

Understanding the Common Core

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Background information

- The Common Core State Standards (CCSS) are a set of high-quality academic expectations in English/language arts (ELA) and mathematics that define both the knowledge and skills all students should master by the end of each grade level to be on track for success in college and careers.
- The Standards were created through a state-led initiative and have been adopted by more than 40 states, including Maryland, which is revising its Curriculum to align with the Common Core State
- The Standards establish consistent learning goals for all students — regardless of where they live — so that children will stay on track in school when moving from one state to another.

Background

- With a clear roadmap of academic expectations, students, parents, and teachers can work together toward shared goals.
- The standards are relevant to the real world, focusing on the knowledge and skills students will need to succeed in life after high school, in both post-secondary education and a globally competitive workforce.
- A diverse team of teachers, parents, administrators, researchers, and content experts developed the CCSS to be academically rigorous, attainable for students, and practical for teachers and districts.

Common Core Standards Guiding Principals

College and
career ready

Use the best state
standards

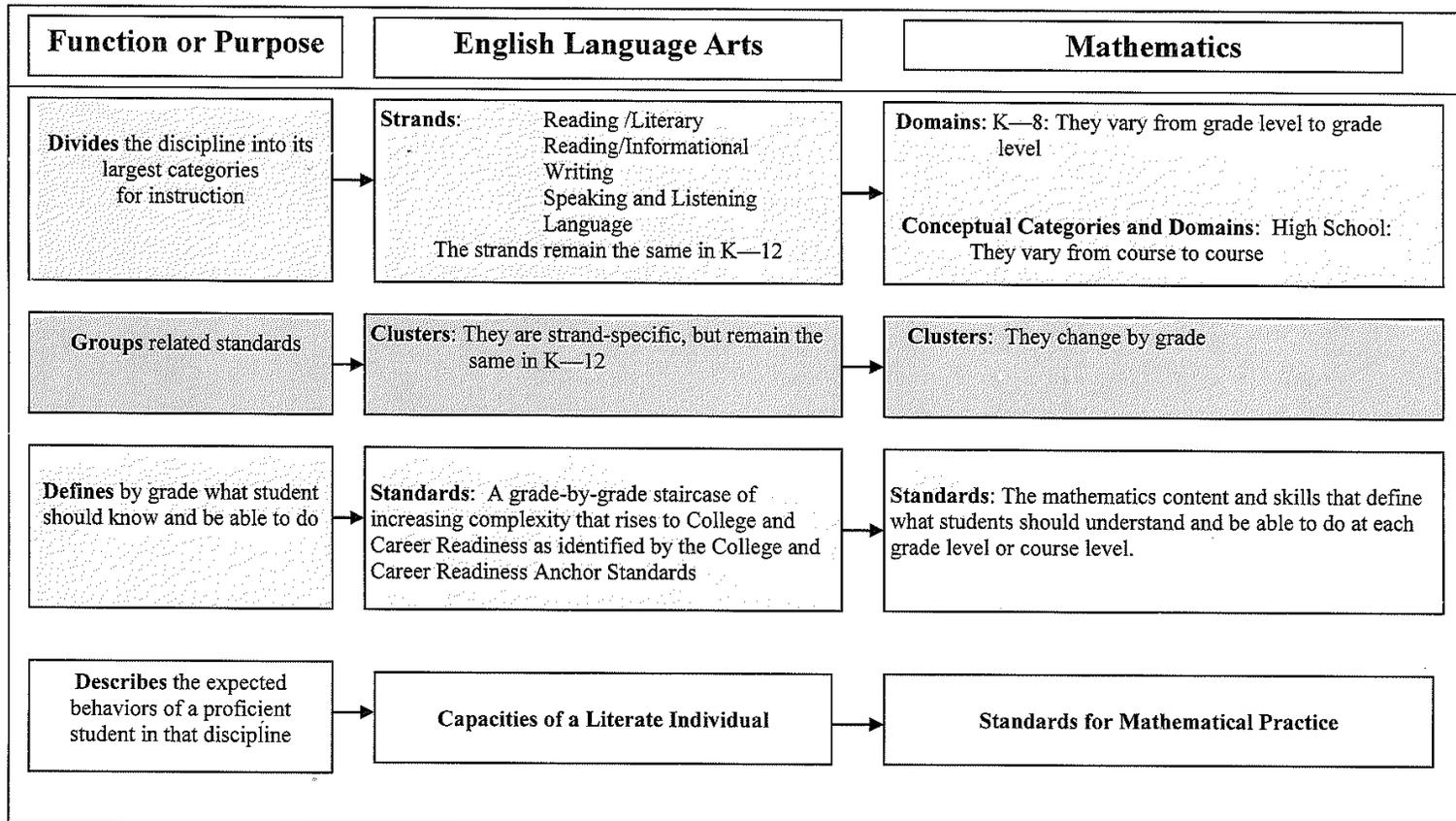
Evidence based
assessment –
provide accurate
information on what
students know and
can do

