Curriculum Review Rubric

Are 80% of tasks in the curriculum you are reviewing score as exemplary? If not, you won't build exemplary teachers.

SMP	NEEDS IMPROVEMENT	EMERGING	PROFICIENT	EXEMPLARY
MAKE SENSE OF PROBLEMS AND PERSEVERE IN SOLVING THEM	**Task:** □ Is strictly procedural. □ Does not require students to check solutions for errors. **Teacher Guidance:** □ Does not advise teachers to allow for wait time; provides leading questions to expedite task. □ Does not advise teachers to encourage students to individually process the tasks. □ Is focused solely on answers rather than processes and reasoning.	**Task:** □ Is overly scaffolded or procedurally "obvious". □ Requires students to check answers by plugging in numbers. **Teacher Guidance:** □ Allots too much or too little time to complete task. □ Encourages teachers to have students individually complete tasks, but does not ask them to evaluate the processes used. □ Explains the reasons behind procedural steps. □ Does not expect teachers to check errors publicly, or make misconceptions explicit.	**Task:** □ Is cognitively demanding. □ Has more than one entry point. □ Requires a balance of procedural fluency and conceptual understanding. □ Requires students to check solutions for errors using one other solution path. **Teacher Guidance:** □ Teacher is advised to allow ample time for all students to struggle with task. □ Teacher is advised to expect students to evaluate processes. □ Teacher is advised to model making sense of the task (given situation) and the proposed solution.	**Task:** □ Allows for multiple entry points and solution paths. □ Requires students to defend and justify their solution by comparing multiply solution paths. **Teacher Guidance:** □ Teacher is supported in differentiation to keep advanced students challenged during work time. □ Task includes time for explicit student meta-cognition. □ Task requires students to make sense of the task and the proposed solution.
REASON ABSTRACTLY AND QUANTITIVLEY	**Task:** □ Lacks context. □ Does not make use of multiple representations or solution paths. **Teacher Guidance:** □ Does not advise teachers to expect students to interpret representations. □ Expects students to memorize procedures with no connection to meaning. .	**Task:** □ Is embedded in a contrived context. **Teacher Guidance:** □ Expects students to model and interpret tasks using a single representation. □ Explains connections between procedures and meaning.	**Task:** □ Has realistic context. □ Requires students to frame solutions in a context. □ Has solutions that can be expressed with multiple representations. **Teacher Guidance:** □ Teacher is advised to expect students to interpret and model using multiple representations. □ Teacher is advised to provide structure for students to connect algebraic procedures to contextual meaning.	**Task:** □ Has relevant realistic context. **Teacher Guidance:** □ Task advised teacher to expect students to interpret, model, and connect multiple representations. □ Teacher is advised to prompt students to articulate connections between algebraic procedures and contextual meaning.

