

| <b>Operations</b>  | <b>Skills Across Domains</b>   | <b>Discourse</b>   | <b>Reasoning &amp; Applications</b>   | <b>Effective Instructional Practices</b>  |
|--|--|--|---|---|
| <b>Concrete-Visual-Abstract</b>  | <b>Patterns</b>  | <b>Questioning</b>   | <b>Critical Thinking</b>  | <b>Explicit Instruction</b>   |
| Numbers and operations are taught through explicit connections among concrete, visual and abstract representations.        | Students use numerical and visual patterns to identify properties and formulas, and to make predictions.           | Questions are posed to promote problem solving and reasoning and are answered by students.                 | Students explain and justify answers and processes.   | New skills and content are introduced, modeled, and guided using explicit and structured instructional practices. |
| <b>Place Value</b>   | <b>Estimation</b>  | <b>Interaction</b>   | <b>Productive Struggle</b>  | <b>Pacing</b>   |
| Place value understanding and properties of operations are used to teach about operations with whole and rational numbers. | Students use estimation to approximate, reason about, and/or check solutions for both numerical and word problems. | Students engage in structured interactions around the learning.  | Challenging tasks are scaffolded to be just within reach, requiring reasoning and problem-solving.                                | Pacing is brisk to maintain high engagement as students process information.                                      |
| <b>Fractions</b>   | <b>Mathematical Models</b>   | <b>Manage Discourse</b>  | <b>Geometric Reasoning</b>  | <b>Active Engagement</b>  |
| Fraction concepts and procedures are connected to like concepts and procedures with whole numbers.                         | Students are taught to analyze real-world scenarios to construct and use mathematical models to solve problems.    | Student to student discourse is managed and summarized to maintain progress toward the learning objective. | Concepts related to geometric shapes and solids are taught through discussion and comparison of their measurable characteristics. | Students are actively engaged as they apply new concepts or skills.   |
| <b>Fact &amp; Procedural Fluency</b>   | <b>Problem-solving Techniques</b>  | <b>Vocabulary</b>  | <b>Learning Through Inquiry</b>   | <b>Differentiation</b>  |
| A variety of methods are used to build fluency and flexibility with number facts and procedures.                           | A variety of problem-solving techniques are taught and applied to solve problems.                                  | Academic language and vocabulary are introduced and developed to ensure access to the content.             | Inquiry processes are clearly defined, guided, and concluded while connecting back to the learning objective.                     | Instruction is differentiated to support student learning.  |