Clear focus on what
matters most

Local flexibility,
teacher judgment

An Overview of the Maryland Common Core State Curriculum Structure

The Common Core State Standards are the foundation on which the Maryland Common Core State Curriculum is constructed. The language in the English Language Arts and Mathematics Standards differs in some areas, but the purposes or functions of the two disciplines are aligned: The standards define what students must know and be able to do to be College and Career Ready when they graduate from high school. The graphic below illustrates how the two disciplines are structured.



● CCSS for English Language Arts: Structure

- Four strands for English Language Arts K*-12
- Reading
- Writing
- Speaking and Listening
- Language

- Several clusters within each strand

- Reading

- Key Ideas and Details
- Craft and Structure
- Integration of Knowledge and Ideas
- Range of Reading and Level of Text Complexity

- Writing

- Text Types and Purposes
- Production and Distribution of Writing
- Research to Build and Present Knowledge
- Range of Writing

Grade-Level Progression



- Format highlights progression of standards across grades

Reading Standards for Literature K-5

RL

Grade 3 students:	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2. Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.	2. Determine a theme of a story, drama, or poem from details in the text; summarize the text.	2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.	3. Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).	3. Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
Craft and Structure		
4. Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.	4. Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).	4. Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
5. Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.	5. Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.	5. Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
6. Distinguish their own point of view from that of the narrator or those of the characters.	6. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.	6. Describe how a narrator's or speaker's point of view influences how events are described.

Example of Grade-Level Progression in Reading



- CCR Reading Standard 3: Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Reading Standards for Literature

Grade 3: Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

Grade 7: Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot)

Grades 11-12: Evaluate various explanations for characters' actions or for events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.

Reading Standards for Informational Text

Grade 3: Describe the relationships between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

Grade 7: Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

Grades 11-12: Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.

Capacities of Literate Individuals

INDEPENDENCE

**STRONG
CONTENT
KNOWLEDGE**

**COMPREHEND
AND
CRITIQUE**

**UNDERSTAND
PERSPECTIVES
AND
CULTURES**

**USE
TECHNOLOGY**

**RESPOND TO
VARIOUS DEMANDS**

**VALUE
EVIDENCE**



Transitioning to the Common Core State Standards

Kay B. Sammons
Coordinator of Elementary Mathematics



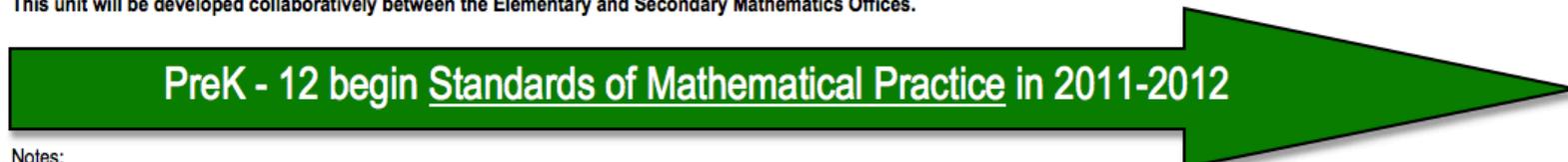
Elementary Mathematics Progress

Elementary Mathematics Common Core Transition Plan

		2011-2012	2012-2013	2013-2014	2014-2015
Kindergarten	Curriculum	CC	CC	CC	CC
	Assessment				
1 st Grade	Curriculum	SC	CC	CC	CC
	Assessment				
2 nd Grade	Curriculum	SC	CC	CC	CC
	Assessment				
3 rd Grade	Curriculum	SC	CC/SC	CC/SC	CC
	Assessment	MSA	MSA	MSA	PARCC
4 th Grade	Curriculum	SC	SC	CC/SC	CC
	Assessment	MSA	MSA	MSA	PARCC
5 th Grade	Curriculum	SC	CC/SC	CC/SC	CC
	Assessment	MSA	MSA	MSA	PARCC

Curriculum: SC = State Curriculum, CC/SC = Transition Curriculum, CC = Common

In 2012/2013 and 2013/2014, Grade 5 will implement a Focused Fraction Unit for all of 4th quarter to ensure students are prepared for 6th grade mathematics. This unit will be developed collaboratively between the Elementary and Secondary Mathematics Offices.



