Unit 03: Operations with Decimals

Content Area: **TEMPLATE**
Course(s):
Time Period: **Full Year**
Length: **3 weeks**
Status: **Published**

General Overview, Course Description or Course Philosophy

In this unit, students will make sense of and use the four basic arithmetic operations with decimal numbers. They will also recognize which operation(s) will be helpful to solve problems and use estimation to make sure that their answers are accurate.

OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS

Essential Question:

- How do we solve real world application decimal problems?

Enduring Understandings:

- Number forms and expressions can be manipulated and translated to be more or less appropriate for a context or procedure for solving.
- Numerical operations are an essential part of solving problems in the real world.

CONTENT AREA STANDARDS

MA.K-12.6	Attend to precision.
MA.6.NS.B.2	Fluently divide multi-digit numbers using the standard algorithm.
MA.6.NS.B.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion Standards are Required)

LA.K-12.NJSLSA.R1	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
LA.K-12.NJSLSA.R7	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
CS.K-12.3	Recognizing and Defining Computational Problems
CS.K-12.5	Creating Computational Artifacts

CS.K-12.6	Testing and Refining Computational Artifacts
WRK.K-12.P.2	Attend to financial well-being.
WRK.K-12.P.5	Utilize critical thinking to make sense of problems and persevere in solving them.
WRK.K-12.P.8	Use technology to enhance productivity increase collaboration and communicate effectively.

STUDENT LEARNING TARGETS

Declarative Knowledge

Students will understand:

- The standard algorithm for dividing multi-digit numbers.
- The standard algorithms for adding, subtracting, multiplying and dividing decimals.

Procedural Knowledge

Students will be able to:

- Fluently divide multi-digit numbers using the standard algorithm.
- Add, subtract, multiply, and divide multi-digit decimals using the standard logarithm for each operation fluently.

EVIDENCE OF LEARNING

Formative Assessments

- Observations/Checklists
- Classwork
- Do Now Questions/Exit Tickets
- Self Assessment Questions
- IXL Skills Practice
- Student Proficiency Scale

Summative Assessments

- Portfolio Artifacts

Averages are based upon participation/preparation, classwork, and quizzes. Student marking period grades are either O (outstanding), S (satisfactory), or U (unsatisfactory).

RESOURCES (Instructional, Supplemental, Intervention Materials)

- *CMP3 Decimal Ops*
- Savvas Realize (teacher and student resources)
- Khan Academy
- MathXL for School
- IXL- Recommended Skills Practice
    - G.1 Add & Subtract Decimal Numbers
    - G.2 Add & Subtract Decimals: Word Problems
    - H.2 Multiply Decimals
    - H.4 Divide Decimals by Whole Numbers
    - H.8 Division with Decimal Quotients
    - H.10 Multiply & Divide Decimals: Word Problems
- Illustrative Mathematics Performance Tasks
- NCTM Illuminations
- Quiz Review Sheet (see classroom teacher)

INTERDISCIPLINARY CONNECTIONS

- Computations
- Financial/Economic/Business/Entrepenerial Literacy

ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS

See link to Accommodations & Modifications document in course folder.