

#### **Common Core Overview**

How will the new standards impact my student's instruction?

Presenter: Kelli Cogan, Assistant Superintendent

# Tonight's Objective

- Introduce parents to the Common Core Standards and help them understand how instruction may look different
- Highlight the connection between district priorities and the Common Core Learning Standards
- Assist parents with how they can help their students at home

#### How Did We Get Here?

Without a semblance of agreed upon educational outcomes, what students must know was largely determined by the textbook companies. With 14,000 different school districts in the United States, having a lack of organized direction may have led to a hit or miss obtainment of outcomes.

#### **Timeline**

- 1997- State of Ohio adopts first set of academic content standards in English-Language Arts and Mathematics
- Prior to 2001- Local districts had autonomy to teach what they wanted, when they wanted and it was the local board policies that determined when the curriculum and materials would be reviewed

#### **Timeline Continued**

2001- Ohio School Board Adopts ELA and Math Standards on 12/11/2001 (Social Studies and Science soon followed)

2010- Ohio School Board Adopts the Common Core Standards in ELA and Math

2014- Districts are held accountable to the new standards in ELA and Math through new assessments in grades 3 through 11

# Activity: What I know about the Common Core

- Notecard Activity
- ➤ Using notecards please list all of the questions you have about the common core
- ➤ We will collect the cards and do our best to respond to specific questions. We will also use these questions to create a common core FAQ document to attach to our district webpage

#### The Common Core Standards will.....

Prepare students to succeed in college and the workforce. (College and Career Ready)

Provide educators with a clear and focused roadmap for what to teach and when to teach the standards. (grade level)

# What is Career Readiness?



Career Readiness means that high school graduates are qualified for and able to do well in long-term careers.

"Career" doesn't just mean a job. It means a profession that lets graduates succeed at a job they enjoy and earn a competitive wage.

#### Where Is Olmsted Falls in the Process?

- ELA: Reading has been completed and writing will follow.
- Math: Undergoing a current math study which includes a material adoption for 2014-2015.
- Social Studies and Science: These are NOT common core standards but they are new and revised state standards. While the new standards will be fully implemented in 2014-2015 a new materials purchase will come a few years later.

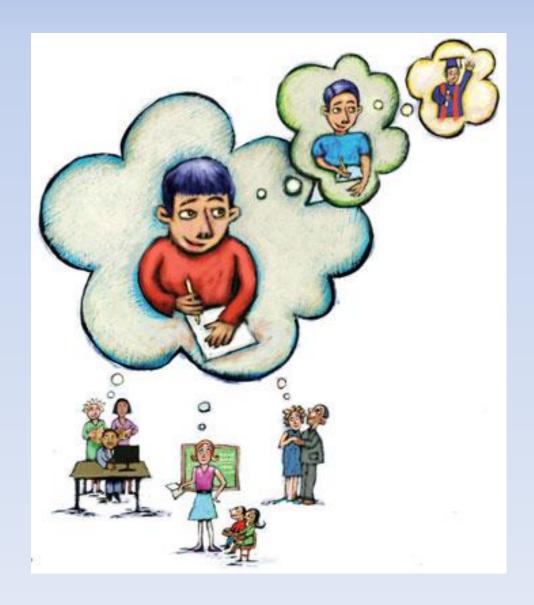
#### What's Next?

The question of, "what should be taught" has been answered. The question that remains for teachers to answer is "how should it be taught?"

# Let's Unpack the Standards

The new Common Core Standards are more intricate than Ohio's current standards and a full implementation requires more than a Board or Superintendent indicating "we're implementing". Fully implementing the new standards will require a fundamental shift in our instructional practices; specifically in how and what students read, how and what they write, and how they engage in mathematical problemsolving.

## So? What does it all mean?



# What is Different in the New Standards?

#### **English Language Arts/Literacy**

- A focus on non-fiction, careful reading
- Discussing reading and writing using evidence
- Increasing academic vocabulary



#### **Mathematics**

- Learning more in-depth, less concepts
- Focus on skill building, speed and accuracy
- Use of real world examples to better understand

concepts

# **ELA Common Core Example**

High School ELA Curriculum Video: The Gettysburg Address

#### ELA Test Question – Pre Common Core

In both the *Demosthenes* biography and the *Icarus and Daedalus* myth the main characters are given advice from other people. Do you respond to advice from other people more like Demosthenes or more like Icarus? Write an essay in which you explain who you are more like when it comes to taking advice and why. Use details from both articles to support your answer.