Notes:

- Current K sit for initial 3rd grade CC assessment (blue), Current 1st graders sit for initial 4th grade CC assessment (yellow), Current 2nd graders sit for initial 5th grade assessment (red)

Transitioning to the Common Core

- Curriculum is Focused, Coherent, and Rigorous
- Equal significance:
 - Conceptual Understanding
 - Procedural skill and fluency
 - Application

Instructional Placements

- Grade Level Assessments
- Recommendations from the Previous Year's Teacher
- Concept and Skills Checklist
- Flexible

Issues for Placement

- Acceleration without sound understanding of skills and concepts may undermine future success.
- Mastery of Content vs Spiraling Content
- All Grades are transitioning to the CC
 - GT 4th and 5th Grade Math
 - Middle school – Algebra I by 8th grade
 - High school

Standards for Mathematical Practice

- Describe mathematical “habits of mind”
- Connect with content standards
- Vehicle for engaging in the practices is the mathematical content

Grade Level Content Standards

- Organized by domains



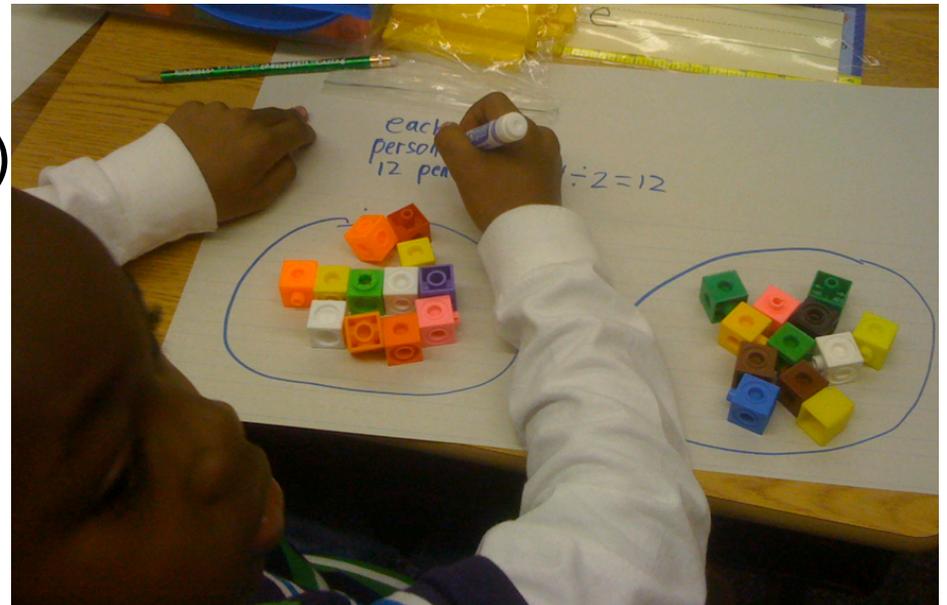
Standards for Mathematical Practice

- **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**



Domains of Mathematics (K-5)

- Number - Counting and Cardinality (K)
- Number - Operations and the Problems They Solve (K-5)
- Number - Base Ten (K-5)
- Measurement and Data (K-5)
- Geometry (K-5)
- Number – Fractions (3-5)



High Expectations for Student Learning

- **Conceptual Understanding**
- **Fluency means quickly and accurately**
- **Application**

Going deeper with instruction...

Operations and Algebraic Thinking

2.OA

Represent and solve problems involving addition and subtraction.

1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of **adding to**, **taking from**, **putting together**, **taking apart**, and **comparing**, with **unknowns in all positions**, e.g., by using drawings and **equations with a symbol for the unknown number** to represent the problem.¹



Going Deeper With Instruction...

Number and Operations—Fractions⁵

3.NF

Develop understanding of fractions as numbers.

2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.
 - a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
 - b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.



PARCC Assessment Design

- Be anchored in college and career readiness
- Enable deeper and richer assessments
- Measure learning and provide information on a student's progress
- Provide timely results.

Beyond Basic Facts

[Home](#) > [Grade 3](#) >

Grade 3 Mathematics (Fluency)

SAMPLE ITEM

Click on all the equations that are true.

