CONNEAUT AREA SCHOOL DISTRICT
MATHEMATICS

UNIT OF STUDY: place value	COURSE/GRADE: 5	# WEEKS: 4

• MODULE 1	• Whole Number and Decimal Fraction Place Value to the One-Thousandths

Focus (emphasis) Standards/EC:

CC.2.1.5.B.1 – Apply place value to show an understanding of operations and rounding as they pertain to whole numbers and decimals

-Eligible Content:

* **M05.A-T.1.1.1:** demonstrate an understanding that in a multi-digit number, a digit in one place represents 1/10 of what it represents in the place to its left (Recognize that in the number 770, the 7 in the tens place is 1/10 the 7 in the hundreds place)

* **M05.A-T.1.1.2:** explain patterns in the number of zeros of the product when multiplying a number by powers of 10 and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. ($4 \times 10^2 = 400$ 0.05 divided by $10^3 = 0.00005$)

* **M05.A-T.1.1.3:** read and write decimals to thousandths using base-ten numerals, word form, and expanded form. (347.392=3x100+4x10+7x1+3x(0.1)+9x(0.01)+2x(0.001)

* **M05.A-T.1.1.4:** compare two decimals to thousandths based on meanings of the digits in each place using >, =, and > symbols

* **M05.A-T.1.1.5:** round decimals to any place value (limit to ones, tenths, hundredths, or thousandths place)

CC.2.4.5.A.1 – Solve problems using conversions within a given measurement system

-Eligible Content:

***M05.D-M.1.1.1:** convert between different-sized measurement units within a given measurement system. (equivalency table provided – ie: convert 5 cm to meters)

Technology/manipulatives:

Base-ten blocks; pictures of base-ten blocks; interactive images of base-ten blocks; number lines; number cards; number cubes; spinners; money; metric and customary measuring tools; conversion charts.

(see Grade 5 Module 1 attachment for examples of usage)

Dry-erase boards, eno-board

Frayer Model graphic organizer (note-taking)

studyzone.org (resources and interactive practice)
www.studyisland
www.firstinmath.com
xpmath.com

National Library of Virtual Manipulatives

Important (reinforced) Standards/EC:

There are no standards currently aligned to this resource.

Reading, writing, speaking strategies:

Journaling, read aloud, lecture, word problems, persuasive/informational/expository writing, graphic organizers, Frayer model, cooperative learning, board work, demonstration, Think-Pair-Share, note-taking, crossword puzzles, , bell-ringers

Vocabulary:

Questioning and discussion techniques:

Customary and metric units of measurement; powers of 10; base-ten numeral form; decimal/decimal point; decompose; elapsed time; expanded form; exponent; factor; mass; tenth/hundredth/thousandth; unit fractions; rounding; estimate; product; commutative property of addition/multiplication; associative property of addition/multiplication	Bell-ringers; exit tickets; journals; Frayer Model; highlighting key terms; small group/ whole group; demonstrations; homework review; dry-erase checks
Real life application: career connections: http://www.xpmath.com/careers/lite.php cooking; building…	**Performance assessment:** http://www.sandi.net/Page/62252
Computation: Use whole number exponents to denote powers of 10; reason about the magnitude of numbers (tens place is ten times as much as ones place; ones place in 1/10 the size of tens place) multiply and divide by multiples of 10 and powers of 10 ($10^2 = 10x10 = 100$ – decimal point moves to the right…$350\text{-}10^3 = 350\text{-}1000 = 0.350 = 0.35$ – decimal moves to the left); compare decimal values; round whole numbers and decimals; convert unit measurements for length, mass and volume	**Accommodations/adaptations:** Base-ten blocks; pictures of base-ten blocks; interactive images of base-ten blocks; number lines; number cards; number cubes; spinners; money; metric and customary measuring tools; conversion charts. Differentiation strategies, small group instruction, cooperative learning, guided practice, peer tutoring, limited problems/choices, manipulatives and models, clarity checks, diagrams and graphs
SAS Module Resources: www.pdesas.org *Teacher Tools-Curriculum Mapping-Instructional Frameworks Math-PA Standards: Focus and Important Standards * Math Cluster Matrix grades 4,5,6 (prior and future learning)	