Four Questions Teams Ask

1. What do we want students to know and be able to do?
2. How will we know if they can?
3. What will we do if they can't?
4. What will we do if they already can?

Essential Standards

Essential standards are ones that all students must know and be able to do by the end of the year. Common formative assessments are based on these standards. (They often are called power or priority standards.) You guarantee that students who do not master these standards receive **time and support**.

Criteria for Essential Standards

Endurance: knowledge and skills that are valued beyond a single test date. Examples are
1) point of view, and 2) place value.

Leverage: knowledge and skills that are valued in multiple disciplines. Examples are
1) reading informational text in other subject areas, and 2) unit rate problems in math that are used for science.

Readiness: knowledge and skills that are necessary for success in the next grade level or next unit of instruction. Examples are: 1) letter-sound recognition, and 2) logarithms.

Understanding the Process

1	• Gather resources. • Provide copies of important documents.
2	• Make decisions individually (teachers). • Keep time short.
3	• Build consensus. • Consider each standard.
4	• Review test blueprints. • Consider pertinent data.
5	• Vertically align standards. • Consider coherence.
6	• Determine pacing guidelines. • include all standards in pacing guide.

Ways to Come to Consensus

- If everyone believes it is **power** or **not power**, the decision is easy!
- If one or more teachers have a different opinion, listen to the reasons (e.g., is it introduced rather than mastered?).
- Read standards for grade levels before and after yours.
- **Clarify *why* by using the criteria: endurance, leverage, and readiness.**
- Consider if there are other standards that are similar.

CCSSM (SBAC) Priority Clusters K – 2

Kindergarten	Grade 1	Grade 2
Counting and Cardinality Know number names and the count sequence. Count to tell the number of objects. Compare numbers. **Operations and Algebraic Thinking** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. **Number and Operations in Base Ten** Work with numbers 11-19 to gain foundations for place value.	**Operations and Algebraic Thinking** Represent and solve problems involving addition and subtraction. Understand and apply properties of operations and the relationship between addition and subtraction. Add and subtract within 20. Work with addition and subtraction equations. **Number and Operations in Base Ten** Extending the counting sequence. Understand place value. Use place value understanding and properties of operations to add and subtract. **Measurement and Data** Measure lengths indirectly and by iterating length units.	**Operations and Algebraic Thinking** Represent and solve problems involving addition and subtraction. Add and subtract within 20. **Number and Operations in Base Ten** Understand place value. Use place value understanding and properties of operations to add and subtract. **Measurement and Data** Measure and estimate lengths in standard units. Relate addition and subtraction to length.

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CCSSM (SBAC) Supporting Clusters K – 2

Kindergarten	Grade 1	Grade 2
Measurement and Data Classify objects and count the number of objects in categories. Describe and compare measureable attributes. **Geometry** Identify and describe shapes. Analyze, compare, create, and compose shapes.	**Measurement and Data** Represent and interpret data. Tell and write time. **Geometry** Reason with shapes and their attributes.	**Operations and Algebraic Thinking** Work with equal groups of objects to gain foundations for multiplication. **Measurement and Data** Work with time and money. Represent and interpret data. **Geometry** Reason with shapes and their attributes.

CCSSM (SBAC) Priority Clusters 3 – 5

Grade 3	Grade 4	Grade 5
Operations and Algebraic Thinking Represent and solve problems involving multiplication and division. Understand properties of multiplication and the relationship between multiplication and division. Multiply and divide within 100. Solve problems involving the four operations, and identify and explain patterns in arithmetic. **Number and Operations - Fractions** Develop understanding of fractions as numbers. **Measurement and Data** Solve problems involving measurement and estimation of intervals of time, liquid volumes and masses of objects. Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	**Operations and Algebraic Thinking** Use the four operations with whole numbers to solve problems. **Number and Operations in Base Ten** Generalize place value understanding for multi-digit whole numbers. Use place value understanding and properties of operations to perform multi-digit arithmetic. **Number and Operations- Fractions** Extend understanding of fraction equivalence and ordering. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. Understand decimal notation for fractions, and compare decimal fractions.	**Number and Operations in Base Ten** Understand the place value system. Perform operations with multi-digit whole numbers and with decimals to hundredths. **Number and Operations -Fractions** Use equivalent fractions as a strategy to add and subtract fractions. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. **Measurement and Data** Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

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CCSSM (SBAC) Supporting Clusters 3 – 5

Grade 3	Grade 4	Grade 5
Number and Operations in Base Ten Use place value understanding and properties of operations to perform multi-digit arithmetic. **Measurement and Data** Represent and interpret data. Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. **Geometry** Reason with shapes and their attributes.	**Operations and Algebraic Thinking** Gain familiarity with factors and multiples. Generate and analyze patterns. **Measurement and Data** Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. Represent and interpret data. Geometric measurement: understand concepts of angle and measure angles. **Geometry** Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	**Operations and Algebraic Thinking** Write and interpret numerical expressions. Analyze patterns and relationships. **Measurement and Data** Convert like measurement units within a given measurement system. Represent and interpret data. **Geometry** Graph points on the coordinate plane to solve real-world and mathematical problems. Classify two-dimensional figures into categories based on their properties.