- $8 \times 9 = 81$
- $54 \div 9 = 24 \div 6$
- $7 \times 5 = 25$
- $8 \times 3 = 4 \times 6$
- $49 \div 7 = 56 \div 8$

For More Item Specific Information

Beyond

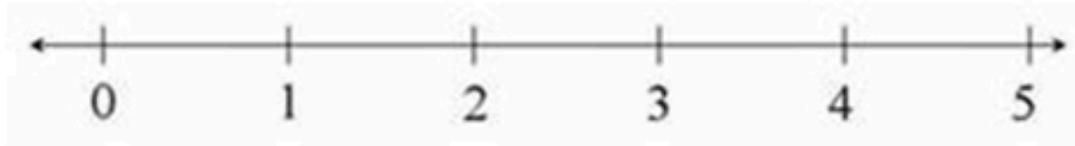
[Home](#) > [Grade 3](#) >

Grade 3 Mathematics (Number Line)

SAMPLE ITEM

Drag each fraction to the correct location on the number line.

● ● ●
 $\frac{1}{2}$ $\frac{3}{2}$ $\frac{6}{2}$

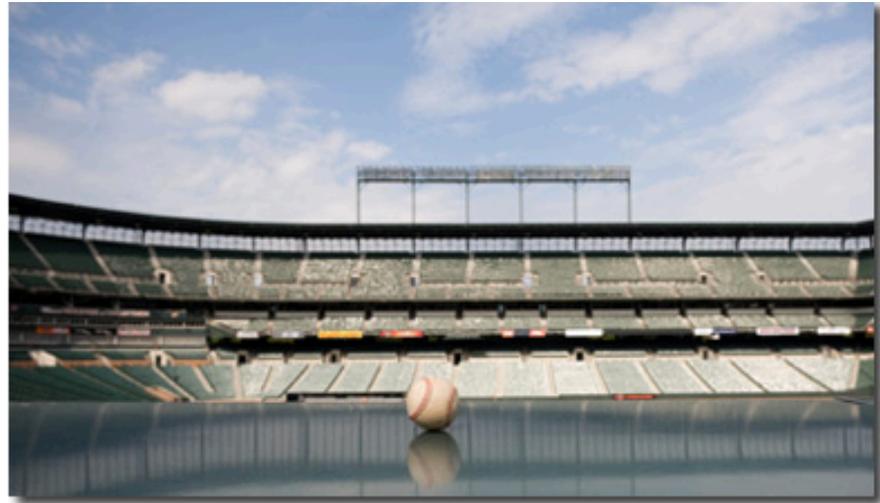


The fraction number line task is adapted from a task available at <http://illustrativemathematics.org>.

[Reset](#)

Grade 4

Baseball stadiums have different numbers of seats. Drag the tiles to arrange the stadiums from least to greatest number of seats.



San Francisco
Giants' stadium:
41,915 seats

Washington
Nationals' stadium:
41,888 seats

San Diego
Padres' stadium:
42,445 seats

Three empty blue boxes arranged horizontally, separated by less-than signs (<), intended for students to drag the stadium information tiles into to order them from least to greatest number of seats.

Grade 4 (Continued)



Write your answer to the following problem in your answer booklet.

San Francisco Giants' stadium: 41,915 seats	Washington Nationals' stadium: 41,888 seats	San Diego Padres' stadium: 42,445 seats
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Compare these statements from two students.

Jeff said, "I get the same number when I round all three numbers of seats in these stadiums."

Sara said, "When I round them, I get the same number for two of the stadiums but a *different* number for the other stadium."

Can Jeff and Sara both be correct? Explain how you know.

Grade 4 (Continued)



Write your answer to the following problem in your answer booklet.

When rounded to the nearest hundred, the number of seats in Aces Baseball Stadium is 9,100.

What is the greatest number of seats that could be in this stadium? Explain how you know.



Our Goals

- All children are mathematically proficient.
- Students in elementary school develop a firm foundation in number, computation, mental math, problem solving, geometry, measurement, data.
- Develop a strong conceptual understanding of the mathematics.

Challenge

Can you remember every word?

