



Welcome Rock View Parents!!

Do not worry if you have built your castles in the air. They are where they should be. Now put the foundations under them.

- Henry David Thoreau

Information on Curriculum 2.0 For Parents of Rising 5th Graders

Creative Thinking

Critical Thinking

Academic Success



Outcomes

- Heard an overview of Curriculum 2.0 and how Thinking and Academic Skills are integrated throughout the curriculum
- **Heard about the differences between the 2001 Curriculum and Curriculum 2.0, including a Comparison Chart of Enrichment and Acceleration expectations between the two curricula**
- Reviewed the Measurement Topics & Proficiency Statements for Math, Reading, Writing, Social Studies, and Science in Grade 5
- **Heard the Grade 5 Roll-out plan for MCPS**
- Discussed Standards Based Grading and Reporting and how it aligns with Curriculum 2.0.
- **Discovered where additional resources can be located**

Creative Thinking

Critical Thinking

Academic Success₂



Curriculum 2.0 Overview



MCPS Curriculum 2.0

Empowering Students • Connecting Content • Fostering Creativity

MCPS Curriculum 2.0 is built around developing students' critical and creative thinking skills, as well as essential academic success skills, so that students are well prepared for a lifetime of learning. We are upgrading the existing MCPS curriculum for the elementary grades in a way that will better engage students and teachers, and dedicate more learning time to subjects such as the arts, information literacy, science, social studies and physical education. By blending these subjects with the core content areas of reading, writing, and mathematics, students will receive robust, engaging instruction across all subjects in the early grades. In short, **we are building a stronger foundation at the elementary level.**

[Dr. Starr's message on Curriculum 2.0 \(PDF\)](#)



Creative Thinking

Critical Thinking

Academic Success



Curriculum 2.0 Overview

What students should know and be able to do in Grade 5...



Creative Thinking

Critical Thinking

Academic Success



Thinking and Academic Success Skills

THINKING SKILLS

Creative Thinking Skills

- Elaboration
- Flexibility
- Fluency
- Originality

Critical Thinking Skills

- Analysis
- Evaluation
- Synthesis

ACADEMIC SUCCESS SKILLS

- Collaboration
- Effort/Motivation/Persistence
- Intellectual Risk Taking
- Metacognition

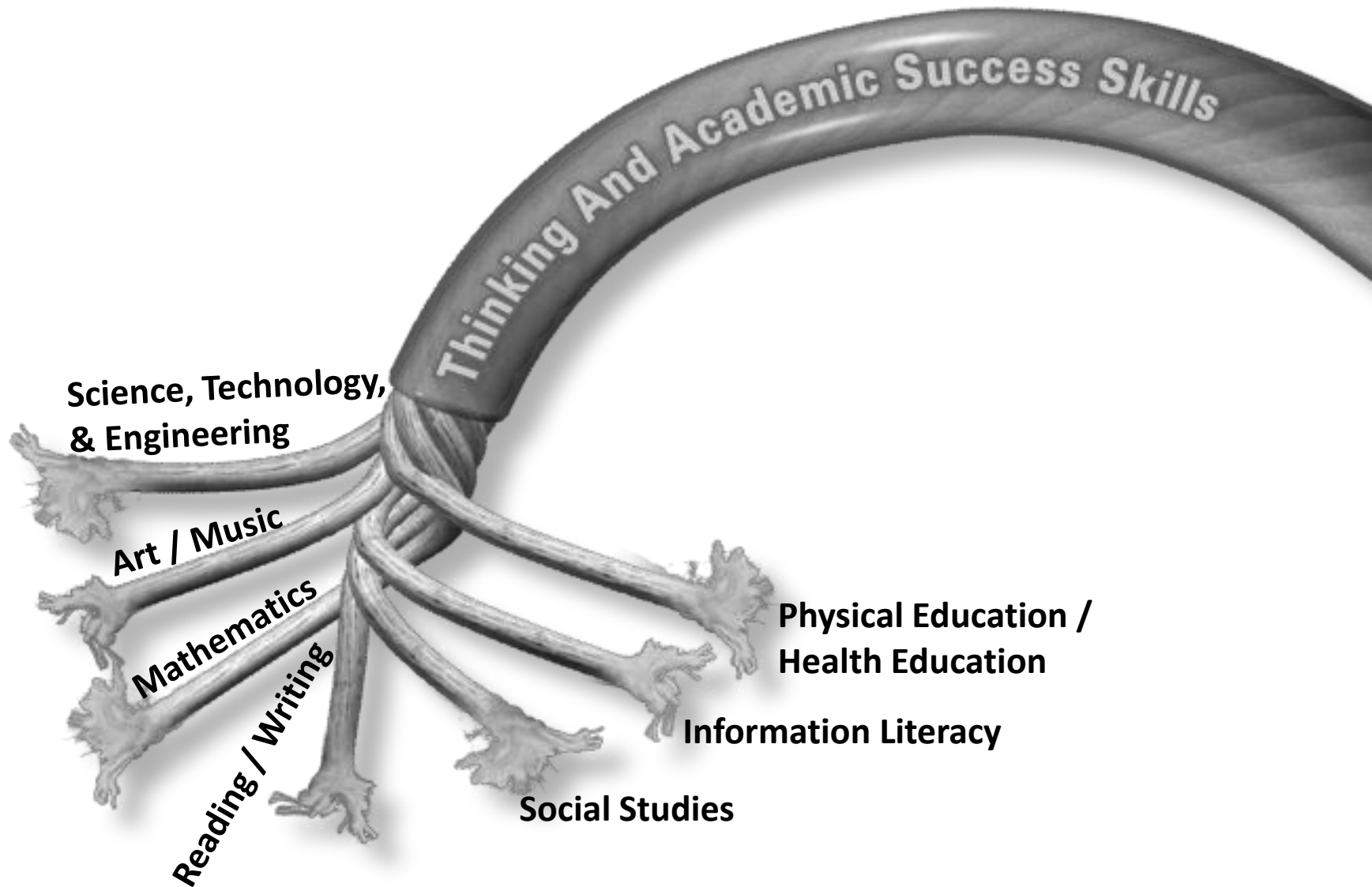


Creative Thinking

Critical Thinking

Academic Success

Threads that weave the content skills and processes together



Curriculum 2.0



Building a Strong Foundation

Curriculum 2.0 Organization

Measurement Topics in:

Math
Reading
Writing

aligns with

Common Core
State
Standards

Measurement Topics in:

Science
Social Studies
Art
Music
Physical Education

aligns with

Maryland
State
Curriculum

Measurement Topics in:

