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| **Revised Bloom’s Taxonomy** | **Webb’s DOK Level 1****Recall & Reproduction** | **Webb’s DOK Level 2****Skills & Concepts** | **Webb’s DOK Level 3****Strategic Thinking/ Reasoning** | **Webb’s DOK Level 4****Extended Thinking** |
| RememberRetrieve 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)
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| **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 number line
* Solve a one-step problem
* Represent math relationships in words, pictures, or symbols
* Read, write, compare decimals in scientific notation
 | * 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
 | * Use concepts to solve non-routine problems
* Explain, generalize, or connect ideas using supporting evidence
* Make and justify conjectures
* Explain thinking when more than one response is possible
* Explain phenomena in terms of concepts
 | * 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
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| **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
 | * 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 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
 | * Design investigation for a specific purpose or research question
* Conduct a designed investigation
* Use concepts to solve non-routine problems
* Use & show reasoning, planning, and evidence
* Translate between problem & symbolic notation when not a direct translation
 | * 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
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| **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
 | * 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
 | * Compare information within or across data sets or texts
* Analyze and draw conclusions from data, citing evidence
* Generalize a pattern
* Interpret data from complex graph
* Analyze similarities/differences between procedures or solutions
 | * Analyze multiple sources of evidence
* analyze complex/abstract themes
* Gather, analyze, and evaluate information
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| **Evaluate**Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique |  |  | * Cite evidence and develop a logical argument for concepts or solutions
* Describe, compare, and contrast solution methods
* Verify reasonableness of results
 | * Gather, analyze, & evaluate information to draw conclusions
* Apply understanding in a novel way, provide argument or justification for the application
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| **Create**Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, construct, produce | * Brainstorm ideas, concepts, or perspectives related to a topic
 | * Generate conjectures or hypotheses based on observations or prior knowledge and experience
 | * 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
 | * Synthesize information across multiple sources or texts
* Design a mathematical model to inform and solve a practical or abstract situation
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