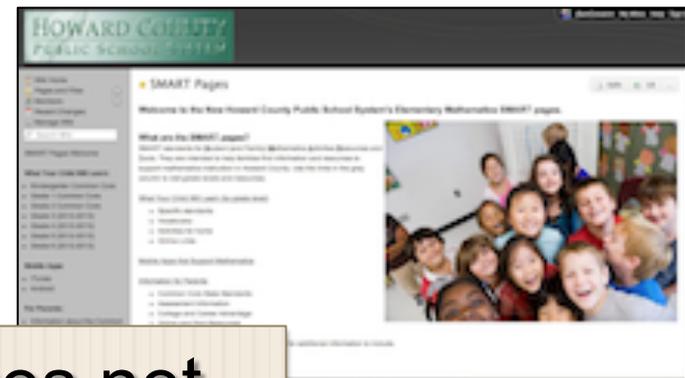
blocks two the crossed get little ran and
the school street girl to to

the little girl ran two blocks and crossed
the street to get to the school

Where Can I Get More Information?

HCPSS SMART Pages

- More information about the Common Core State Standards
- Specific grade level standards
- Optional activities you can do at home to support your student



<http://smart.hcpss.wikispaces.net>

Key Shifts for ELA

The CCSS for ELA require an increased focus on

- **complex text**
- **close reading**
- **text-dependent questions**
- **text-based evidence**
- **balance of text types**

- **writing from sources**
- **academic vocabulary**
- **speaking & listening**
- **short, focused research**
- **integration of standards**



Complex Text

Shift:



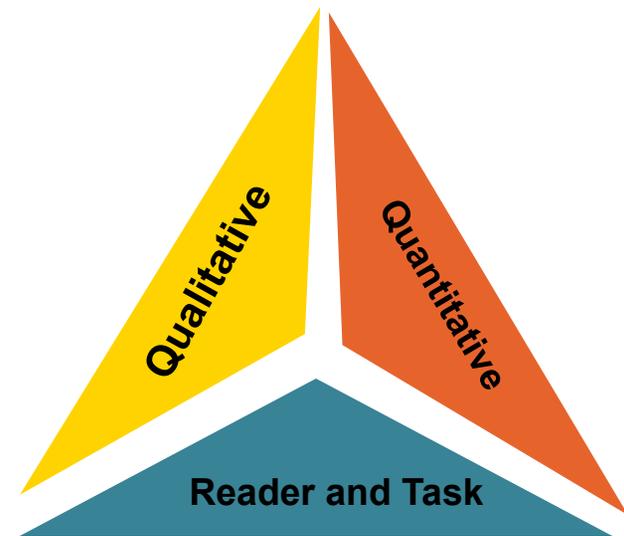
Text Complexity Matters

***From Appendix A, page 4 of the
*Common Core State Standards for
English Language Arts.***

**“Being able to read complex
text independently and
proficiently is essential
for high achievement in college
and the workplace and
important in numerous life activities.**

Use the text complexity tools to determine appropriate texts:

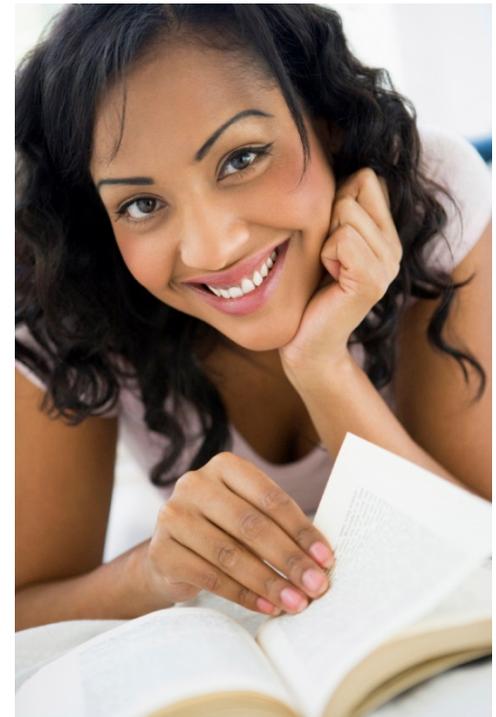
- 1. Qualitative measures** – levels of meaning, structure, language conventionality and clarity, and knowledge demands
- 2. Quantitative measures** – readability and other scores of text complexity
- 3. Reader and Task** – background knowledge of reader, motivation, interests, and complexity generated by tasks assigned



Shift: Close Analytic Reading

PARCC's Definition -

Close, analytic reading stresses engaging with a text of sufficient complexity directly and examining its meaning thoroughly and methodically, encouraging students to read and reread deliberately.



Shift:

Text Dependent Questions

- Rigorous, text-dependent questions require students to demonstrate that they can follow the details of what is explicitly stated **and** make valid claims and inferences that square with the evidence in the text.