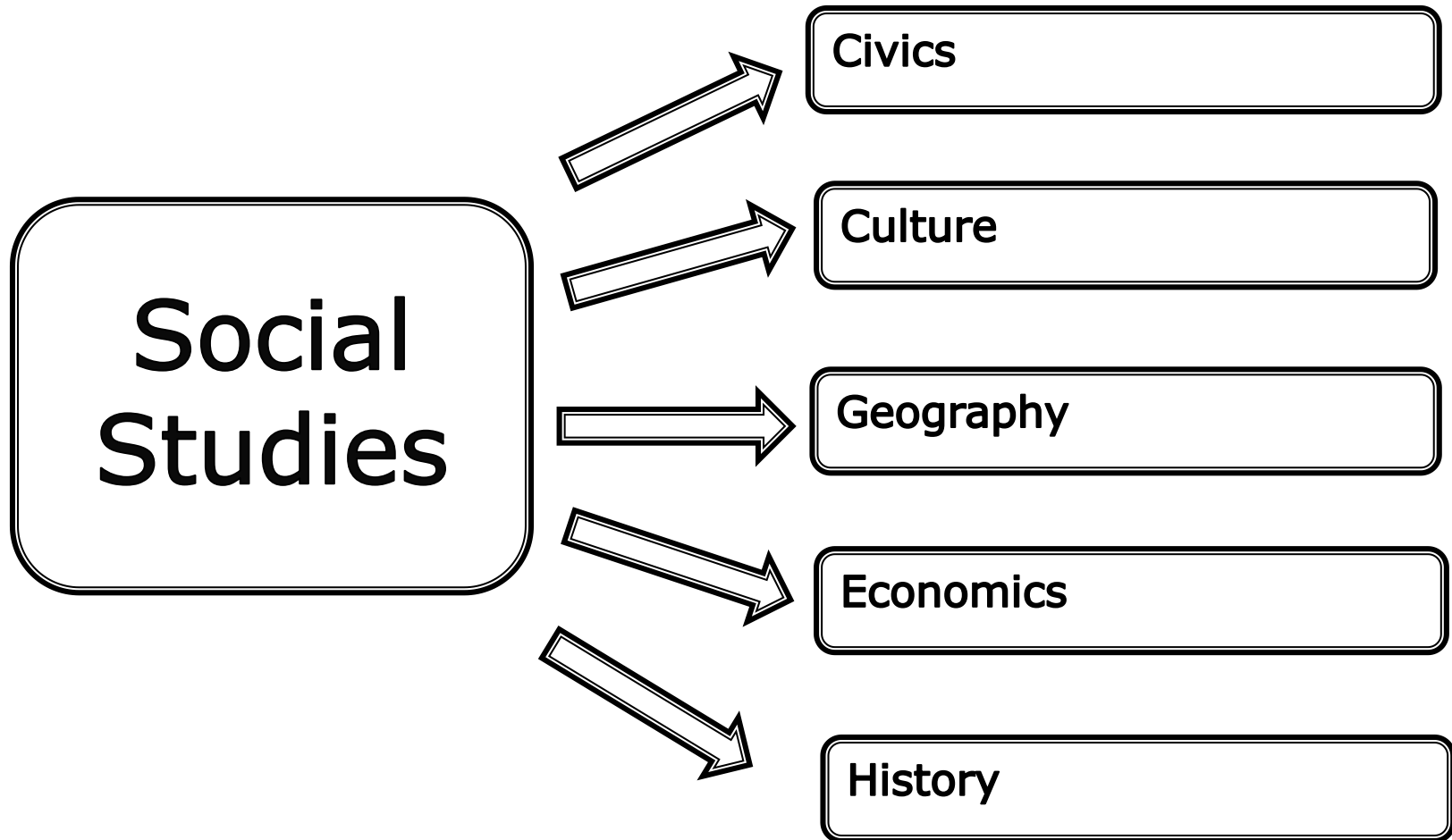
ESOL

aligns with

World-Class
Instructional
Design and
Assessment

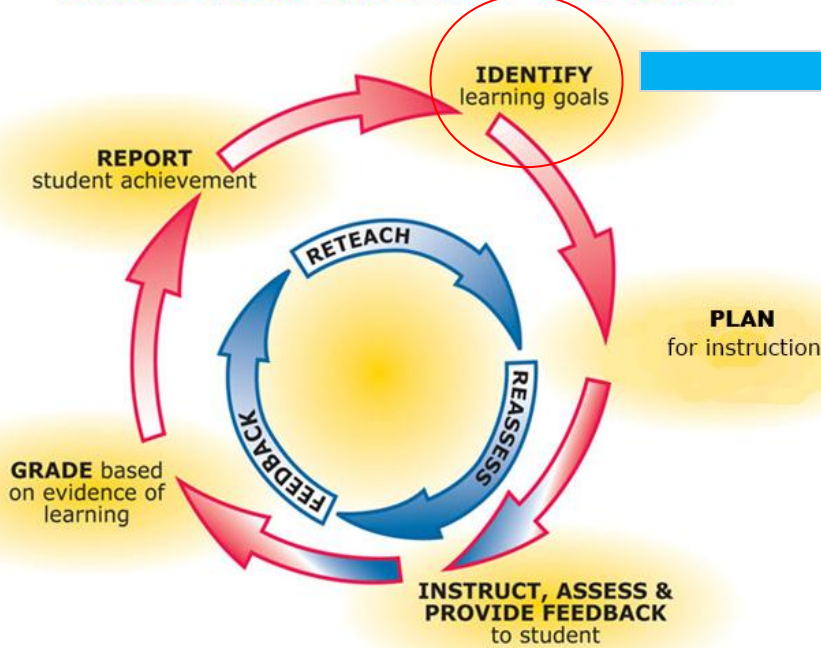
**Curriculum
2.0**

Measurement Topics



Identifying Learning Goals

INSTRUCTIONAL CYCLE



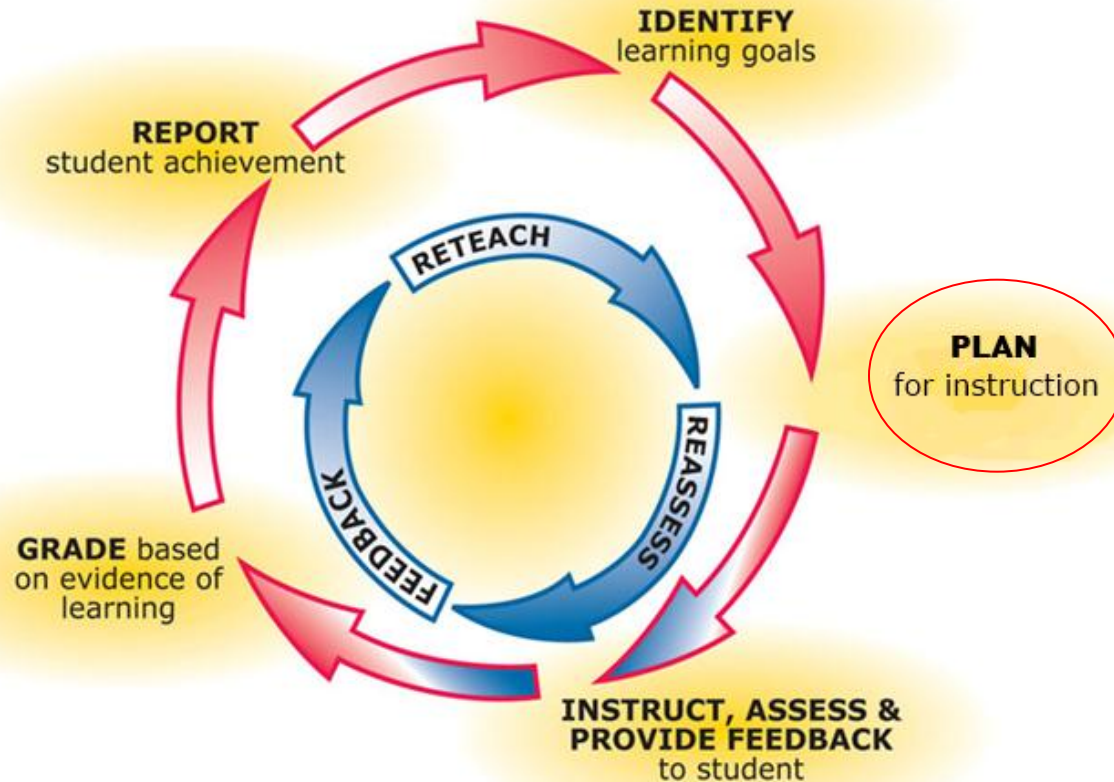
C2.0 CCSS vs 2001 MCPS Math

Grade 5 Multiplication and Division Indicators Comparison

C2.0/CCSS Indicators – Grade 5	MCPS 2001 Indicators – Grade 5
<p>Perform operations with multi-digit whole numbers and with decimals to hundredths.</p> <p>1.5.C.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.</p> <p>1.5.C.5 Fluently multiply multi-digit whole numbers using the standard algorithm.</p> <p>1.5.C.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>1.5.C.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</p> <p>1.5.D.3 Interpret a fraction as division of the numerator by the denominator ($\frac{a}{b} = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p> <p>1.5.D.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <ul style="list-style-type: none"> Interpret the product $(\frac{a}{b}) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. <i>For example, use a visual fraction model to show, $(\frac{2}{5}) \times 4 = \frac{8}{5}$ and create a story context for this equation. Do the same with $(\frac{2}{5}) \times (\frac{1}{5}) = \frac{2}{25}$. (In general, $(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}$.)</i> Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. <p>1.5.D.5 Interpret multiplication as scaling (resizing), by:</p> <ul style="list-style-type: none"> Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $\frac{a}{b} = \frac{(n \times a)}{(n \times b)}$ to the effect of multiplying $\frac{a}{b}$ by 1. <p>1.5.D.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p>1.5.D.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.</p> <ul style="list-style-type: none"> Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. <i>For example, create a story context for, $(\frac{1}{5}) \div 4$ and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(\frac{1}{5}) \div 4 = \frac{1}{20}$ because $(\frac{1}{20}) \times 4 = \frac{1}{5}$.</i> Interpret division of a whole number by a unit fraction, and compute such quotients. <i>For example, create a story context for, $4 \div (\frac{1}{5})$ and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (\frac{1}{5}) = 20$ because $20 \times (\frac{1}{5}) = 4$.</i> Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each person get if 3 people share $\frac{3}{4}$ lb of chocolate equally? How many $\frac{1}{4}$-cup servings are in 2 cups of raisins?</i> 	<p>6.5.5.1 compute with whole numbers.</p> <p>6.5.5.4 multiply and divide decimals by whole numbers.</p> <p>6.5.6.2 explain and apply number relationships using the mathematical properties of operations, including associative (addition and multiplication).</p> <p>6.5.3.1 identify prime and composite numbers less than 100.</p> <p>6.5.3.2 find the prime factorization of a composite number.</p> <p>6.5.3.3 find the greatest common factor and the least common multiple of numbers.</p> <p>6.5.3.4 use number theory concepts of primes, factors, multiples, and rules of divisibility to show number relationships.</p>

