct, produce	• Generate conjectures or hypotheses based on observations or prior knowledge and experience

Level 3: Strategic Thinking

Items falling into this category demand a short-term use of higher order thinking processes, such as analysis and evaluation, to solve real-world problems with predictable outcomes. Stating one's reasoning is a key marker of tasks that fall into this particular category. The expectation established for tasks at this level tends to require coordination of knowledge and skill from multiple subject-matter areas to carry out processes and reach a solution in a project-based setting. Key processes that often denote this particular level include: analyze, explain and support with evidence, generalize, and create.

Verbs	Teacher Role	Student Role
Critique, apprise, revise, assess, construct, compare, investigate, differentiate, cite evidence, hypothesize, formulate, develop a logical argument, use concepts to solve non-routine problems, explain phenomena in terms of concepts, draw conclusions	Probes, observes, acts as a resource, organizes, clarifies, guides, evaluates, questions, dissects, accepts	Discusses, debates, examines, judges, assesses, justifies, uncovers, thinks deeply, questions, disputes, decides, argues, tests, calculates, compares, selects

Possible Products

Graph	Survey	Debate	Podcast
Spreadsheet	Database	Panel	Publishing
Checklist	Mobile	Report	Program
Chat	Abstract	Evaluating	Film
Outline	Report	Investigation	Animation
			Video cast

Potential Activities

• Use a Venn Diagram that shows how two topics are the same and different • Design a questionnaire to gather information • Survey classmates/industry members to find out what they think about a particular topics • Make a flow chart to show the critical stages • Classify the actions of the characters in a book • Prepare a report about an area of study • Conduct an investigation to produce information to support a view • Write a letter to the editor after evaluating a product • Prepare and conduct a debate • Prepare a list of criteria to judge • Write a persuasive speech arguing for/against . . . • Make a booklet about five rules you see as important. Convince others. • Form a panel to discuss viewpoints on … • Write a letter to … advertising on changes needed.	• Prepare a case to present your view about … • Short-term tasks and projects placing a strong emphasis on transferring knowledge to solve predictable problems • Explaining and/or working with abstract terms and concepts • Recognition tasks when the environment observed is real-world and often contains extraneous information which must be sorted through • Complex calculation problems presented that draw upon multiple processes • Writing and/or explaining tasks that require altering a message to "fit" an audience • Creating graphs, tables and charts where students must reason thorough and organize the information with instructor prompts • Identifying a research question and/or designing investigations to answer a question • Tasks that involve proposing solutions or making predictions

Potential Questions

What are the parts of features of . . . ? How is _____ related to . . . ? Why do you think . . . ? What is the theme . . . ? What motive is there . . . ? What is the relationship between . . . ? Can you make a distinction between . . . ? What is the function of . . . ?	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 . . . ? What evidence can you find . . . ? What ideas justify . . . ?

ELA, History & Social Studies Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 3 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference) • Identify/make inferences about explicit or implicit themes • Describe how word choice, point of view, or bias may affect the readers' interpretation of a text • Write multi-paragraph composition for specific purpose, focus, voice, tone & audience
Apply Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Apply a concept in a new context • Revise final draft for meaning or progression of ideas • Apply internal consistency of text organization and structure to composing a full composition • Apply word choice, point of view, style to impact readers'/viewers' interpretation of a text
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g. for bias or point of view)	• Analyze information within data sets or texts • Analyze interrelationships among concepts, issues, problems • Analyze or interpret author's craft (literary devices, viewpoint, or potential bias) to create or critique a text • Use reasoning, planning, and evidence to support inferences
Evaluate Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	• Cite evidence and develop a logical argument for conjectures • Describe, compare, and contrast solution methods • Verify reasonableness of results • Justify or critique conclusions drawn
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Synthesize information within one source or text • Develop a complex model for a given situation • Develop an alternative solution

Math & Science Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 3 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion (such as from examples given), predict, compare/contrast, match like ideas, explain, construct models	• Use concepts to solve <u>non-routine</u> problems • Explain, generalize, or connect ideas <u>using supporting evidence</u> • Make <u>and justify</u> conjectures • Explain thinking when more than one response is possible • Explain phenomena in terms of concepts
Apply Carry out or use a procedure in a given situation, carry out (apply to a familiar task), or use (apply) to an unfamiliar task	• Design investigation for a specific purpose or research question • Conduct a designed investigation • Use concepts to solve non-routine problems • <u>Use & show reasoning, planning, and evidence</u> • Translate between problem & symbol; notation when not a direct translation
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct	• Compare information within or across data sets or texts • Analyze and <u>draw conclusions from data, citing evidence</u> • Generalize a pattern • Interpret data from computer graph • Analyze similarities/differences between procedures or solutions
Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique	• <u>Cite evidence and develop a logical argument</u> for concepts or solutions • Describe, compare, and contrast solution methods • <u>Verify reasonableness of results</u>
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, construct, produce	• Synthesize information within one data set, source or text • Formulate an original problem given a situation • Develop a scientific/mathematical model for a complex situation

Level 4: Extended Thinking

Curricular elements assigned to this level demand extended use of higher order thinking processes such as synthesis, reflection, assessment and adjustment of plans over time. Students are engaged in conducting investigations to solve real-world problems with unpredictable outcomes. Employing and sustaining strategic thinking processes over a longer period of time to solve the problem is a key feature of curricular objectives that are assigned to this level. Key strategic thinking processes that denote this particular level include: synthesis, reflect, conduct, and manage.