In your response, be sure to do the following:

- tell whether you are more like Demosthenes or Icarus
- explain why you respond to advice similar to Demosthenes or Icarus
- use details from both passages in your response

## ELA Test Question – Post Common Core

In both the *Demosthenes* biography and the *Icarus and Daedalus* myth the main characters exhibit determination in pursuit of their goals. Did determination help both main characters reach their goals, or did it lead them to tragedy? **Write an argument** for whether you believe determination helped or hurt the two main characters. In your response, be sure to do the following:

- **describe** how determination affected the outcome in *Demosthenes*
- describe how determination affected the outcome in *Icarus and Daedalus*
- explain the similarities or differences that exist in the ways determination played into the outcome of both texts
- use details from both passages in your response

# Grade 3 PARCC Example

Today you will research two people who lived long ago. As you read these passages, you will gather information and answer questions. Then you will write an article for your school newspaper to teach your classmates about how these two people made a difference in America.

# Grade 6 PARCC Example

Prose Constructed Response from Narrative Writing Task:

In the passage, the author developed a strong character named Miyax. Think about Miyax and the details the author used to create that character. The passage ends with Miyax waiting for the black wolf to look at her.

Write an original story to continue where the passage ended. In your story, be sure to use what you have learned about the character Miyax as you tell what happens to her next.

## ELA Vertical Alignment Example

Sample: English Language Arts (Writing)

**Kindergarten**: Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...)

**First:** Write opinion pieces in which they introduce the topic or name for the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.

**Second:** Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.

# Vertical Alignment Continued

Sample- English Language Arts (Writing)

#### **Grade Six:**

Write arguments to support claims with clear reasons and relevant evidence.

- a. Introduce claims and organize the reasons and evidence clearly.
- b. Support claims with clear reasons and relevant evidence, using credible sources and demonstrating and understanding of the topic or text.
- c. Use words, phrases and clauses to clarify relationships among claims and reasons.
- d. Establish and maintain a formal style.
- e. Provide a concluding statement or section that follows from the argument presented.

# Math Key Advances

- Focus in early grades on number and number sense
- Even pacing (deeper not wider)
- Using math and solving complex problems
- Problem-solving and communication



## Math Common Core Example

David Coleman, Contributing Author of the Common Core

# Math Organization of Standards

#### Math (K-5)

- ➤ Counting and Cardinality (K only)
- ➤ Operations in Algebraic Thinking
- ➤ Number and Operations in Base Ten
- ➤ Measurement and Data
- ➤ Geometry
- ➤ Number and Operations-Fractions (grades 3-5)

# Organization of Standards

#### Math (6-8)

- Ratios and Proportional Relationships
- ➤ The Number System
- Expressions and Equations
- Geometry
- Statistics and Probability

#### Math (9-12)

- Number and Quantity
- Algebra
- > Functions
- Modeling
- Geometry
- > Statistics and Probability

## Priorities in Math

Grade	Priorities in Support of Rich Instruction and Expectations of Fluency and Conceptual Understanding			
K-2	Addition and Subtraction, measurement using whole number quantities			
3-5	Multiplication and division of whole numbers and fractions			
6	Ratios and proportional reasoning; early expressions and equations			
7	Ratios and proportional reasoning; arithmetic of rational numbers			
8	Linear algebra			

#### Standards of Mathematical Practice

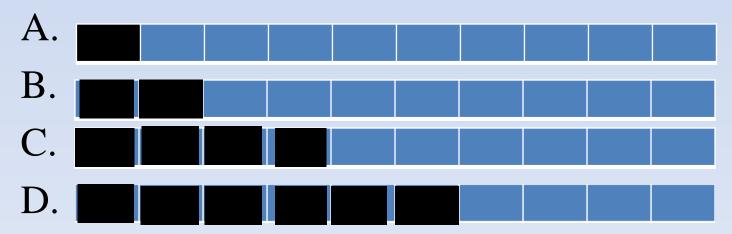
- Make sense of problems and persevere in solving them. (ability to explain)
- 2. Reason abstractly and quantitatively. (make sense of quantities)
- 3. Construct viable arguments and critique the reasoning of others. (justify why)
- 4. Model with mathematics. (graphs, formulas, etc...)
- 5. Use appropriate tools strategically. (manipulatives, calculators, etc...)
- 6. Attend to precision. (state meaning of symbols)
- 7. Look for and make use of structure. (patterns)
- 8. Look for and express regularity in repeated reasoning. (repeated calculations-shortcuts)

### OAA Grade 4 Mathematics Example

 A set of five circles is shown. Tina shaded one of the circles to represent a fraction.



