

Good Questions to Use in Math Class

The questions in this book are divided into seven strands:

number relationships
multiplication and proportional reasoning
fractions, decimals, and percents
geometry
algebraic thinking
data analysis and probability
measurement

Each strand is subdivided into two bilevel grade spans: 5–6 and 7–8.

A set of learning objectives and necessary materials are listed at the beginning of each section to help guide your content and question choices. Many of the presented questions can be adapted to meet the needs of a particular class.

You may wish to explore questions in both grade spans as you decide upon appropriate questions for your particular class. For example, if you teach sixth grade and your students have a thorough understanding of multiplication and proportional reasoning, you may want to explore questions from the 7–8 grade span. Similarly, if you teach seventh grade and find that your particular curriculum is more closely aligned with the grades 5–6 learning objectives of a particular strand, incorporate questions from that span within your teaching.

In general, the questions in each section are neither hierarchical nor sequential. Each can be posed individually. Each section can be viewed as an

à la carte menu of question choices to help students deepen their understanding of the mathematics they are studying.

Following most questions are teacher notes. Some identify important teaching points while others describe in more depth the mathematics being addressed or misconceptions that may present themselves. Teaching notes may also present possible extensions or questions that can be assigned as homework, as noted by the icon. As you pose questions in your classes, you may also wish to add your own teaching notes that you can use to guide instruction in subsequent years.