Verbs	Teacher Role	Student Role
design, connect, synthesize, apply concepts, critique, analyze, create, prove	facilitates, reflects, evaluates, extends, analyses	designs, takes risks, proposes, formulates, modifies, plans, creates

Possible Products

Story	Plan	Song	Media Product
Film	Project	New Game	Newspaper

Potential Activities

• Applying information to solve ill-defined problems in novel situations	• Creating graphs, tables, and charts where students must reason through and organize the information without instructor prompts
• Tasks that require a number of cognitive and physical skills in order to complete	• Writing tasks that have a strong emphasis on persuasion
• Writing and/or research tasks that involve formulating and testing hypotheses over time	• Devise a way to …
• Tasks that require students to make multiple strategic and procedural decisions as they are presented with new information throughout the course of the event	• Develop a menu for a new restaurant using a variety of healthy foods
• Tasks that require perspective taking and collaboration with a group of individuals	• Sell an idea
	• Write a jingle to advertise a new product
	• Conduct an internship in industry where students are faced with real-world, unpredictable problems

Potential Questions

What changes would you make to solve . . . ?	What could be combined to improve (change) . . . ?
How would you improve . . . ?	Suppose you could ____ what would you do . . . ?
What would happen if . . . ?	How would you test . . . ?
Can you elaborate on the reason . . . ?	Can you formulate a theory for . . . ?
Can you propose an alternative . . . ?	Can you predict the outcome if . . . ?
Can you invent . . . ?	How would you estimate the results for . . . ?
How would you adapt ____ to create a different . . . ?	What facts can you compile . . . ?
How could you change (modify) the plot (plan) . . . ?	Can you construct a model that would change . . . ?
What could be done to minimize (maximize) . . . ?	Can you think of an original way for the . . . ?
What way would you design . . . ?	Do you agree with the actions . . . ? with the outcomes . . . ?
Would it be better if . . . ?	What is your opinion of . . . ?
Why did they (the character) choose . . . ?	How would you prove . . . ? disprove . . . ?
What would you recommend . . . ?	Can you assess the value or importance of . . . ?
How would you rate the . . . ?	Based on what you know, how would you explain . . . ?
What would you cite to defend the actions . . . ?	What information would you use to support the view . . . ?
How would you evaluate . . . ?	How would you justify . . . ?
How could you determine . . . ?	What data was used to make the conclusion . . . ?
What choice would you have made . . . ?	Why was it better that . . . ?
What would you select . . . ?	How would you prioritize the facts . . . ?
How would you prioritize . . . ?	
What judgment would you make about . . . ?	
How would you compare the ideas . . . ? people . . . ?	

ELA, History & Social Studies Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 4 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Explain how concepts or ideas specifically relate to other content domains or concepts • Develop generalizations of the results obtained or strategies used and apply them to new problem situations
Apply Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Illustrate how multiple themes (historical, geographic, social) may be interrelated • Select or devise an approach among many alternatives to research a novel problem
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g. for bias or point of view)	• Analyze multiple sources of evidence, or multiple works by the same author, or across genres, time periods, themes • Analyze complex/abstract themes, perspectives, concepts • Gather, analyze, and organize multiple information sources • Analyze discourse styles
Evaluate Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	• Evaluate relevancy, accuracy & completeness of information from multiple sources • Apply understanding in a novel way, provide argument or justification for the application
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Synthesize information across multiple sources or texts • Articulate a new voice, alternate theme, new knowledge or perspective

Math & Science Alignment to Bloom's Taxonomy

Revised Bloom's Taxonomy	Webb's DOK Level 4 Recall & Reproduction
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion (such as from examples given), predict, compare/contrast, match like ideas, explain, construct models	• Relate mathematical or scientific concepts to other content areas, other domains, or other concepts • Develop generalizations of the results obtained and the strategies used (from investigation or readings) and apply them to new problem situations
Apply Carry out or use a procedure in a given situation, carry out (apply to a familiar task), or use (apply) to an unfamiliar task	• Select or devise approach among many alternatives to solve a problem • Conduct a project that specifies a problem, identifies solution paths, solves the problem, and reports results
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct	• Analyze multiple sources of evidence • Analyze complex/abstract themes • Gather, analyze, and evaluate information
Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique	• Gather, analyze, & evaluate information to draw conclusions • Apply understanding in a novel way, provide argument or justification for the application
Create Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, construct, produce	• Synthesize information across multiple sources or texts • Design a mathematical model to inform and solve a practical or abstract situation

Content/Curriculum Analysis

Course or Unit Name:

List course or unit objectives in the correct DOK Level.

DOK Level(s)	Objective	CCSS DOK Level(s)	Common Core Standard(s)	Location/ Performance or Assessment
Level 1 Recall/ Reproduction of Information or Procedures				
Level 2 Working with Skills and Concepts				
Level 3 Short-term Strategic Thinking				
Level 4 Extended Strategic Thinking				

Resources:

Webb, Norman L. and others. "Web Alignment Tool" 24 July 2005. Wisconsin Center of Educational Research. University of Wisconsin-Madison. 2 Feb. 2006. <http://www.wcer.wisc.edu/WAT/index.aspx

Karin Hess, Center for Assessment, The National Center for the Improvement of Educational Assessment, Inc.

Mississippi Department of Education Webb's Depth of Knowledge Guide

Florida's Department of Education, Depth of Knowledge Questions