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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** |
| 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 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 |
| **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 |
| **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 |
| **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 |
| **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 |