Standards for Mathematical Practice

1 Make sense of problems and persevere in solving them.

- Multiple representations are presented to help students move from concrete to representative and into abstract thinking.
- *Modeling Real Life Examples* and PROBLEM-SOLVING exercises encourage students to use problem-solving strategies, such as drawing a diagram, making a table, and solving a simpler problem. They also use a formal problem-solving plan: understand the problem, make a plan, and solve and check.

2 Reason abstractly and quantitatively.

- Visual problem-solving models help students create a coherent representation of the problem.
- *Explorations* allow students to investigate concepts to understand the REASONING behind the rules.
- Questions ask students to explain and justify their REASONING.
- Questions encourage students to apply NUMBER SENSE and formulate consistent and appropriate REASONING.

3 Construct viable arguments and critique the reasoning of others.

- *Explorations* help students make conjectures, use LOGIC, and CONSTRUCT ARGUMENTS to support their conjectures.
- Exercises, such as YOU BE THE TEACHER; DIFFERENT WORDS, SAME QUESTION; and WHICH ONE DOESN'T BELONG?, provide students the opportunity to critique the reasoning of others.

4 Model with mathematics.

- Real-life situations are translated into diagrams, tables, equations, and graphs to help students analyze relations and to draw conclusions.
- Real-life problems are provided to help students apply the mathematics they are learning to everyday life.
- MODELING REAL LIFE examples and exercises help students see that math is used across content areas, other disciplines, and in their own experiences.

5 Use appropriate tools strategically.

- *Graphic Organizers* support the thought process of what, when, and how to solve problems.
- A variety of tools, such as number lines and graph paper, manipulatives, and digital tools, are available as students CHOOSE TOOLS and begin USING TOOLS to solve problems.

6 Attend to precision.

- PRECISION exercises encourage students to formulate consistent and appropriate reasoning.
- Cooperative learning opportunities support precise communication.

7 Look for and make use of structure.

- *Learning Targets* and *Success Criteria* at the start of each chapter and section help students understand what they are going to learn.
- *Explorations* provide students the opportunity to see PATTERNS and STRUCTURE in mathematics.
- Real-life problems help students use the STRUCTURE of mathematics to break down and solve more difficult problems.

8 Look for and express regularity in repeated reasoning.

- Opportunities are provided to help students make generalizations through REPEATED REASONING.
- Students are continually encouraged to check for reasonableness in their solutions.

The colored words above are used throughout the program to indicate exercises that correlate to the Standards for Mathematical Practice.