Plan Instruction

INSTRUCTIONAL CYCLE



Proficiency Statements

- Every Measurement Topic has a corresponding proficiency statement.
- A proficiency statement provides clarity on what students should know or be able to do by the end of the year within a Measurement Topic.

Proficiency Statements Grade 5 Reading

Reading

Foundational Skills

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- Applying grade-level appropriate phonics, word analysis skills, and fluency when reading.

Reading: Literature

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- Using **Key Ideas and Details** to strategically read grade level literary texts with purpose and comprehension by quoting accurately from a text to explain and draw inferences, determining a theme, and comparing and contrasting story elements.
- **Analyzing Craft and Structure** by interpreting words and phrases, analyzing text structure, and describing how points of view influence text.
- **Building Knowledge and Ideas** by analyzing visual and multimedia elements of text and comparing and contrasting similar themes and topics within a genre
- **Reading and comprehending a range of literary texts** at the high end of the grades 4-5 text complexity band independently and proficiently.

Reading: Informational Text

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- Using **Key Ideas and Details** to strategically read grade level informational texts with purpose and comprehension by quoting accurately from a text to explain and draw inferences, determining main idea, summarizing, and explaining relationships in text
- **Analyzing Craft and Structure** by interpreting words and phrases, comparing and contrasting text structure, and analyzing points of view
- **Building Knowledge and Ideas** to draw on information from multiple sources, explain author's use of reasons and evidence, and integrate information from multiple texts on the same topic.
- **Reading and comprehending a range of informational texts** at the high end of the grades 4-5 text complexity band independently and proficiently.

Language: Vocabulary

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- Engaging in a variety of collaborative discussions to build on the ideas of others and express their own ideas clearly.
- Summarize portions of a text presented in multiple formats
- Summarize a speaker's points and explain how reasons and evidence support claims
- Determining meaning of unknown and multiple meaning words and phrases in grade 5 content in order to comprehend more fully.
- Demonstrating understanding of word relationships and nuances with guidance and support.
- Acquiring and using grade-appropriate conversational, general academic and domain-specific vocabulary.