PARCC Model Content Frameworks, 2011



Shift:

Text-based evidence

- Students stay grounded in the text, responding to high quality text-dependent questions with **evidence-based responses**
- RI.1 and RL.1 – always utilized when asking text dependent questions
- Used in combination with RI.2-9 and RL.2-9.



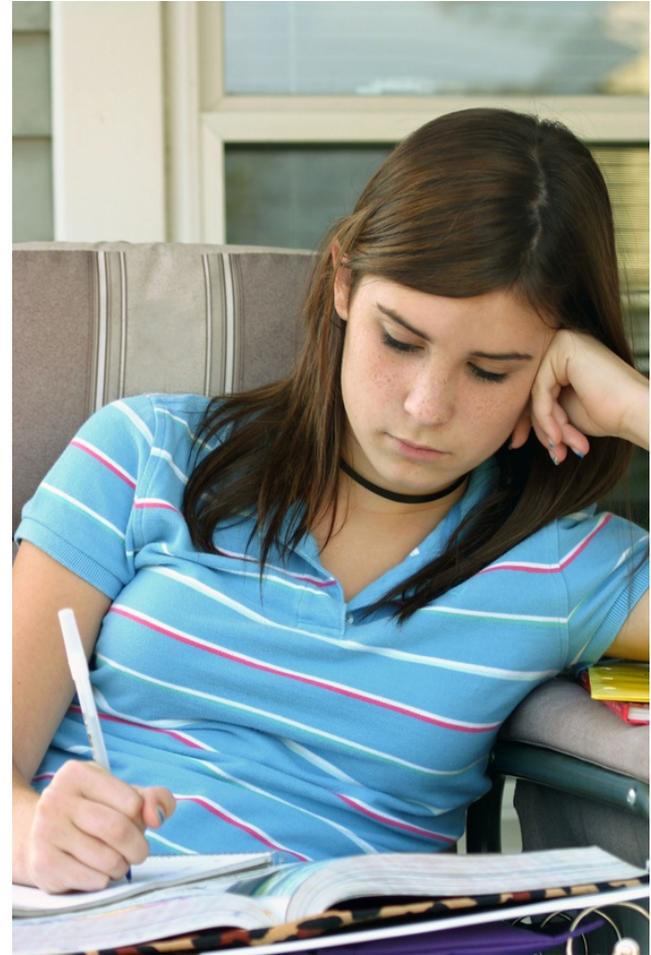
Shift: Balance of Text Types

Recommendations from NAEP (2009) Percent of Text Structure Type by Grade Level

Grade	% Literary Text	% Informational/ Expository Text
4	50	50
8	45	55
12	30	70

Shift: Writing to/using Sources

- Student writing will be in response to sources both in the ELA class and in the content classes
- Students will use sources in the research process to synthesize information and ideas



Shift: Writing to/using Sources

- Print:
 - Text
 - Primary & Secondary Sources
 - Web sites
- Non-print
 - Video
 - Pictures
 - Web sites
 - Audio
 - Performances
 - Experiments
 - Graphics



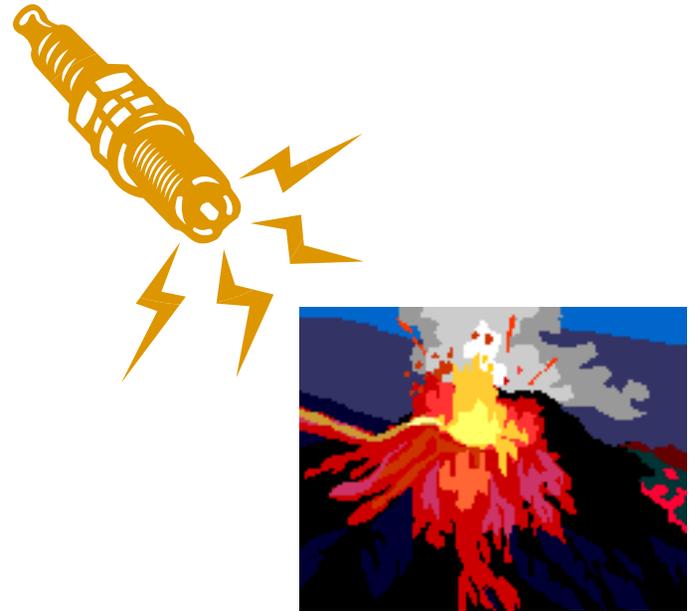
Shift:

