Since the Wyoming State Board of Education has agreed to adopt the Common Core State Standards as part of the Wyoming Content and Performance Standards, this document creates a bridge between what is tested on PAWS and what is taught in the Common Core Math Standards. This is necessary because Wyoming students will continue taking the PAWS, which is based on the 2008 Wyoming math standards, while districts transition to the Common Core State Standards (which will be tested in 2014 or 2015).

For grades K-8 and high school, the knowledge and skills defined in the 2008 Wyoming Content and Performance Standards and the PAWS Assessment Descriptors were compared with those specified in the Common Core Math Standards. Some knowledge and skills were found at the same grade level, some were found in lower grade levels, some were found at higher grade levels, and some were not found at all.

The information is provided in two formats. The first summarizes the information in a three-column chart that maps the Wyoming benchmarks to the Common Core Standards and indicates whether the match occurs within the same grade, at previous grades or at later grades/not at all. The second chart provides a detailed picture of the match between the Wyoming Content and Performance Standards (or Assessment Descriptors) and the Common Core State Standards. Since grades K-2 do not have Assessment Descriptors, the Wyoming Content and Performance Standards were used; for 3rd grade on, the PAWS Assessment Descriptors have been used. The Standards and/or Assessment Descriptors are color coded as follows:

- Yellow indicates skills found in preceding grades. These are things that eventually will not need to be taught at that grade level because students will master them at lower levels when the Common Core Standards are fully implemented.
- Red indicates skills that are found in higher grades or skills that are not addressed by the Common Core Standards. To adequately prepare students for the PAWS, these skills will need to be taught at the grade level until students no longer need to take PAWS.
- Blue indicates skills that need to be taught as long as PAWS is given because they are in the PAWS assessment descriptors and may be included in the test even if they are not a direct match to the benchmarks.
- Purple (unusual) indicates skills that are found in both preceding grades and higher grades. (E.g. 07.2.3 Wyoming Geometry Standard maps partly to grade 4 and partly to grade 8 in the CCSS.)

To facilitate the use of this document, the following are examples of the notation used:

- Wyoming Content and Performance Standards
    - **03.1.2** ⇒ Grade: **3**, Standard: **1**(Number and Operations), Benchmark: **2**(Students compare and order whole numbers up to 9,999.)
    - **O7.3.5** ⇒ Grade: **7**, Standard: **3**(Measurement), Benchmark: **5**(Students calculate the areas of triangles and trapezoids)
    - **11.5.4** ⇒ Grade: **11**, Standard: **5** (Data Analysis and Probability), Benchmark: **4** (Students determine, collect, organize, and analyze relevant data needed to make conclusions.)
- Common Core State Standards (K-8 by grade level)
    - **K.CC.1** ⇒ Grade: **K**indergarten, Domain: **C**ounting and **C**ardinality, Standard: **1** (Count to 100 by ones and by tens.)
    - **5.NBT.4** ⇒ Grade: **5**, Domain: **N**umber & Operations in **B**ase **T**en, Standard: **4** (Use place value understanding to round decimals to any place.)
    - **6.EE.1** ⇒ Grade: **6**, Domain: **E**xpressions & **E**quations, Standard: **1** (Write and evaluate numerical expressions involving whole-number exponents.)
    - **8.G.6** ⇒ Grade: **8**, Domain: **G**eometry, Standard: **6** (Explain a proof of the Pythagorean Theorem and its converse.)
- Common Core State Standards (High School by Domain and Strand)
    - **N.RN.2** ⇒ Domain: **N**umber & Quantity, Strand: The **R**eal **N**umber System, Standard: **2** (Rewrite expressions involving radicals and rational exponents using the properties of exponents.)
    - **A.APR.1** ⇒ Domain: **A**lgebra, Strand: **A**rithmetic with **P**olynomials & **R**ational Expressions, Standard: **1** (Understand that polynomials form a system analogous to the integers, . . .)
    - **S.ID.1** ⇒ Domain: **S**tatistics & Probability, Strand: **I**nterpreting Categorical & Quantitative **D**ata, Standard: **1** (Represent data with plots on the real number line (dot plots, histograms, and box plots.)

It is also important to note that the 8 Mathematical Practices which are part of the CCSS are just as important as the Content Standards and are referenced as Core Practices in this document.

