What is the instructional focus for this marking period?

In Grade 3, students rounded numbers within 1,000 to the nearest 10 or 100. In Grade 4 weeks 1–4, students extend place value understandings to read, write, and compare numbers to 1,000,000, and make generalizations about the relative sizes of numbers in each place of multi-digit numbers. In Grade 4 weeks 3–4, students use place value understandings to round numbers less than or equal to 1,000,000 to any place. The critical Grade 4 understanding that a digit in one place represents ten times what it represents in the place to its right is extended to include decimals to thousandths in Grade 5.

In Grade 3, students used a variety of strategies and algorithms based on place value, properties of operations, and the relationship between addition and subtraction to fluently add and subtract within 1,000. In Grade 4 weeks 5–6, students extend and apply these understandings to fluently add and subtract multi-digit numbers using the standard algorithms. Students are also expected to use place value understanding and properties of operations to explain computation with the standard algorithms. It is expected that Grade 4 students who are fluent with their understanding of addition and subtraction are flexible in their choice of strategies and can justify the efficiency of their choice. The standard algorithms become parts of a repertoire of strategies and do not supplant other useful strategies, such as compensation.

In week 7, students apply their computational fluency to solve a variety of multi-step word problems involving addition and subtraction, representing the problems using equations with a letter for the unknown quantity. Students assess the reasonableness of answers using mental computation and estimation strategies including rounding. In subsequent marking periods, problems include the four operations. A spectrum of multi-step word problems of varying complexity levels are purposefully incorporated throughout the year as new learning is developed and applied.

In weeks 8–9, students interpret, represent, and solve word problems involving multiplicative comparisons or situations in which the underlying question is what factor would multiply one quantity in order to result in the other. In earlier grades, students worked with additive comparisons, situations in which the underlying question is what amount would be added to one quantity in order to result in the other. In Grade 4, students also distinguish multiplicative from additive comparison.

Why will students learn this?

Enduring Understandings and Essential Questions

Place value provides meaning to the digits in multi-digit whole numbers.
- What strategies can be used to read, write, and compare multi-digit whole numbers and decimals?
- How does understanding place value help in rounding multi-digit whole numbers?

The structure of the base-ten system is uniform, and base-ten units can be understood in terms of other base-ten units.
- What generalizations can be made about place value patterns?
- What strategies can be used to read, write, and compare multi-digit whole numbers?
- How does understanding place value help in rounding multi-digit whole numbers?

Flexible methods of computation involve understanding place value concepts and properties of operations.
- What are efficient strategies for adding and subtracting multi-digit whole numbers?

There are relationships among the four operations.
- What are the relationships among factors, products, and quotients?
- How is a multiplicative comparison different from additive comparison?
- How can you model, represent, and interpret addition, subtraction, multiplication, and division situations?