Academic Vocabulary

- Vocabulary that is used to explain a curriculum concept but is not content-specific and may apply to a variety of curricula
- Examples: relative, vary, formulate, specificity, accumulate, calibrate, itemize, periphery

Domain Specific Words

- Words that are specific to a domain or field of study and key to understanding a new concept within a text.
- Examples: lava, carburetor, legislature, circumference, aorta



Shift: Speaking and Listening

This requires students to demonstrate a range of interactive oral communication and interpersonal skills, including (but not limited to) skills necessary for making **formal presentations, working collaboratively, sharing findings and listening carefully to the ideas of others.**

Shift:

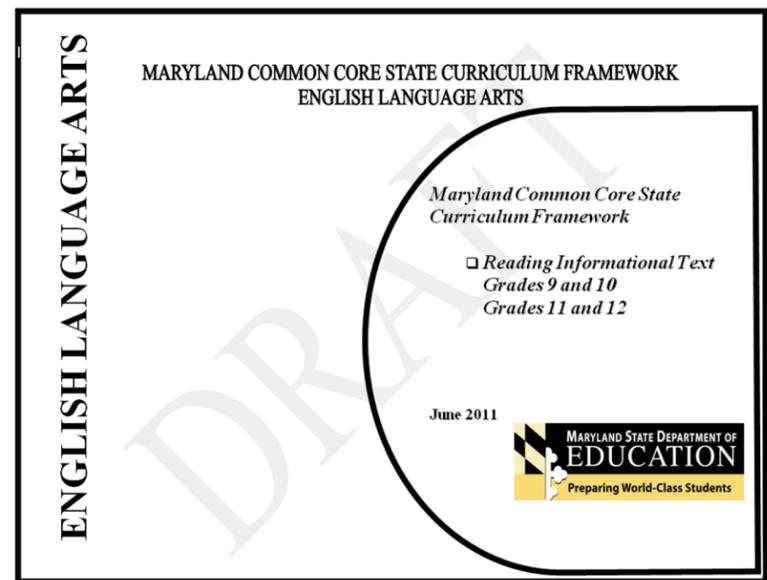
Short, focused research

Students:

- gather resources (including multi-media)
- evaluate their relevance
- report on information and ideas they have investigated (i.e., conducting research to answer questions or to solve problems).

Shift: Integration of the Standards

- Modeled in MD Common Core State Curriculum Frameworks
 - Integration among standards in the 4 strands
 - Integration of standards within a strand
 - Integration of School Library Media and Technology Standards



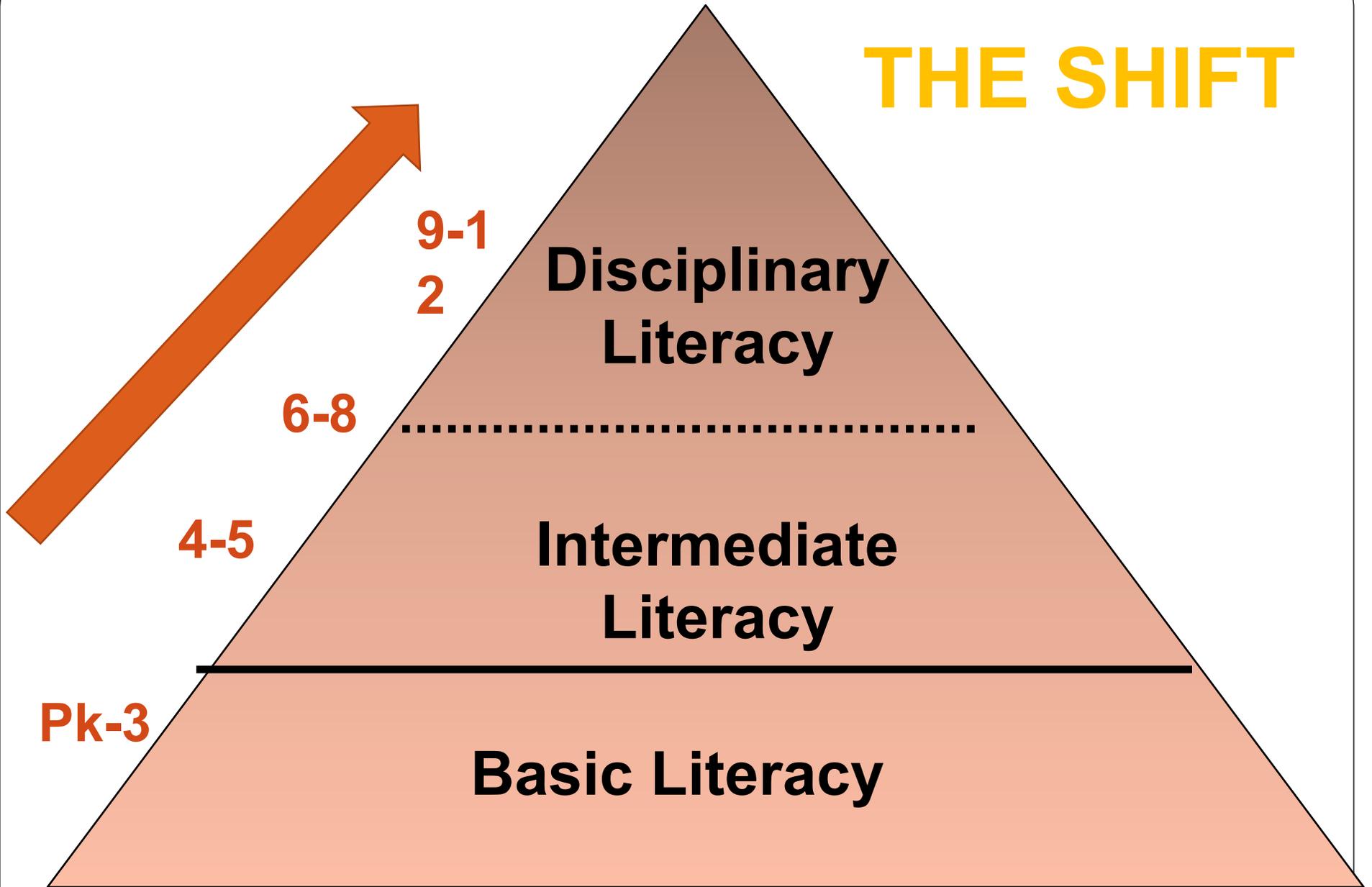
What is Disciplinary Literacy?