Proficiency Statements Grade 5 Writing

Writing
Writing: Opinion Students demonstrate proficiency of Grade 5 standards for this measurement topic by composing, over shorter and extended time frames, opinion texts with evidence of: <ul style="list-style-type: none">• An introduction that elaborates on an opinion statement.• An organizational structure in which logical ideas are grouped to support the opinion.• Logically ordered reasons supported by researched facts and details.• Linking opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).• An influential concluding statement or section.
Writing: Informative/Explanatory Students demonstrate proficiency of Grade 5 standards for this measurement topic by composing, over shorter and extended time frames, informative/explanatory texts with evidence of: <ul style="list-style-type: none">• An introduction to a topic.• Writing organized using a text structure.• Researched facts, definitions, concrete details, quotations, or other information and examples related to the topic.• Linking ideas within and across categories of information using words and phrases (e.g., in contrast, especially).• Precise language and domain-specific vocabulary• A concluding statement or section related to the information or explanation presented.
Writing: Narrative Students demonstrate proficiency of Grade 5 standards for this measurement topic by composing, over shorter and extended time frames, narrative texts with evidence of: <ul style="list-style-type: none">• A well-established situation that introduces a narrator and/or characters.• An organized event sequence that unfolds naturally.• Narrative techniques (e.g., dialogue, description, pacing) to develop experiences, events, or show the characters response to situations.• A variety of transitional words, phrases, and clauses to sequence events.• Concrete words, phrases, and sensory details to precisely communicate experiences.• A concluding section related to the experiences and events.
Writing: Process, Production, and Research Students demonstrate proficiency of Grade 5 standards for this measurement topic by composing, over shorter and extended time frames, writing with evidence of: <ul style="list-style-type: none">• Clear and coherent writing.• Developing and organizing writing appropriate to task, purpose and audience.• Planning, revising, editing, rewriting, or trying a new approach based on feedback from adults and peers.• Producing and publishing writing using technology to facilitate interaction and collaboration with others.• Summarizing or paraphrasing notes and citing sources.• Recalling information from experiences or gathering and evaluating relevant information from print and digital literary or informational texts.
Writing: Use of Language Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">• Creating multimedia components and visual displays to sequence ideas logically, and use facts and details to develop and enhance main ideas or themes.• Demonstrating command of grade-level grammar, usage, spelling, capitalization, and punctuation.• Adapting speech to a variety of tasks, contexts, or situations.• Using formal English and knowledge of language conventions when writing, speaking, or reading.

Proficiency Statements Grade 5 Social Studies

Social Studies
Civics Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">demonstrating and applying knowledge of the historical development and current status of the fundamental concepts and processes of authority, power, and influence in the United States and Maryland today and during the American Revolution and early constitutional period.
Culture Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">demonstrating and applying knowledge of the diversity, commonality, and interdependence of people in the United States today and during the time of the development of the United States Constitution through the lens of conflict and compromise.
Geography Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">using geographic concepts and processes to examine the role of culture, technology, and the environment in the location and distribution of human activities in the United States today and during the territorial expansion of the United States including the impact of changes in transportation.
Economics Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">using economic reasoning to understand the historical development and current status of economic principles, institutions, and processes needed to be effective citizens, consumers, and workers today and during the American Revolutionary Period.
History Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">using historical thinking skills to identify, examine, describe, and compare how individuals and societies changed during the early constitutional period and the time of territorial expansion of the United States.

Proficiency Statements Grade 5 Science, Technology & Engineering

Science <i>Proficiency statements clarify what students should know and be able to do by the end of the year. They are used in combination with standards and indicators to analyze student understanding of grade level concepts. In science & engineering, proficiency involves using the four strands of science learning.</i>
Life Sciences Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">• Understanding Explanations- Explaining relationships among the forms and functions of plant and animal cells, as well as the relationship between traits and heredity. Applying these concepts to real-world situations.• Generating Evidence- Planning and conducting research through observation, investigation, field study, or reading about the forms and functions of plant and animal cells, as well as traits and heredity.• Reflecting on Knowledge- Using and interpreting scientific and technological knowledge to analyze and revise generalizations about the forms and functions of plant and animal cells, as well as generalizations about traits and heredity.• Participating Productively- Assessing and presenting solutions to practical or real-world situations using scientific and technological knowledge about the forms and functions of plant and animal cells, as well as traits and heredity.
Earth and Space Sciences Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">• Understanding Explanations- Explaining relationships among the movement, location, and position of objects in the universe. Explaining the observable effects of Earth's rotation and revolution. Applying these concepts to real-world situations.• Generating Evidence- Planning and conducting research through observation, investigation, field study, or reading about the movement, location, and position of objects in the universe, as well as the observable effects of Earth's rotation and revolution.• Reflecting on Knowledge- Using and interpreting scientific and technological knowledge to analyze and revise generalizations about the movement, location, and position of objects in the universe, as well as the observable effects of Earth's rotation and revolution.• Participating Productively- Assessing and presenting solutions to practical or real-world situations using scientific as well as technological knowledge about the movement, location, and position of objects in the universe, as well as the observable effects of Earth's rotation and revolution.
Physical Sciences Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">• Understanding Explanations- Explaining relationships among measurable changes in motion, forces that affect motion, forms and conversion of energy, electricity, and magnetism. Applying these concepts to real-world situations.• Generating Evidence- Planning and conducting research through observation, investigation, field study, or reading about measurable changes in motion, forces that affect motion, forms and conversion of energy, electricity, and magnetism.• Reflecting on Knowledge- Using and interpreting scientific and technological knowledge to analyze and revise generalizations about measurable changes in motion, forces that affect motion, forms and conversion of energy, electricity, and magnetism.• Participating Productively- Assessing and presenting solutions to practical or real-world situations using scientific and technological knowledge about measurable changes in motion, forces that affect motion, forms and conversion of energy, electricity, and magnetism.
Engineering and Technology Students demonstrate proficiency of Grade 5 standards for this measurement topic by: <ul style="list-style-type: none">• Understanding Explanations- Explaining relationships among technology, humans, and the natural world. Understanding the engineering design process and its application to real-world situations.• Generating Evidence- Deciding what evidence is needed to investigate a scientific question or address a technological problem. Applying the engineering design process to address a technological problem.• Reflecting on Knowledge- Using and interpreting scientific and technological knowledge to revise thinking based on new evidence or ideas about products or systems.• Participating Productively- Representing information and ideas clearly and convincingly based on scientific evidence and technological concepts or designs.

Grade 5 Proficiency Statements

Proficiency statements clarify what students should know and be able to do by the end of the year. They are used in combination with standards and indicators to analyze student understanding of grade level concepts.

