### **Standards** Codes

#### For K-8 there are 11 Domains

CC = Counting and Cardinality, OA = Operations and Algebraic Thinking, NBT = Number and Operations in Base 10, MD = Measurement and Data, G = Geometry, NF = Number and Operations-Fractions, RP = Ratios and Proportional Relationships, NS = Number System, EE = Expressions and Equations, SP = Statistics and Probability, F = Functions.

The numbering system for K-8 is Grade.Domain.Standard# For example: 2.MD.7

#### For High School there are 6 Conceptual Categories

#### Number and Quantity (N)

N-RN = The Real Number System N-Q = Quantities N-CN = The Complex Number System N-VM = Vector and Matrix Quantities Algebra (A) A-SSE = Seeing Structure in Expressions A-APR = Arithmetic with Polynomials and Rational Expressions A-CED = Creating Equations

A-REI = Reasoning with Equations and inequalities

#### Functions (F)

F-IF = Interpreting Functions F-BF = Building Functions F-LE = Linear and Exponential Models F-TF = Trigonometric Functions Modeling (\*) Appear throughout the HS standards Geometry (G) G-CO = CongruenceG-SRT = Similarity, Right Triangles, and Trigonometry G-C = CirclesG-GPE = Expressing Geometric Properties with Equations G-GMD = Geometric Measurement and Dimension G-MG = Modeling with Geometry Statistics and Probability (S) S-ID = Categorical and Quantitative Data S-IC = Inferences and Justifying Conclusions S-CP = Conditional Probability and Rules of Probability S-MD = Using Probability to Make Decisions

The numbering system for HS is Category.Domain.Standard# Examples: F.LE.2 or F.LE.1b

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#### Common Core State Standards for Mathematics - CCSSM

This card available for download at:

faculty.wiu.edu/JR-Olsen/wiu/common-core/front.html By Jim Olsen

## Standards for Mathematical Practice Brief Form

Students using these practices understand and apply mathematics with confidence. Therefore, the mathematical practices describe behaviors that we want all students to develop.

#### 1 Make sense of problems and persevere in solving them.

► Find meaning in problems, ► Analyze, predict and plan solution pathways, ► Verify answers, ► Continually ask themselves: "Does this make sense?"

#### 2 Reason abstractly and quantitatively.

► Make sense of quantities and their relationships, ► Use two complementary abilities: *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols, and *contextualize*—to pause during the manipulation process to consider the referents for the symbols involved, ► Create coherent representations.

# **3** Construct viable arguments and critique the reasoning of others.

► Understand and use information to construct arguments,  $\blacktriangleright$  Make and explore the truth of conjectures,  $\blacktriangleright$  Justify conclusions and respond to arguments of others.

#### 4 Model with mathematics.

► Apply mathematics to problems in everyday life, society, and the workplace, ► Identify quantities in a practical situation, ► Interpret results in the context of the situation and reflect on whether the results make sense.

#### 5 Use appropriate tools strategically.

► Consider the available tools when solving problems, including mental math, pencil and paper, concrete models, protractor, calculators, and other technological tools.

#### 6 Attend to precision.

- ► Communicate precisely to others, ► Use clear definitions,
- ► State the meaning of symbols, and specify units, ► Label axes,
- ► Calculate accurately and efficiently.

#### 7 Look for and make use of structure.

▶ Discern patterns and structures, ▶ Can step back for an overview and shift perspective, ▶ See complicated things as single objects or as being composed of several objects.

#### 8 Look for and express regularity in repeated reasoning.

► When calculations are repeated, look for general methods, patterns and shortcuts, ► Maintain oversight of the process, while attending to the details, ► Evaluate whether intermediate results and answers makes sense.

The full version Mathematical Practices is on pages 6-8 of the Common Core State Standards for Mathematics. Available for download at: www.corestandards.org/

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