CCSSM (SBAC) Priority Clusters 6 – 11

Grade 6	Grade 7	Grade 8	Grade 11
Ratios and Proportional Reasoning Understand ratio concepts and use ratio reasoning to solve problems. **The Number System** Apply and extend previous understandings of multiplication and division to divide fractions by fractions. Apply and extend previous understandings of numbers to the system of rational numbers. **Expressions and Equations** Apply and extend previous understandings of arithmetic to algebraic expressions. Reason about and solve one-variable equations and inequalities. Represent and analyze quantitative relationships between dependent and independent variables.	**Ratios and Proportional Reasoning** Analyze proportional relationships and use them to solve real-world and mathematical problems. **The Number System** Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. **Expressions and Equations** Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	**Expressions and Equations** Work with radicals and integer exponents. Understand the connections between proportional relationships, lines, and linear equations. Analyze and solve linear equations and pairs of simultaneous linear equations. **Functions** Define, evaluate, and compare functions. **Geometry** Understand congruence and similarity using physical models, transparencies, or geometry software. Understand and apply the Pythagorean Theorem.	**Seeing the Structure in Expressions** Interpret the structure of expressions. Write expressions in equivalent forms to solve problems. **Arithmetic with Polynomials and Rational Expressions** Perform arithmetic operations on polynomials. **Creating Equations** Create equations that describe numbers or relationships. **Reasoning with Equations and Inequalities** Understand solving equations as a process of reasoning and explain the reasoning. Solve equations and inequalities in one variable. Represent and solve equations and inequalities graphically. **Interpreting Functions** Understand the concept of a function and understand function notation. Interpret functions that arise in applications in terms of the context. Analyze functions using different representations. **Building Functions** Build a function that models a relationship between two quantities.

CCSSM (SBAC) Supporting Clusters 6 – 11

Grade 6	Grade 7	Grade 8	Grade 11
Geometry Solve real-world and mathematical problems involving area, surface area, and volume. **The Number System** Compute fluently with multi-digit numbers and find common factors and multiples. **Statistics and Probability** Develop understanding of statistical variability. Summarize and describe distributions.	**Geometry** Draw, construct and describe geometrical figures and describe the relationships between them. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. **Statistics and Probability** Use random sampling to draw inferences about a population. Investigate chance processes and develop, use, and evaluate probability models. Draw informal comparative inferences about two populations.	**The Number System** Know that there are numbers that are not rational, and approximate them by rational numbers. **Functions** Use functions to model relationships between quantities. **Geometry** Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres. **Statistics and Probability** Investigate patterns of association in bivariate data.	**Quantities** Reason quantitatively and use units to solve problems. **The Real Number System** Extend the properties of exponents to rational exponents. Use properties of rational and irrational numbers. **Interpreting Categorical and Quantitative Data** Summarize, represent, and interpret data on a single count or measurement variable. **Congruence** Prove geometric theorems.

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Unwrapping a Standard

What Does Unwrap Mean?

In "*Unwrapping" the Standards: A Simple Process to Make Standards* Manageable (2003), Larry Ainsworth notes that to unwrap standards, one must:

- Identify the concepts and skills found in the standards.
- Determine exactly what students need to 1) know (the concepts or content) and 2) be able to do (the skills) (p. 5).

What Are Concepts and Content?

- **Concepts:** abstract ideas that point to a larger set of understandings (e.g., peace, patterns, power)

- **Content:** specific information students need to know in a given standard

These are used interchangeably when unwrapping standards.

In addition, Ainsworth writes: "To simplify the definitions, think of the **concepts** or content as being *the important **nouns** and noun phrases* embedded in the standards and indicators, and the **skills** as being *the **verbs***. When an educator 'unwraps' a standard, s/he is looking for the important nouns and verbs student need to know and be able to do" (p. 5).

How Do We Unwrap Standards?

Ainsworth outlines the process of unwrapping (pp. 6–7). To summarize, one must:

1. Determine which standards to unwrap in PLC team (PLC question 1).
2. **Underline** the key concepts (nouns and noun phrases) and **circle** the skills (verbs).
3. Organize concepts and skills in a graphic organizer or curriculum map. Teachers may want to put parentheses after skills to show how skills will be applied.

Step 1

Standard Example (Math – CCSSM 3.MD.8)

Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Standard Deconstruction ~ For Teacher Planning and Assessment

Step 2

Concepts and Content	Skills
• Real world problems • Mathematical problems • Perimeter • Perimeter given side lengths • Perimeter with an unknown side length • Rectangle • Rectangles with same perimeter and different areas • Rectangles with same area and different perimeters	• Solve real world problems. • Solve mathematical problems. • Find perimeters of polygons. • Find perimeters given side lengths. • Find perimeters with an unknown side length. • Draw rectangles with the same perimeter and different areas. • Draw rectangles with the same area and different perimeters.

Step 3

Step 4

Student Learning Targets for CCSSM Standard 3.MD.8:

1. I can solve real world problems.
2. I can find the perimeter of a polygon.
    - With known side lengths
    - With unknown side lengths
3. I can draw rectangles with the same perimeter and different areas.
4. I can draw rectangles with the same area and different perimeters.

Unwrapping a Standard in a PLC Team

1. Choose one standard from your current or next unit.
2. Unwrap the standard by underlining the concepts (nouns) and circling the skills (verbs).
3. List the concepts and content and skills in a chart.
4. Write the learning targets as *I can* statements for students.

Concepts and Content	Skills

Student Learning Targets