Mathematics

Operations and Algebraic Thinking

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- **Understanding:** Understanding numerical expressions using parentheses, brackets, or braces.
- **Computing:** Graphing ordered pairs on a coordinate plane. Evaluating numerical expressions.
- **Applying:** Applying understanding of operations and mathematical notation to interpret numerical expressions.
- **Reasoning:** Analyzing relationships between terms in numerical patterns.
- **Engaging:** Seeing mathematics as sensible, useful, and doable-if you work at it-and being willing to do the work.

Number and Operations in Base Ten

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- **Understanding:** Understanding patterns in the structure of the place value system.
- **Computing:** Fluently multiplying multi-digit whole numbers.
- **Applying:** Using place value understanding to round decimals (to thousandths) to any place. Applying strategies based on place value and properties of operations to find quotients of whole numbers and perform operations with decimals to hundredths.
- **Reasoning:** Explaining patterns in the number of zeros of the product when multiplying a number by powers of 10.
- **Engaging:** Seeing mathematics as sensible, useful, and doable-if you work at it-and being willing to do the work.

Number and Operations—Fractions

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- **Understanding:** Interpreting a fraction as division of the numerator by the denominator. Interpreting multiplication as scaling (resizing).
- **Computing:** Adding and subtracting fractions.
- **Applying:** Applying understandings of multiplication and division with whole numbers to multiply and divide fractions. Applying understandings of equivalent fractions to add and subtract fractions. Applying understandings of operations and visual fraction models to represent and solve word problems involving fractions.
- **Reasoning:** Reasoning about the size of a product in relation to the size of its factors. Reasoning about fractions as numbers when estimating answers or solving problems. Using benchmark fractions to estimate and assess reasonableness of answers.
- **Engaging:** Seeing mathematics as sensible, useful, and doable-if you work at it-and being willing to do the work.

Measurement and Data

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- **Understanding:** Understanding volume as 3-dimensional measure. Understanding the relationships among linear, area, and volume measurements of a solid figure.
- **Computing:** Finding the volume of right rectangular prisms.
- **Applying:** Converting among different-sized measurement units within a given system.
- **Reasoning:** Extending understandings about addition, multiplication, division to solve problems involving volume.
- **Engaging:** Seeing mathematics as sensible, useful, and doable-if you work at it-and being willing to do the work.

Geometry

Students demonstrate proficiency of Grade 5 standards for this measurement topic by:

- **Understanding:** Understanding the order and distance relationships of ordered pairs on the coordinate plane.
- **Computing:** Graphing points in the first quadrant of the coordinate plane.
- **Applying:** Classifying two-dimensional figures in a hierarchy based on their properties.
- **Reasoning:** Explaining and justifying categories and subcategories of two-dimensional figures. Extending understanding about graphs on the coordinate plane to solve problems.
- **Engaging:** Seeing mathematics as sensible, useful, and doable-if you work at it-and being willing to do the work.

Proficiency Statements Grade 5 Math

Key Messages – Mathematics Curriculum 2.0/CCSS



- Develop students who love math and see it as sensible and useful to solving problems and making sense of the world.
- Maryland is adopting internationally-driven standards to raise the level of rigor. These standards will be implemented with Curriculum 2.0
- The CCSS recommend that elementary schools focus on building a strong foundation in number concepts – that will help students be more successful in advanced math courses in middle school and high school.

Understanding Going Deeper: UCARE

All students will reach proficiency in math –

Understanding,
Computing,
Applying,
Reasoning, and
Engaging

**Mathematical Proficiency and
Common Core State Standards Mathematical Practices**

The goal of the Montgomery County Public Schools Pre-K–12 mathematics program is for all students to achieve mathematical proficiency by developing both conceptual understanding and procedural fluency. The end result is the ability to think and reason mathematically and use mathematics to solve problems in authentic contexts.
—Elementary Integrated Curriculum Pre-K–12 Mathematics Curriculum Framework (Original Approval: July 2011)

STRANDS OF MATHEMATICAL PROFICIENCY

Applying
Being able to formulate problems mathematically and to devise strategies for solving them using concepts and procedures appropriately

Reasoning
Using logic to explain and justify a solution to a problem or to extend from something known to something not yet known

Engaging
Seeing mathematics as sensible, useful, and doable—if you work at it—and being willing to do the work

Understanding
Comprehending mathematical concepts, operations, and relations—knowing what mathematical symbols, diagrams, and procedures mean

Computing
Carrying out mathematical procedures, such as adding, subtracting, multiplying, and dividing numbers flexibly, accurately, efficiently, and appropriately

COMMON CORE STATE STANDARDS MATHEMATICAL PRACTICES	
<p style="text-align: center;">Practices <i>Mathematically proficient students:</i></p> <ul style="list-style-type: none"> Make sense of problems and persevere in solving them Reason abstractly and quantitatively Construct viable arguments and critique the reasoning of others Model with mathematics Use appropriate tools strategically Attend to precision Look for and make use of structure Look for and express regularity in repeated reasoning 	<p style="text-align: center;">Examples <i>Mathematically proficient students:</i></p> <ul style="list-style-type: none"> Plan a solution pathway rather than simply jumping into a solution attempt Attend to the meaning of quantities, not just how to compute them Justify their conclusions, communicate them to others, and respond to the arguments of others Apply the mathematics they know to solve problems arising in everyday life Consider the available tools when solving a mathematical problem, and make sound decisions about when each of these tools might be helpful Calculate accurately and efficiently; give carefully formulated explanations Notice, for example, that 3 and 7 more is the same amount as 7 and 3 more or sort a collection of shapes according to how many sides the shapes have Look both for general methods and for shortcuts; evaluate the reasonableness of their intermediate results

MCPS EIC Core Team Training – Spring 2011

Enrichment/Acceleration Approach

Enrichment

Enrichment tasks may further engage students in content from that week of instruction

Enrichment tasks may challenge students to apply previously-taught content and skills in a novel way

Enrichment tasks may provide opportunities to further challenge students to apply The Mathematical Practices with content that does not directly align with specific grade-level indicators

After students have successfully completed enrichment opportunities for a week, there may be suggestions for **acceleration** to the next logical topic in the learning progression, often in the next week of instruction.