Disciplinary Literacy is the use of discipline-specific practices to access, apply, and communicate content knowledge.

Why Disciplinary Literacy?

- Each discipline has specialized:
 - Ways of thinking
 - Language and vocabulary
 - Types of text to comprehend
 - Ways of communicating in writing

THE SHIFT



How can elementary instruction support students' Disciplinary Literacy development?

Science and Social Studies

Moving.....



From.....

- Writing from a personal perspective... I think, I feel.
- Teacher interpreting text.
- Reading mostly narrative.
- Using generalized reading strategies.
- Identifying facts.
- Using a single text to convey information.

To.....

- Evidence -based responses both orally and in writing.
- Students doing “the work”.
- Increased close reading of informational text.
- Using discipline specific reading strategies
- Analyzing and synthesizing information.
- Accessing multiple sources of information.

Common Core Examples

Science and Social Studies

. . . The natives of person be very proper and tall men, by nature swarthy, but much more by art, painting themselves with colours in oile a darke read, especially about the head . . . As for their faces they use sometimes other colours, as blew from the nose downward, and read upward, and sometimes contrary wise with great variety, and in gastly manner. . . They weare their hair diversly some having it cut all short, one halfe of the head, and long on the other; others have it all long, but generally they weare all a locke at the left eare, and sometimes at both eares . . .

Resource: *A Brief Relation of a Voyage Unto Maryland*

By Father Andrew White

Before Common Core Question

Have you ever met someone who looks different from you? Write a journal entry describing how that person's appearance differed from yours and your reaction to his/her appearance.

After Common Core Question

Paraphrase what Father Andrew White says explicitly about the appearance of Native Americans in colonial Maryland. Draw inferences about Father White's reaction to the natives, supporting your conclusions by citing specific details in the source. (RI.4.1)

Write an opinion in the form of a journal entry from the perspective of Father White. Express his opinion of Native Americans citing details from the text. (W.4.1)

WRITING STANDARDS

There are three types of writing in the Common Core State Standards.

Writing Standard 1: Argument

**Writing Standard 2: Informative/
Explanatory**

Writing Standard 3: Narrative

Argument Is Special

**From Appendix A, page 24 of the Common Core State Standards for English Language Arts.*

“While all three text types are important, the Standards put particular emphasis on students’ ability to write sound arguments on substantive topics and issues, as this ability is critical to college and career readiness .”

In the elementary grades, argument takes the form of opinion.

Younger students are emerging writers who learn to develop logical arguments by:

- providing examples**
- offering reasons for assertions**
- explaining cause and effect**