RATIONALE

The primary aim of the seventh grade mathematics program is focused on four critical areas. The program combines problem-solving skills and critical reasoning skills with basic calculation skills to provide the students with a broad base of knowledge from which to draw as they become productive members of society. The program also provides numerous opportunities for the students to practice, apply, and integrate specific skills so that they become independent thinkers and problem solvers. Upon completion, the program allows for an easy transition into the next grade level of mathematics.

COURSE DESCRIPTION

Seventh grade offers a general mathematics course that continues the development of the elementary mathematics program. Students will develop the understanding of and applying proportional relationships; developing understanding of operations with rational numbers and working with expressions and linear equations. Students will also solve problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and drawing inferences about populations based on samples.

MOST IMPORTANT LEARNER OUTCOMES

I Can Statements:

- 1. I can analyze proportional relationships and use them to solve real-world and mathematical problems.
- 2. I can apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
- 3. I can use properties of operations to generate equivalent expressions.
- 4. I can solve real-life and mathematical problems using numerical and algebraic expressions and equations.
- 5. I can draw, construct, and describe geometrical figures and describe the relationships between them.
- 6. I can solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
- 7. I can use random sampling to draw inferences about a population.
- 8. I can draw comparative inferences about two populations.
- 9. I can investigate chance processes and develop, use, and evaluate probability models.

EVALUATION

Evaluations will be based on formative and summative tests, daily work, journal entries, observation of students during activities, performance events, and MAP.