Acceleration

Math in 2013 - 2014

ROLL-OUT PLAN

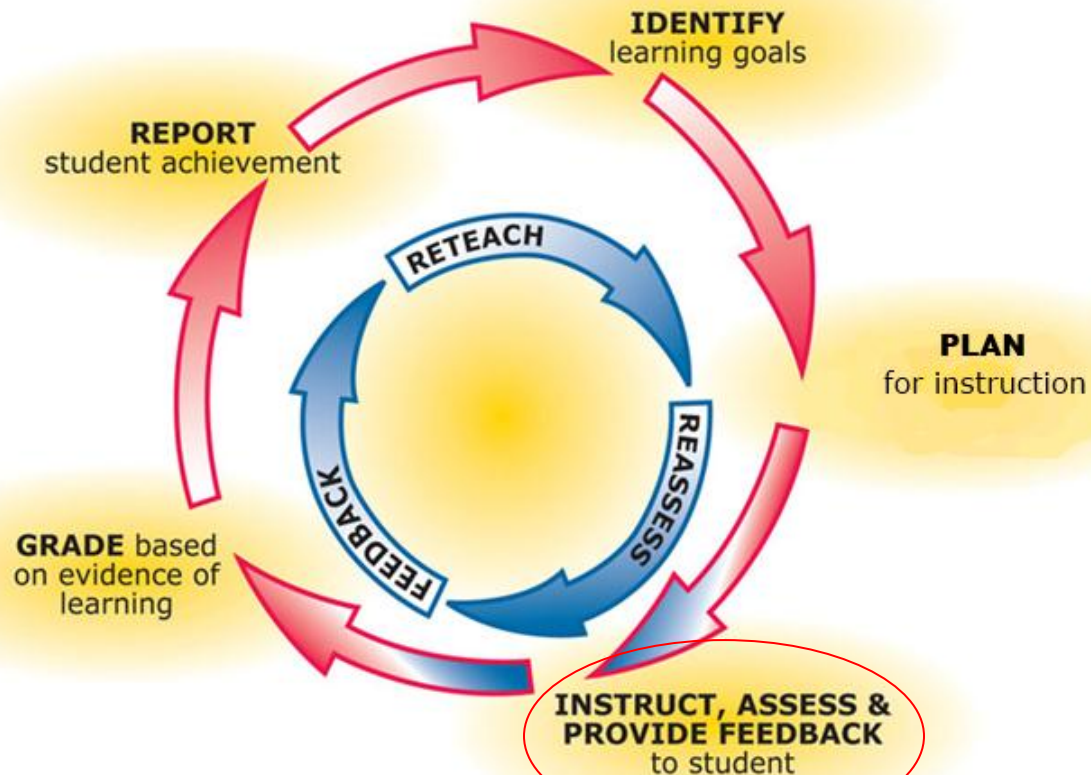
	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
C2.0 Kindergarten–Math 3					
C2.0 Math 4					
C2.0 Math 5					
C2.0 Math 6					
C2.0 Math 7 & C2.0 I.M.					
C2.0 Math 8					
C2.0 Algebra 1					
C2.0 Geometry					
C2.0 Algebra 2					
C2.0 Pre-Calculus					

Shading identifies years of implementation.

- **Understanding**—comprehending concepts, operations, and relations
- **Computing**—carrying out procedures
- **Applying**—formulating and solving mathematical problems
- **Reasoning**—using logic to explain a solution or justify why the mathematics works
- **Engaging**—seeing math as useful, sensible, and doable

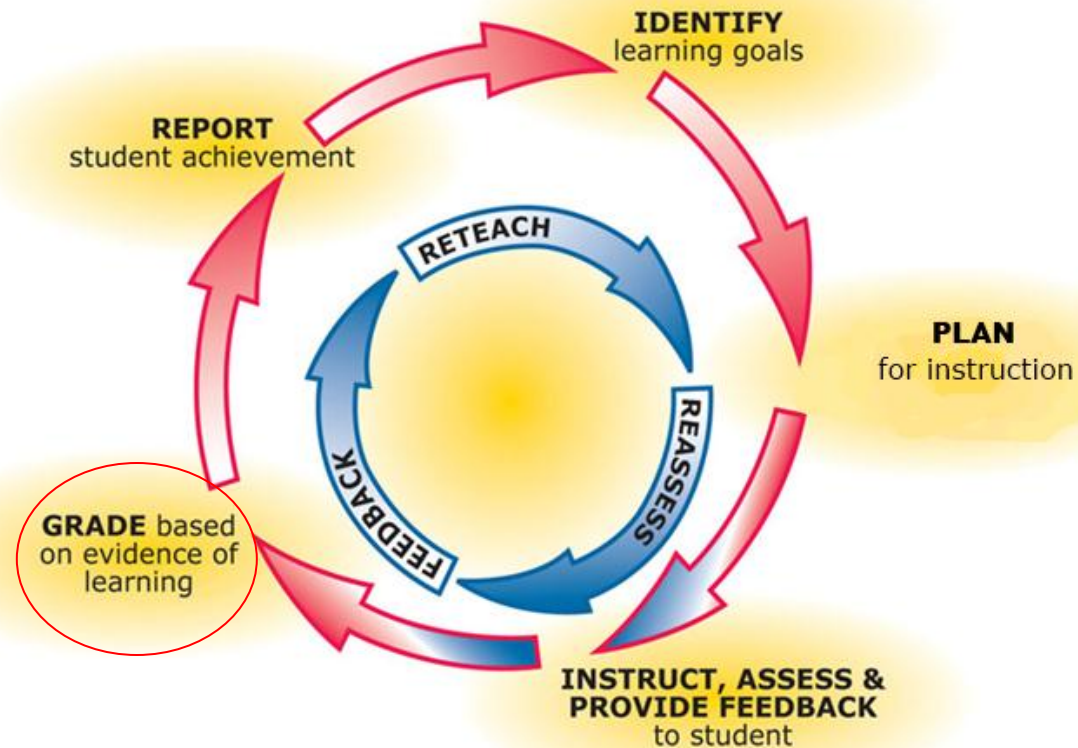
Instruct, Assess, and Provide Feedback

INSTRUCTIONAL CYCLE



Grading Student Understanding

INSTRUCTIONAL CYCLE



Why are we implementing standards-based grading and reporting?

