

K-12 Mathematics HQIM Evaluation Tool Question Bank



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PURPOSE AND USE OF THIS QUESTION BANK

This K-12 Mathematics HQIM Evaluation Tool Question Bank is designed to support districts in conducting deep, rigorous reviews of instructional materials.

This resource is intentionally comprehensive and reflects the breadth of considerations that contribute to strong evaluation. It is **not intended to be used in full as a single evaluation tool**.

HOW TO USE THIS RESOURCE

Districts should use this question bank as a source of high-quality evaluation questions, not as a checklist.

Recommended uses include:

- ▶ Selecting a focused subset of questions to build or refine an evaluation tool
- ▶ Reviewing and strengthening existing criteria
- ▶ Identifying gaps and supplementing current processes

Districts should prioritize a manageable number of questions that allows reviewers to engage deeply with the materials.

EXPECTATIONS FOR REVIEWERS

Each selected question should be treated as an opportunity for careful analysis.

Reviewers should:

- ▶ Fully consider each question in relation to the materials
- ▶ Provide clear, specific responses supported by evidence
- ▶ Cite evidence from student materials, teacher materials, assessments, and digital tools as appropriate

Using too many questions at once will limit the depth and quality of responses.

SCORING GUIDANCE

Questions are designed to be used with a rating scale (for example, a 1–4 rubric).

They are not intended to be answered as yes/no questions.

Districts should define scoring criteria that:

- ▶ Differentiate levels of quality
- ▶ Emphasize observable evidence
- ▶ Support consistency across reviewers

Including space for written evidence alongside ratings is strongly recommended.

IMPORTANT CONSIDERATIONS

This question bank does not represent a complete or exhaustive list of all possible evaluation criteria.

Districts may:

- ▶ Adapt questions to reflect local priorities
- ▶ Add additional criteria as needed
- ▶ Refine language to align with local policy and context

This resource is designed to support strong decision-making while allowing flexibility in implementation.

Question Bank

TECHNICAL SPECIFICATIONS, PLATFORM ACCESS, AND ADOPTION READINESS

- 1 Do the materials meet district technical requirements for platform access, security, rostering, data privacy, and interoperability?
- 2 Can all staff who support mathematics instruction (including but not limited to: non-rostered staff, coaches, interventionists, co-teachers, and district leaders) access the digital platform and assign and view work when their role requires it?
- 3 Can curriculum leaders and review committee members view the program from both teacher and student perspectives?
- 4 Does the publisher provide a clear schedule for content updates, platform updates, feature improvements, and district notifications across the adoption period?
- 5 Are platform upgrades, digital feature updates, maintenance, and required support included in the adoption purchase?
- 6 Does the platform integrate with district single sign-on, learning management, student information, gradebook, and assessment systems?
- 7 Does the platform preserve student access, instructional records, and assignment history when students move between teachers, schools, or courses?

STANDARDS ALIGNMENT AND CONTENT ACCURACY

- 1 Do the materials provide comprehensive coverage of the full intent of the Florida B.E.S.T. mathematics standards, benchmarks, clarifications, and areas of emphasis?
- 2 Are student tasks, teacher guidance, assessments, digital resources, and ancillary materials aligned to the B.E.S.T. mathematics expectations?
- 3 Does the program include a clear alignment map showing where each benchmark is taught, practiced, assessed, revisited, extended, and reviewed?
- 4 Are standards addressed at the intended depth rather than through superficial tagging or isolated references?
- 5 Is the mathematical content accurate, complete, objective, and understandable in both teacher-facing and student-facing materials?
- 6 Do examples, definitions, representations, models, and solution pathways reflect sound mathematics?
- 7 Are instructional objectives, lesson goals, essential questions, and academic language goals clearly connected to the intent of the B.E.S.T. expectations?
- 8 Do assessments measure the same benchmarks and mathematical expectations that instruction is designed to develop?
- 9 Does the publisher provide evidence that qualified mathematics educators or content experts reviewed the materials?
- 10 Does the publisher provide that errors can be corrected through a transparent process?

FOCUS, COHERENCE, AND LEARNING PROGRESSION

- 1 Do the materials devote the majority of instructional time to the areas of emphasis (as defined by the B.E.S.T. standards) of the grade or course?
- 2 Does supporting content strengthen the areas of emphasis of the grade or course rather than distract from it?
- 3 Does the sequence of units and lessons build coherently across the year and across grade levels or courses?
- 4 Do the materials connect prior learning to current grade/course expectations and future learning in ways that students and teachers can see?
- 5 Are prerequisite concepts connected within the context of new learning rather than taught as disconnected review?
- 6 Is review from prior grades or courses clearly identified so teachers and students understand the current grade/course responsibility?
- 7 Do problems and activities connect major strands, standards, and benchmarks when those connections are natural and important?
- 8 Is the pacing viable for a school year and supportive of depth of understanding rather than rushed coverage?

