

## **A/E Accelerated Replacement Program: Math Fourth and Fifth Grade**

### **Curriculum Goals**

The Accelerated Math Program will help students:

1. Develop critical thinking, reasoning, problem solving, and logic skills.
2. Develop the ability to analyze a problem and think deeply about its solution.
3. Learn to think like a mathematician rather than just memorizing facts and algorithms.
4. Apply mathematical reasoning to understand complex issues in society.
5. Develop personal growth and social development skills.
6. Develop perseverance and task commitment to mathematical challenges.
7. Develop the ability to become an independent and self-directed learner.
8. Experience the joy and beauty of mathematics.
9. Understand the role of technology in mathematics.

### **Emphases in the Curriculum**

- Make mathematics problematic
- Connect with students at their instructional level
- Leave behind something of mathematical value
- Value ideas and methods
- Learn from mistakes through mathematical argument
- Use meaningful tools with purpose to solve problems
- Share mathematical understanding and communicate thinking
- Provide communication opportunities for all students

# Promoting Mathematical Understanding for the High Ability Learner

DIMENSIONS	CORE FEATURES
Nature of Classroom Tasks	Make mathematics problematic Connect with where students are Leave behind something of mathematical value
Role of the Teacher	Select tasks with goals in mind Share essential information Establish classroom culture
Social Culture of the Classroom	Ideas and methods are valued Students choose and share their methods Mistakes are learning sites for everyone Correctness resides in mathematical argument
Mathematical Tools as Learning Supports	Meaning for tools must be constructed by each user Used with purpose—to solve problems Used for recording, communicating, and thinking
Equity and Accessibility	Tasks are accessible to all students Every student is heard Every student contributes