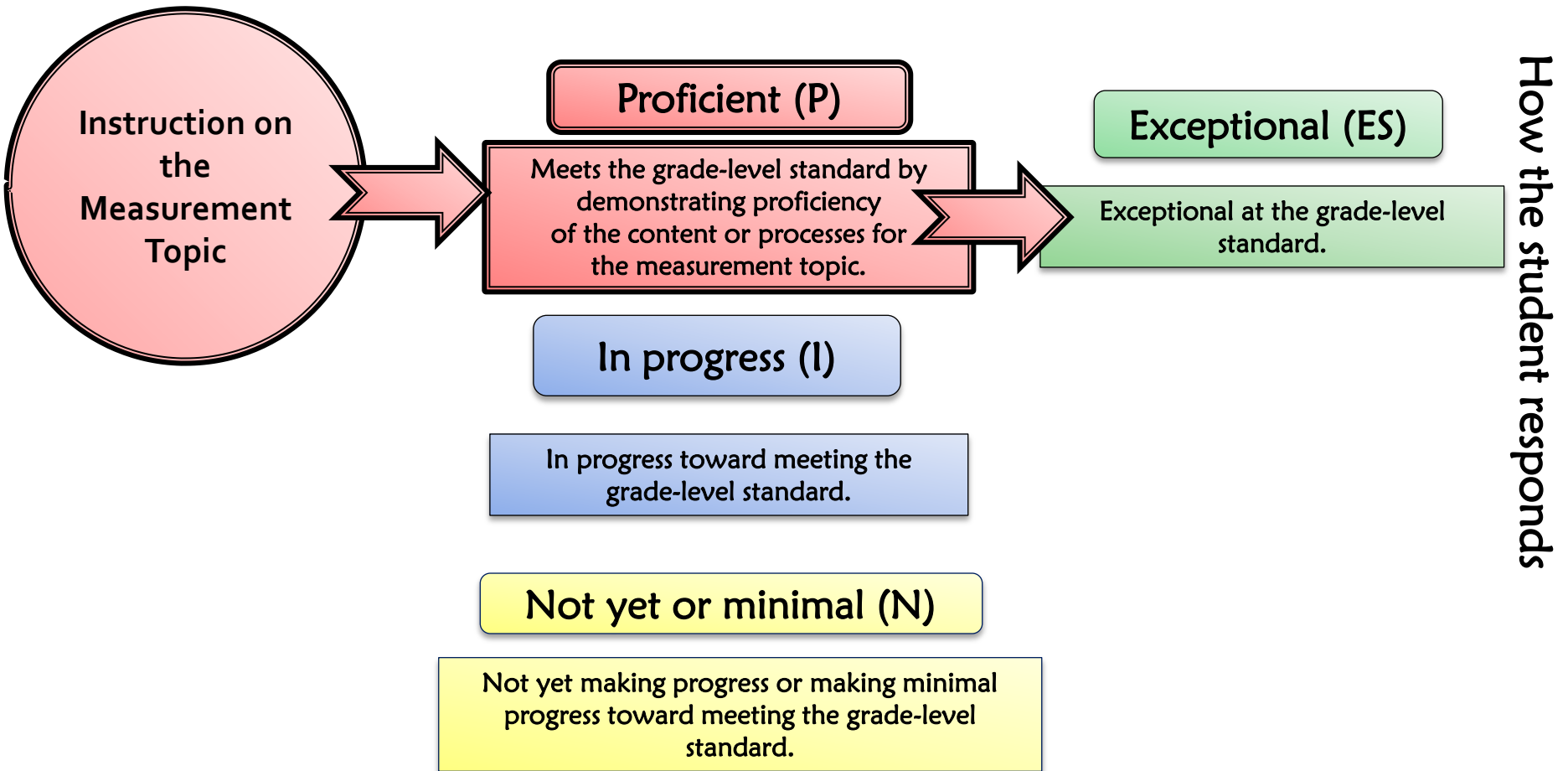
Standards-based teaching and learning:

- links instruction and grading to standards
- provides an accurate reflection of what students know and are able to do
- increases student achievement

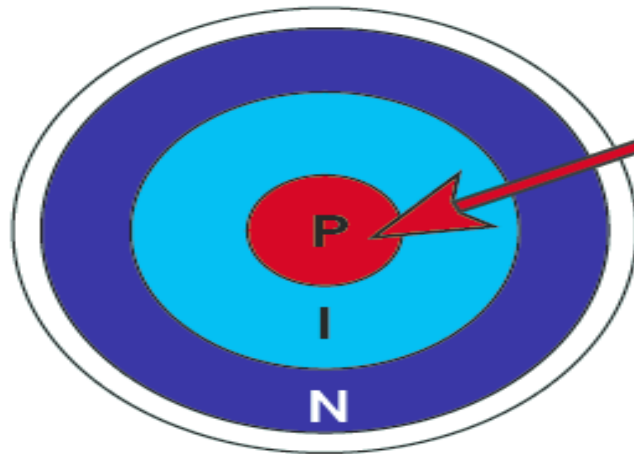


Levels of Performance

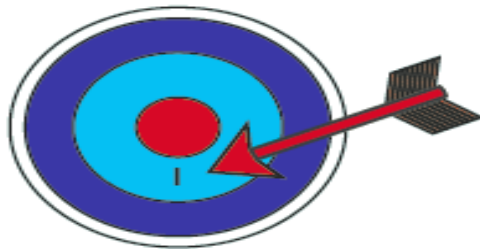
Instruction begins at the grade-level standard.
How the student performs at the grade-level standard determines level of proficiency.



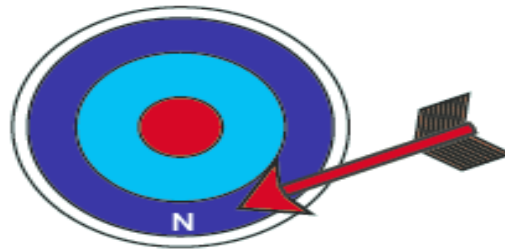
Aim For Proficiency



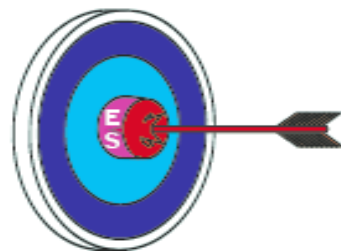
P - Proficiency
I know it and can show it.
“I hit the target!”



I - In Progress
I am working on it.
I am getting closer.