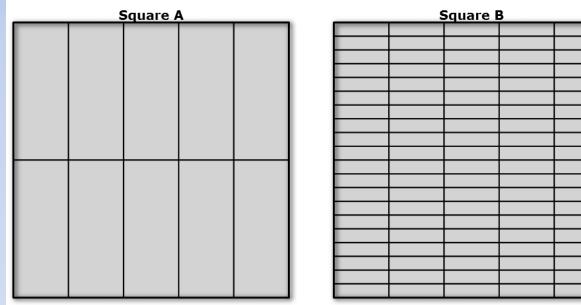
• Which model represents an equivalent fraction?



## PARCC Grade 4 Mathematics Example

In this task, you will compare the decimal representations of the fractions  $\frac{2}{10}$  and  $\frac{17}{100}$ .

Two grids, Square A and Square B, are shown. The squares are of equal size. Square A is divided into 10 rectangles of equal size. Square B is divided into 100 rectangles of equal size. You can shade the rectangles by clicking in them. You can use the grids to help with your explanation and comparison.



Part A

Write a fraction with a denominator of 100 that is equivalent to  $\frac{2}{10}$ . Use the grids to explain how you know that the fractions are equivalent.

Part B

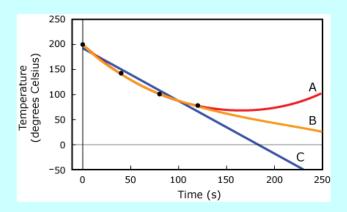
Write  $\frac{2}{10}$  as a decimal. Then write  $\frac{17}{100}$  as a decimal. Explain how you can use the grids to compare the two decimals.

#### PARCC Grade 9 Mathematics Example

A scientist is studying the cooling patterns of a particular material over time. Her research requires heating a sample of the material to 200°C. She records the temperature of the sample as it is cooled to 0°C. The table shows the data collected during the first 2 minutes of the cooling process.

Time material is cooling (seconds)	0	40	80	120
Temperature (°C)		141	101	74

The figure shows the scientist's data (data points are plotted as large dots). Three possible models for the data are also shown: a linear model, a quadratic model, and an exponential model.



#### Part A

- Which model is linear? Which model is quadratic? Which model is exponential?
- Which model is best for the range of times  $0 \le t \le 250$ ?
- Explain why the other models do not fit the data very well for the range of times  $0 \le t \le 250$ .

# PARCC Grade 9 Mathematics Example Continued

#### Part B

Construct a function using the type of model you decided is best (linear, quadratic, or exponential). Show your work and use function notation when entering your answer.

# Vertical Alignment Math

#### Sample- Math (Measurement)

Kindergarten: Describe and compare measurable attributes.

First: Measure lengths indirectly by iterating length units.

Second: Measure and estimate lengths in standard units

**Third:** Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects

**Fourth:** Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

**Fifth:** Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

#### **How Will Instruction Look Different?**

- There will be less standards to be taught at each grade level HOWEVER the standards that are taught will be the most important topics that students need to know at that grade level.
- Students will be expected to read more difficult text sooner, and discuss what they read at a more complex level. For example, instead of pulling out individual text elements, such as character, plot and setting, students will be reading or listening to various stories, and will compare stories using their understanding of text elements.

#### **Instruction Continued:**

- To prepare students for college-level work, there will be more of a focus on informational and expository text. In middle school especially, students will be reading informational text, including original documents, from the Declaration of Independence to presidential speeches.
- Assessments will likely be more difficult. Instead of multiple choice tests, students will be analyzing and synthesizing information, writing essay responses, and answering in-depth questions to show how much they understand.

## How Can I Help?

- Look through the common core standards to get a feel for what your student will be learning as they move through school.
- As your student completes homework, help them hone in on the most important aspects and core concepts.
- As you read with your student, ask them in-depth why and how questions that encourage them to analyze and synthesize text. For example, read three different versions of <u>Goldilocks and the Three Bears</u> and ask your student to compare and contrast them as you read.

# How Can I Help Continued:

- Encourage your student to research a topic they are interested in using informational text and original documents. (non-fiction)
- Ask your student to explain or show you how they are solving problems. Then have them think of multiple ways that they could have solved the problem.
- As your student works through assignments, ask them how someone might use what they are working on in "real life".

# Classwork and Homework: What you should see

- Real-world examples that makes what students learn in English and math make more sense.
- Read books that are both fiction and non-fiction.
- Writing assignments that require students to use evidence instead of opinion.
- Math work that asks students to write out how they got their answer.
- Math work that asks students to use different methods to solve the same problem.

### Resource Pages

- ELA Crosswalk
- Math Crosswalk
- Common Core Toolbox for Math
- Common Core Webpage
- Math and ELA Standards
- PARCC Assessment and Prototypes
- National PTA and Common Core