This page is an introduction on how to use a Big Ideas Math textbook. It shows and explains the icons that are used throughout the book.
This scavenger hunt helps familiarize the student with the book. As students complete the scavenger hunt, they get a better feel for the flow of the program and can easily identify various features by their icons.
Newton and Descartes provide interest and humor for the topics covered. They show that math can be fun!

Both Newton (dog) and Descartes (cat) love math. Newton takes almost everything in life literally. Newton doesn't have a sarcastic bone in his body. He approaches every task in life with innocence and enthusiasm. Descartes takes a considerably more cautious approach to life.
Examples help the students remember things from earlier grades. Review shouldn’t be just a list of questions.

Big Ideas Math integrates review throughout the program, beginning with the chapter openers. Before each chapter, a skills review of previously learned topics is incorporated into the pacing guide. This helps student’s master topics they’ve studied before, as well as practice prior skills that are needed to be successful in the chapter.

When appropriate, specific strategies are given to help students review.
Each section begins with a 2 page Activity that is introduced by an Essential Question.

The state standard(s) being covered in this section is shown.

Most Activities show an example, or sample, activity to help the students get started.

Students record their work in the Record and Practice Journal, a consumable workbook.
Students gain a deeper understanding of topics through inductive reasoning and exploration.

Students develop communication and problem-solving skills by answering Essential Questions.

The practice exercises are correlated to the skills learned in the Activity.
After the concept has been introduced with a full-class period Activity, it is extended the following day through the Lesson.

Key vocabulary terms defined in the lesson are listed in the margin with page references. Students can also look up vocabulary online in the interactive multi-language glossary at BigIdeasMath.com. This feature is indicated by the icon.

Lesson tutorials are available at BigIdeasMath.com.

The Key Idea box is used to explain a concept, definition, property or procedure. Often, multiple representations of the concept are given. Key ideas can be broken up throughout the lesson.

Each example has follow-up exercises that check the student’s understanding of the concept.
Each concept is accompanied by clear, stepped-out examples.

Side notes help the students when studying. This note reminds the student of a previously learned concept.

After students grasp the concept of an example, they are ready to try the corresponding exercises in the exercise set.

Real-life examples apply knowledge to real-world situations. Some examples also provide a nice cross-disciplinary reference for the student.
After the students explore the concept in the Activity and extend it in the Lesson, they can practice it with skills and applications in the Exercises.

If students need more help with their homework, it is available at BigIdeasMath.com.

The Vocabulary and Concept Check asks meaningful questions that verify a student knows the vocabulary and concepts, rather than simply filling in the blank.

First page word problems are simply "words wrapped around" a skill exercise. More thought-provoking problems are on succeeding pages.

Icons 1, 2, and 3 show which Example to reference for help with an exercise.

Error Analysis is included to provide students with the opportunity to be a critical thinker. They are analyzing rather than rationalizing in order to solve the problem.
The most challenging exercises are indicated by a starburst inline heading. These problems are designed to extend the concept to the next level.

The second page exercises include rich problem solving. These are the kind of critical thinking problems that help students develop a deeper understanding of the concepts.

The Fair Game Review has multiple purposes. First, it’s a spiral review. Second, it helps prepare the student for the next lesson. Last, it will give the student some standardized test practice.
The language of mathematics is essential for success. The Meaning of a Word feature helps students understand mathematical language and to make connections to known common words.

When appropriate, key vocabulary terms are defined in the Activity.

Most activities are done in groups. This allows students to interact and learn from each other.
Many of the activities and exercises are “writing intensive”. This allows the students to be more creative in communicating their thoughts and answers.

Throughout the book, features like Puzzle allow students to use deductive reasoning to solve problems.
Students often confuse the terminology of mathematics. In Different Words, Same Question students are asked to find the three questions that ask the same thing and to answer the question, and then to answer the question that is different.

The skill exercises get progressively more difficult as the student works through the exercise set.
The exercise sets are designed to be visually appealing. Most visual elements contain information needed to solve the problem.

Throughout the program students are asked to use research methods to help solve real world problems. Generally, there is a wide variety of appropriate answers.
There are 10 different Graphic Organizers in each book of the program. They are designed to reflect Robert Marzano’s research in "Classroom Instruction that Works". Here students see an example of how to use the graphic organizer. They can make their own or download editable graphic organizers off the web, or CD, to fill out on their own.

Check out all of the graphic organizers at BigIdeasMath.com.
There are two quizzes per chapter. Content for each quiz focuses only on the lessons that immediately precede the quiz.

Students can access a self-grading quiz online at BigIdeasMath.com to further assess their progress.

The exercises on the quizzes and chapter test are the same style and format as exercises from the lessons.

Each exercise has a section reference for the material being assessed.
The Chapter Review provides a review of the key vocabulary with page references.

Each lesson of the chapter has a review section with practice.

Students can review vocabulary online using the interactive, multi-language glossary at BigIdeasMath.com.
The Chapter Test helps students assess their knowledge of Key Ideas from the chapter.

Additional assessment practice is available at BigIdeasMath.com.
The Standardized Test Practice helps students prepare for the state tests. It also serves as a cumulative review of all material taught up to the current chapter.

Newton and Descartes offer test-taking strategies. Different strategies may apply depending on the content and style of the test.