CONCEPTUAL UNDERSTANDING AND MATHEMATICAL REPRESENTATIONS

- 1 Do the materials support students in developing conceptual understanding where the standards call for understanding, interpreting, or explaining?
- 2 Do students regularly make sense of mathematical ideas before, during, and after learning procedures?
- 3 Do lessons help students construct meaning for why mathematical ideas work and when they are useful?
- 4 Do the materials include high-quality conceptual problems and discussion questions that require reasoning rather than recall alone?
- 5 Do students connect verbal descriptions, diagrams, manipulatives, tables, graphs, equations, expressions, and contextual situations?
- 6 Do materials help students identify correspondences across multiple representations of the same mathematical idea?
- 7 Are visual models, physical manipulatives, and digital manipulatives accurate representations of the mathematics and connected to other representations?
- 8 Do students explain why procedures work using properties, structure, definitions, models, and/or representations?

PROCEDURAL SKILL, FLUENCY, PRACTICE, AND APPLICATION

- 1 Are required procedural skills and fluencies developed intentionally across the year and not isolated only to specific lessons or sections?
- 2 Does fluency development support students in solving more complex mathematical tasks?
- 3 Is procedural practice connected to conceptual understanding rather than taught only as isolated steps?
- 4 Do practice opportunities include both problems where strategic and flexible thinking is useful and problems where more efficient generalized methods are needed?
- 5 Are practice sets intentionally sequenced to strengthen understanding, accuracy, efficiency, and flexibility as appropriate and determined by the intent of the benchmark?
- 6 Does each problem, exercise, task, routine, or practice activity have a clear instructional purpose?
- 7 Do the materials include single-step, multi-step, contextual, and non-routine problems that develop understanding of grade-level/course-level mathematics?
- 8 Do application tasks require students to choose methods, interpret results, and determine whether solutions make sense?
- 9 Do the materials balance conceptual understanding, procedural skill and fluency, and application across the grade/course?

MATHEMATICAL THINKING, REASONING, AND COMMUNICATION

- 1 Do the materials intentionally connect the Mathematical Thinking and Reasoning standards to grade/course-level mathematics?
- 2 Are mathematical thinking and reasoning expectations present throughout assignments, activities, discussions, and assessments?
- 3 Do reasoning opportunities strengthen the mathematical focus of the lesson rather than distract from it?
- 4 Do students regularly engage in problem solving as a form of mathematical reasoning?
- 5 Do students construct viable arguments about grade/course-level mathematics?
- 6 Do students analyze, compare, and respond to the reasoning of others using mathematical evidence?
- 7 Do students produce explanations, diagrams, models, representations, and justifications in addition to answers?
- 8 Is the specialized language of mathematics, argument, explanation, precision, and problem solving explicitly taught rather than assumed?
- 9 Do students use definitions, properties, counterexamples, and mathematical structure to support claims?

INSTRUCTIONAL DESIGN, LESSON STRUCTURE, AND STUDENT ENGAGEMENT

- 1 Are lessons thoughtfully structured so teachers can lead coherent learning experiences while students actively participate?
- 2 Does each lesson have a clear instructional flow that supports launch, exploration or development, synthesis, practice, and reflection where appropriate?
- 3 Are activity-based and exploratory learning structures embedded in the core materials rather than treated only as optional extras?
- 4 Do warm-ups, routines, and opening tasks prepare students for the mathematics of the lesson?
- 5 Do lessons include purposeful questions that help teachers elicit and advance student thinking?
- 6 Do lessons include purposeful questions that help teachers elicit and facilitate student discourse?
- 7 Do students engage with challenging mathematics through sustained sense-making rather than immediately being shown procedures?
- 8 Are lesson components manageable within the time available and appropriate for students to process and understand?

SUPPORTS FOR LEARNER ACCESS AND ACADEMIC LANGUAGE

- 1 Do the materials provide multiple entry points so students with varied readiness levels can engage with grade/course-level mathematics?
- 2 Are tiered supports embedded within the core program rather than provided only as separate add-ons?
- 3 Do supports help students engage with the same grade/course expectations rather than replacing them with substantially lower-level work?
- 4 Do materials provide timely prerequisite support that is directly connected to upcoming grade/course learning?
- 5 Do materials include actionable intervention resources, mini-lessons, targeted practice, enrichment, or extension opportunities?
- 6 Are scaffolds provided at both unit and lesson levels and designed for gradual release toward independent understanding?
- 7 Do materials help teachers identify when students need prerequisite support, grade/course-level practice, or extension?
- 8 Is the language in problems and questions clear enough that it does not create unnecessary barriers to accessing the mathematics?
- 9 Do materials provide vocabulary supports, visuals, sentence frames, cognates, graphic organizers, and other academic language supports (such as Math Language Routines) when needed?
- 10 Do materials provide guidance for adapting lessons for students with documented learning, language, or accessibility needs while maintaining the mathematics goal?

