

MATHEMATICS CURRICULUM LOOK FORS

The teacher:

- ◆ ***provides 60 minutes of math instruction using the math instructional block model.***
 - Does the warm-up connect to prior learning and the essential question for the lesson?
 - Does the focus problem/lesson address the essential question and provide opportunity for exploration, direct instruction, and guided practice?
 - Is the independent practice meaningful and does it meet the needs of students?
 - Does the closure summarize and clarify the mathematics learned in the lesson?
- ◆ ***maintains a dynamic mathematical learning environment.***
 - Is student work displayed and related to the unit?
 - Does the student work contain appropriate teacher feedback?
 - Is there a relevant mathematical word wall in the classroom?
 - Are appropriate mathematical tools and models accessible to students?
- ◆ ***facilitates interactive and thoughtful student discussions about mathematical concepts and processes.***
 - Does the discussion build on student understanding and lead to greater clarity?
 - Does the discussion include connections to other problems and alternative solution methods?
 - Does the teacher ask probing questions rather than just giving an answer?
- ◆ ***maintains a high level of student engagement.***
 - Are the tasks in the lesson meaningful for students?
 - Does the teacher use appropriate scaffolding?
 - Is there ample time for students to share and analyze multiple strategies?
 - Is there sustained emphasis on explanation and the development of meaning?
- ◆ ***helps students make connections to prior knowledge.***
 - Is there a link to prior knowledge in the warm-up?
 - Is the connection to prior knowledge made explicit in the focus lesson?
 - Do the tasks in the lesson build on students' prior knowledge?
- ◆ ***uses a variety of strategies to check for student understanding.***
 - Do the strategies include opportunities for students to offer solutions, make generalizations, ask questions, and provide explanations?
- ◆ ***uses assessment to guide instruction.***
 - Does the teacher modify instruction based on feedback from checks for understanding?
 - Does the teacher use pre-assessment to determine what students know and are able to do?
- ◆ ***differentiates instruction to meet students' needs.***
 - Does the teacher use pre-assessment to differentiate instruction?
 - Does the teacher use flexible grouping strategies to differentiate instruction?
 - Does the teacher use a variety of differentiation strategies so that all students have access to the curriculum?

The students:

- ◆ work independently, in pairs, in small groups, and as a whole class.
- ◆ solve problems using multiple strategies.
- ◆ engage in classroom discussions that focus on problem solving strategies and reasoning.
- ◆ use the language of mathematics to express mathematical ideas precisely through speaking and writing.
- ◆ use computational skills and mathematical processes to solve meaningful problems.
- ◆ develop an understanding of mathematical concepts before using an algorithm.
- ◆ use calculators to develop and enhance conceptual understanding and as a tool in problem solving.
- ◆ monitor their own learning.