Eighth Grade
(Use in conjunction with 2008 Wyoming Standards and Common Core State Standards)
{Wyoming Standards $\Rightarrow$ where in CCSS this is addressed}

- "Not Taught in Common Core At or Below This Grade Level" means these skills will need to be taught as long as students are required to take PAWS.
- "Taught at Lower Grade Levels" means students will need to be taught these skills until all grade levels have "caught up" with the CCSS.
- "Taught at this Grade Level," means CCSS and PAWS match.

Number and Operations		
Skill 1: Understand Meaning of Arithmetic Operations and Make Reasonable Estimates		
Skill 2: Understand Ways to Represent Numbers, Relationships Among Numbers and Number Systems		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:* **08.1.1⇒4.OA.4; 4.NF.2; 6.EE.1; 6.RP.3; 7.RP.3** **08.1.2⇒7.NS.1, 2, 3**	*Taught at this Grade Level:* **08.1.1⇒8.EE.2**
Skill 3: Develop the Connection Between Conceptual Understanding and Computational Proficiency		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:* **08.1.1⇒5.NBT.7; 6.EE.2; 7.NS.1, 2, 3** **08.1.4⇒7.NS.1, 2, 3** **08.1.3⇒7.EE.3, Core Practice #6**	*Taught at this Grade Level:* **08.1.1⇒8.EE.1, 2**

Geometry		
Skill 1: Specify Locations and Describe Spatial Relationships Using Coordinate Geometry and Other Representation Systems		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:* **08.2.1⇒4.G.1, 2; 6.G.4; 7.G.5** **08.2.4⇒5.G.3, 4; Core Practice #6**	*Taught at this Grade Level:* **08.2.1⇒8.G.5** **08.2.3⇒8.G.6, 7, 8**
Skill 3: Apply Transformations and Use Symmetry to Analyze Mathematical Situations		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:*	*Taught at this Grade Level:* **08.2.2⇒8.G.1, 2, 3, 4** **08.2.4⇒8.G.2,3, 4; Core Practice #6**

Measurement		
Skill 1: Understand Measurable Attributes of Objects and the Units, Systems and Processes of Measurement		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:* **08.3.1⇒4.MD.1, 2; 5.MD.1; 6.RP.3 (Derived Measures)** **08.3.2⇒4.MD.2; 5.MD.1** **08.3.3⇒6.G.1, 2; 7.G.1, 4, 5**	*Taught at this Grade Level:*
Skill 2: Apply Appropriate Techniques, Tools, and Formulas to Determine Perimeter, Area, or Volume		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:* **08.3.3⇒6.G.4; 7.G.1 (Scale Factors), 4, 6**	*Taught at this Grade Level:* **08.3.3⇒8.G.9 (Cones & Pyramids)**

Eighth Grade
(Use in conjunction with 2008 Wyoming Standards and Common Core State Standards)
{Wyoming Standards ⇒ where in CCSS this is addressed}

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- "Taught at this Grade Level," means CCSS and PAWS match.

Algebra		
Skill 1: Understand Patterns, Relations, and Functions		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:* **08.4.3⇒6.EE.1, 2**	*Taught at this Grade Level:* **08.4.2⇒8.EE.7**
Skill 2: Use Mathematical Models to Represent and Understand Quantitative Relationships		
Not Taught in Common Core At or Below this Grade Level:	*Taught at Lower Levels:* **08.4.1⇒6.EE.9; 7.EE.4** **08.4.4⇒6.NS.6, 8**	*Taught at this Grade Level:* **08.4.1⇒8.F.4, 5** **08.4.4⇒8.EE.5, 6**

Data Analysis and Probability		
Skill 1: Collect, Organize, and Display Relevant Data to Answer Questions and Use Appropriate Statistical Methods to Analyze the Data		
Not Taught in Common Core At or Below this Grade Level: **CCSS does not address stem-and-leaf plots, Venn diagrams, line graphs, circle graphs or the concept of mode.**	*Taught at Lower Levels:* **08.5.1⇒3.MD.3; 6.SP.1, 2, 3, 4, 5** **08.5.2⇒6.SP.1, 2, 3, 4, 5; 7.SP.4**	*Taught at this Grade Level:* **08.5.1⇒8.SP.1 (Scatter Plots)**
Skill 2: Develop and Evaluate Inferences and Predictions That Are Based on Data		
Not Taught in Common Core At or Below this Grade Level: **CCSS does not use the words "impossible, equally likely, certain" for probability**	*Taught at Lower Levels:* **08.5.3⇒7.SP.5, 6, 7, 8** **08.5.4⇒7.SP.5,6, 7, 8; Core Practice #6**	*Taught at this Grade Level:*