ASSESSMENT SYSTEM, EVIDENCE OF LEARNING, AND DATA USE

- 1 Does the program provide multiple, frequent, and varied assessment opportunities embedded across units and lessons?
- 2 Do assessments include diagnostic, formative, progress monitoring, performance, and summative options?
- 3 Do assessments measure the full expectation of the benchmarks being assessed?
- 4 Do assessments reflect the intended balance of conceptual understanding, procedural skill and fluency, application, reasoning, and modeling of the assessed benchmarks?
- 5 Do assessments require students to produce solutions as well as explanations, arguments, diagrams, or models?
- 6 Do assessments allow students to represent understanding in multiple ways, such as written responses, verbal explanations, illustrations, performance tasks, or project-based tasks where appropriate?
- 7 Do assessment items include problem types and item formats comparable to the F.A.S.T. assessment when appropriate?
- 8 Do formative assessments identify prerequisite learning needs that are directly connected to upcoming grade/course lessons?
- 9 Do scoring guidelines, rubrics, and answer keys align to the B.E.S.T. standards and include specific, observable, and measurable criteria?
- 10 Are assessments and item banks editable or customizable while preserving standards alignment and mathematical quality?
- 11 Do assessment reports and item analysis tools help teachers and leaders identify patterns in student understanding and determine next instructional steps?
- 12 Are there opportunities to formatively assess the Mathematical Thinking and Reasoning Standards (MTRS)?

TEACHER SUPPORT, USABILITY, AND PROFESSIONAL LEARNING

- 1 Do teacher materials provide clear guidance for lesson planning, instruction, facilitation, and reflection?
- 2 Are teacher editions concise, easy to manage, and clearly connected to student materials and other resources?
- 3 Do teacher materials explain the mathematics of each unit and the mathematical purpose of each lesson?
- 4 Do teacher materials provide mathematical content support, such as explanations of methods or representations?
- 5 Do teacher materials anticipate common student strategies, misconceptions, errors, and partial understandings?
- 6 Do teacher materials include questions that prompt student thinking and support mathematical discussion?
- 7 Do teacher materials include expected student outcomes or look-fors that help teachers interpret student work?
- 8 Do teacher resources explicitly reference prerequisite skills and future connections, including where those skills are taught?
- 9 Are ready-to-use and editable resources available, such as slide decks, handouts, question banks, routines, practice sets, and assessment supports?
- 10 Does professional learning support both content knowledge and instructional practice for new and experienced teachers across the adoption period?

DIGITAL INSTRUCTIONAL MATERIALS, MULTIMEDIA, AND USER EXPERIENCE

- 1 Do digital and print materials provide consistent mathematical content and instructional guidance?
- 2 Do digital tools enhance mathematical understanding rather than merely digitizing worksheets?
- 3 Can digital resources easily be converted to print resources?
- 4 Do digital tasks allow students to show reasoning, use representations, explain thinking, and submit meaningful mathematical work?
- 5 Can teachers monitor student responses to digital math tasks in real time or near real time?
- 6 Do digital manipulatives, simulations, and interactive tools accurately represent the mathematics?
- 7 Do multimedia resources, such as videos and demonstrations, directly support the lesson's mathematical goal?
- 8 Is the user experience consistent across teacher materials, student materials, assessments, reports, and support resources?
- 9 Can teachers customize digital assignments, pacing, and visibility while maintaining coherence of the program?

ACCESSIBILITY AND ASSISTIVE TECHNOLOGY

- 1 Do materials include teacher guidance for adapting lessons using low-technology and high-technology options?
- 2 Can fonts, font sizes, font colors, background colors, and contrast settings be adjusted to support readability?
- 3 Are text-to-speech tools included or compatible with selectable text?
- 4 Can assistive technology software run in the background without interfering with the platform?
- 5 Are videos captioned and are transcripts available for video or audio resources when needed?
- 6 Do text, image tags, captions, navigation elements, refreshable Braille displays, and screen readers work with the materials?
- 7 Do student tools include highlighting, annotation, note-taking, and export features when useful for learning?
- 8 Are PDFs accessible, unlocked, searchable, text-based, and usable with assistive technology?
- 9 Do the materials primarily incorporate real-world photographs rather than only cartoons or illustrations?

FAMILY, STUDENT, AND EXTENDED LEARNING ACCESS

- 1 Do students have reliable access to core materials, assignments, feedback, and supports outside the school day?
- 2 Do materials provide mathematics support for students and families beyond class time?
- 3 Are family-facing resources clear enough to help families understand the mathematics without requiring them to replace the teacher?
- 4 Do homework and practice materials reinforce classroom learning in ways families can reasonably support?
- 5 Can families access student progress information in a clear and timely way?

EVIDENCE-BASED DESIGN, QUALITY ASSURANCE, AND SUSTAINABILITY

- 1 Are the materials grounded in credible research or field knowledge about how students learn mathematics?
- 2 Does the publisher explain the design principles behind the program's sequence, task types, representations, practice, and assessments?
- 3 Are author, reviewer, or advisor qualifications transparent enough for district review?
- 4 Do the materials show evidence of field testing, educator feedback, or documented revision cycles?
- 5 Is the visual design clear, uncluttered, readable, and supportive of mathematical thinking?
- 6 Are materials organized so the relationship among units, lessons, assessments, supports, and professional learning is easy to understand?
- 7 Does the publisher provide a sustainable implementation model with ongoing support, content maintenance, corrections, accessibility improvements, and technical updates?