CONSTRUCT VIABLE ARGUMENTS /CRITIQUE REASONING OF OTHERS	**Task:** □ Does not require or provide opportunity for student construction of argument or peer critique. **Teacher Guidance:** □ Does not advise teachers to ask students to present arguments or solutions. □ Expects students to follow a given solution path without opportunities to make conjectures.	**Task:** □ Is rote or procedural but does expect student explanation. **Teacher Guidance:** □ Does not help students differentiate between assumptions and logical conjectures. □ Teacher is expected to ask students to present arguments but not to evaluate them. □ Expectation students will make conjectures without justification.	**Task:** □ Avoids single steps or routine algorithms. **Teacher Guidance:** □ Teacher is advised to identify students' assumptions. □ Teacher is advised to model evaluation of student arguments. □ Teacher is advised to ask students to explain their conjectures.	**Task:** □ Is open **Teacher Guidance:** □ Teacher is advised to engage students in differentiating between assumptions and logical conjectures. □ Teacher is advised to prompt students to evaluate peer arguments. □ Teacher is advised to expect students to formally justify the validity of their conjectures.
MODEL WITH MATHEMATICS	**Task:** □ Requires students to simply identify variables and perform necessary computations. **Teacher Guidance:** □ Expects teacher to Identify appropriate variables and procedures for students. □ Does not expect teacher to discuss appropriateness of model.	**Task:** □ Requires students to identify variables and to compute and interpret results. **Teacher Guidance:** □ Expects teacher to verify that students have identified appropriate variables and procedures. □ Expects teacher to explain the appropriateness of model.	**Task:** □ Requires students to identify variables, compute and interpret results, and report findings using a mixture of representations. □ Illustrates the relevance of the mathematics involved. **Teacher Guidance:** □ Teacher is advised to expect students to justify their choice of variables and procedures. □ Teacher is advised to give students opportunity to evaluate the appropriateness of model.	**Task:** □ Requires students to identify variables, compute and interpret results, report findings, and justify the reasonableness of their results and procedures within context of the task. **Teacher Guidance:** □ Teacher is advised to expect students to justify their choice of variables and procedures. □ Teacher is advised to give students opportunity to evaluate the appropriateness of model.
USE APPROPRIATE TOOLS STRATEGICALLY	**Task:** □ Does not incorporate additional learning tools. **Teacher Guidance:** □ Does not suggest that teacher incorporate additional learning tools.	**Task:** □ Lends itself to one learning tool. □ Does not involve mental computations or estimation. **Teacher Guidance:** □ Expects teacher to demonstrate use of appropriate learning tool.	**Task:** □ Lends itself to multiple learning tools. □ Gives students opportunity to develop fluency in mental computations. **Teacher Guidance:** □ Teacher is advised to choose appropriate learning tools for student use. □ Teacher is advised to model error checking by estimation.	**Task:** □ Requires multiple learning tools (i.e., graph paper, calculator, manipulatives). □ Requires students to demonstrate fluency in mental computations. **Teacher Guidance:** □ Teacher is advised to allow students to choose appropriate learning tools. □ Teacher is advised to assist students in finding appropriate alternatives where tools are not available.
ATTEND TO PRECISION	**Task:** □ Gives imprecise instructions. **Teacher Guidance:** □ Does not suggest that teacher intervene when students are being imprecise. □ Does not suggest that teacher point out instances when students fail to address the question completely or directly.	**Task:** □ Has overly detailed or wordy instructions. **Teacher Guidance:** □ Provides inconsistent intervention when students are imprecise. □ Expects teacher to identify incomplete responses but does not require student to formulate further response.	**Task:** □ Has precise instructions. **Teacher Guidance:** □ Teacher is advised to consistently require precision in communication and in mathematical solutions. □ Teacher is advised to identify incomplete responses and ask students to revise their response.	**Task:** □ Includes assessment criteria for communication of ideas. **Teacher Guidance:** □ Teacher is advised to require and model precision in communication and mathematical solutions. □ Teacher is advised to encourage students to identify when others are not addressing the question completely.

LOOK FOR AND MAKE USE OF STRUCTURE	**Task:** □ Requires students to automatically apply an algorithm to a task without evaluating its appropriateness. **Teacher Guidance:** □ Does not suggest teachers recognize students for developing efficient approaches to the task. □ Requires students to apply the same algorithm to a task although there may be other approaches.	**Task:** □ Requires students to analyze a task before automatically applying an algorithm. **Teacher Guidance:** □Expects teacher to identify individual students' efficient approaches, but does not expand understanding to the rest of the class. □ Expects teacher to demonstrate the same algorithm for use in all related tasks although there may be other more effective approaches.	**Task:** □ Requires students to analyze a task and identify more than one approach to the problem. **Teacher Guidance:** □ Teacher is advised to facilitate all students in developing reasonable and efficient ways to accurately perform basic operations. □ Teacher is advised to continuously question students about the reasonableness of their intermediate results.	**Task:** □ Requires students to identify the most efficient solution to the task. **Teacher Guidance:** □ Teacher is advised to prompt students to identify mathematical structure of the task in order to identify the most effective solution path. □ Teacher is advised to encourage students to justify their choice of algorithm or solution path.
LOOK FOR AND EXPRESS REGULARITY IN REASONING	**Task:** □ Is disconnected from prior and future concepts. □ Has no logical progression that leads to pattern recognition. **Teacher Guidance:** □ Does not show evidence of task's place within the hierarchy or learning trajectory of concepts. □ Presents or examines task in isolation.	**Task:** □ Is overly repetitive or has gaps that do not allow for development of a pattern. **Teacher Guidance:** □ Obscures or does not advise teacher to draw connections to prior or future concepts.	**Task:** □ Reviews prior knowledge and requires cumulative understanding. □ Lends itself to developing a pattern or structure. **Teacher Guidance:** □ Teacher is advised to connect concept to prior and future concepts to help students develop an understanding of procedural shortcuts. □ Teacher is advised to demonstrate connections between tasks.	**Task:** □ Addresses and connects to prior knowledge in a non-routine way. □ Requires recognition of pattern or structure to be completed. **Teacher Guidance:** □ Teacher is advised to encourage students to connect task to prior concepts and tasks. □ Teacher is advised to prompt students to generate exploratory questions based on current task. □ Teacher is advised to encourage students to monitor each other's intermediate results.