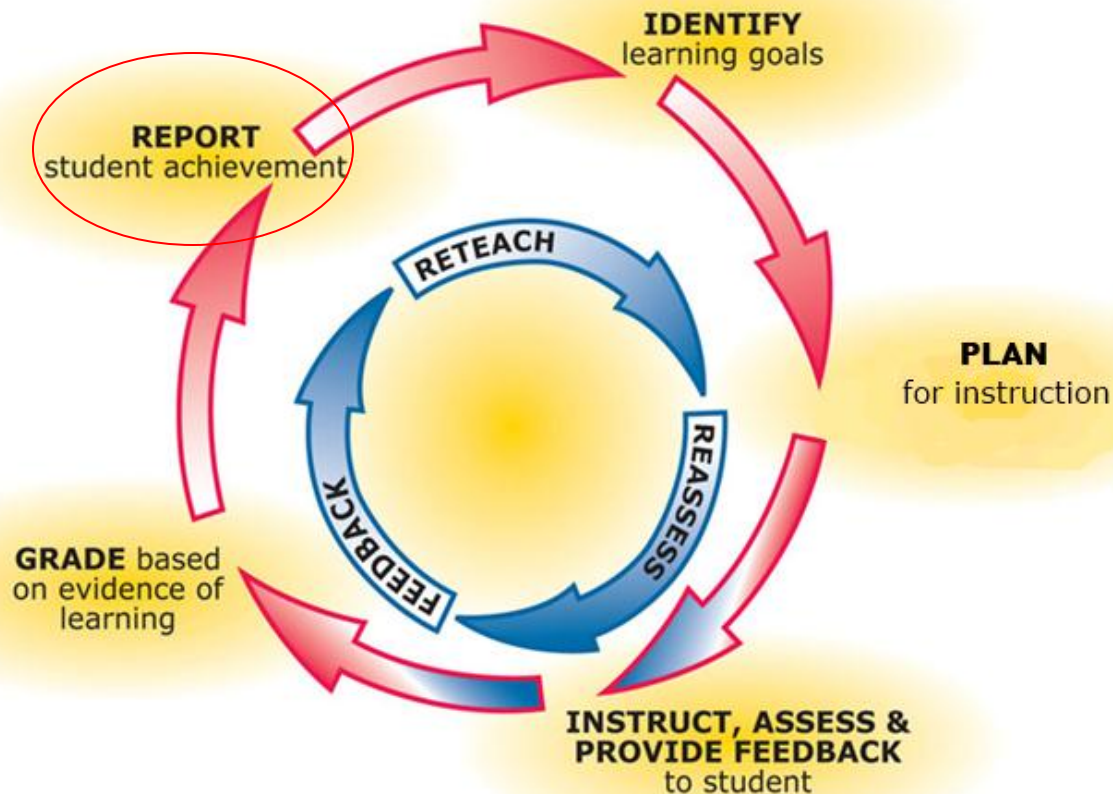
N - Not Yet
I am not understanding.
I need to work on getting closer.



ES - Exceptional at the Standard
I know it and can show it with exceptional understanding.

Reporting Student Achievement

INSTRUCTIONAL CYCLE



Standards-based Report Card



Grade 1 Progress Report Card 2012-2013

Mathematics	MP1	MP2	MP3	MP4
Geometry				
Measurement and Data				
Number and Operations in Base Ten				
Number and Operations—Fractions				
Operations and Algebraic Thinking				

(Enrichment/acceleration statement will appear here.)

Science	MP1	MP2	MP3	MP4
Earth Space Sciences				
Life Sciences				
Physical Sciences				

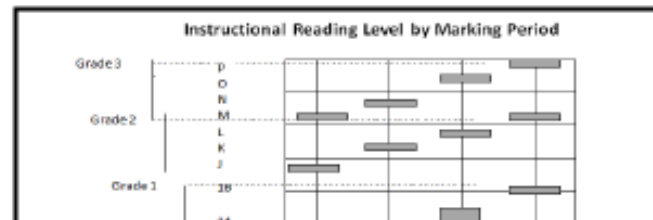
Social Studies	MP1	MP2	MP3	MP4
Civics				
Culture				
Economics				
Geography				
History				

Reading	MP1	MP2	MP3	MP4
Foundational Skills				
Language: Vocabulary				
Reading: Informational Text				
Reading: Literature				

Student Name:
Student ID:
Birth Date:
School:
Teacher:

Attendance	MP1	MP2	MP3	MP4
Days Absent				
Times Tardy				

Learning Skills				
Work Habits	MP1	MP2	MP3	MP4
Rules and Procedures				
Task Completion				
Thinking and Academic Success Skills	MP1	MP2	MP3	MP4
Analysis				
Collaboration				
Effort/Motivation/Persistence				
Fluency				
Intellectual Risk Taking				
Metacognition				
Originality				
Synthesis				



Subject
Measurement Topic

Standards-Based Report Card

Social Studies Example

Social Studies	MP1	MP2	MP3	MP4
Civics	P			
Culture		ES		
Economics				P
Geography			P	
History		P		

Reading Chart and Reporting of Instructional Reading Level

Grades 3-5

Reading	MP1	MP2	MP3	MP4
Instructional Reading Level				

Reading Targets – Text Level Chart: Grades 2-5				
Grade Level	MP1	MP2	MP3	MP4
2	J	K	L	M
3	M	N	O	P
4	Q-R		S-T	
5	T-U		V-Z	

Math Enrichment/Acceleration

Mathematics	MP1	MP2	MP3	MP4
Geometry				
Measurement and Data				
Number and Operations in Base Ten				
Number and Operations—Fractions				
Operations and Algebraic Thinking				

Your child was consistently instructed on the content and processes of the grade level.

OR

Your child was consistently instructed on the content and processes of the grade level with enrichment/acceleration.

Learning Skills

Kindergarten <i>Personal and Social Development</i>	Grades 1 – 5 <i>Work Habits</i>	Kindergarten – Grade 5 <i>Thinking and Academic Success Skills</i>
<ul style="list-style-type: none">• Follows classroom rules and routines• Interacts easily with peers• Shows initiative and self-direction• Uses classroom materials appropriately	<ul style="list-style-type: none">• Follows rules and routines• Completes tasks	<ul style="list-style-type: none">• Analysis• Collaboration• Effort/Motivation/Persistence• Elaboration• Evaluation• Flexibility• Fluency• Intellectual Risk Taking• Metacognition• Originality• Synthesis

Learning Skills: Codes

Code	Description
DEM	Demonstrating
PRG	Progressing
N	Not yet evident



Next Year in Grade 5

Curriculum 2.0 Implementation

Continued differentiation in Small Groups within the Classroom

New Standards-based Report Card

Math 6 will be available for those students who completed Math 5

Creative Thinking

Critical Thinking

Academic Success



*We need to
prepare students
for their future,
not our past.*

-Ian Jukes



Curriculum 2.0 Resources for Parents

- [MCPS Curriculum 2.0 Webpage Resources](#)
 - Videos
 - Parent Guides
 - FAQs
 - Curriculum Framework
- Parent Academies
- Mathematics Power Point
- Rock View Website with Links to Resources



MCPS Curriculum 2.0 is built around developing students' critical and creative thinking skills, as well as essential academic success skills, so that students are well prepared for a lifetime of learning. We are upgrading the existing MCPS curriculum for the elementary grades in a way that will better engage students and teachers, and dedicate more learning time to subjects such as the arts, information literacy, science, social studies and physical education. By blending these subjects with the core content areas of reading, writing, and mathematics, students will receive robust, engaging instruction across all subjects in the early grades. In short, we are building a stronger foundation at the elementary level.



[Dr. Starr's message on Curriculum 2.0 \(PDF\)](#)

Creative Thinking

Critical Thinking

Academic Success