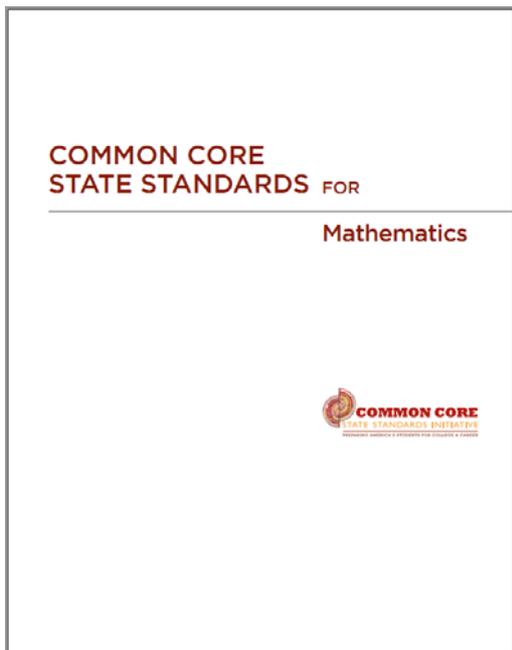


**Common Core State Standards:
Extended School Day/School Violence
Prevention Coordinator's Meeting**

October 23rd, 2013



The Common Core Learning Standards are not intended to be new names for old ways of doing business. They are a call to take the next step. ... It is time to recognize that standards are not just promises to our children, but promises we intend to keep.

CCSSM, p. 5

Why does this matter?

Because it's what our students need

For every 100 ninth graders...



65 graduate from high school

37 enter college

24 are still enrolled in sophomore year

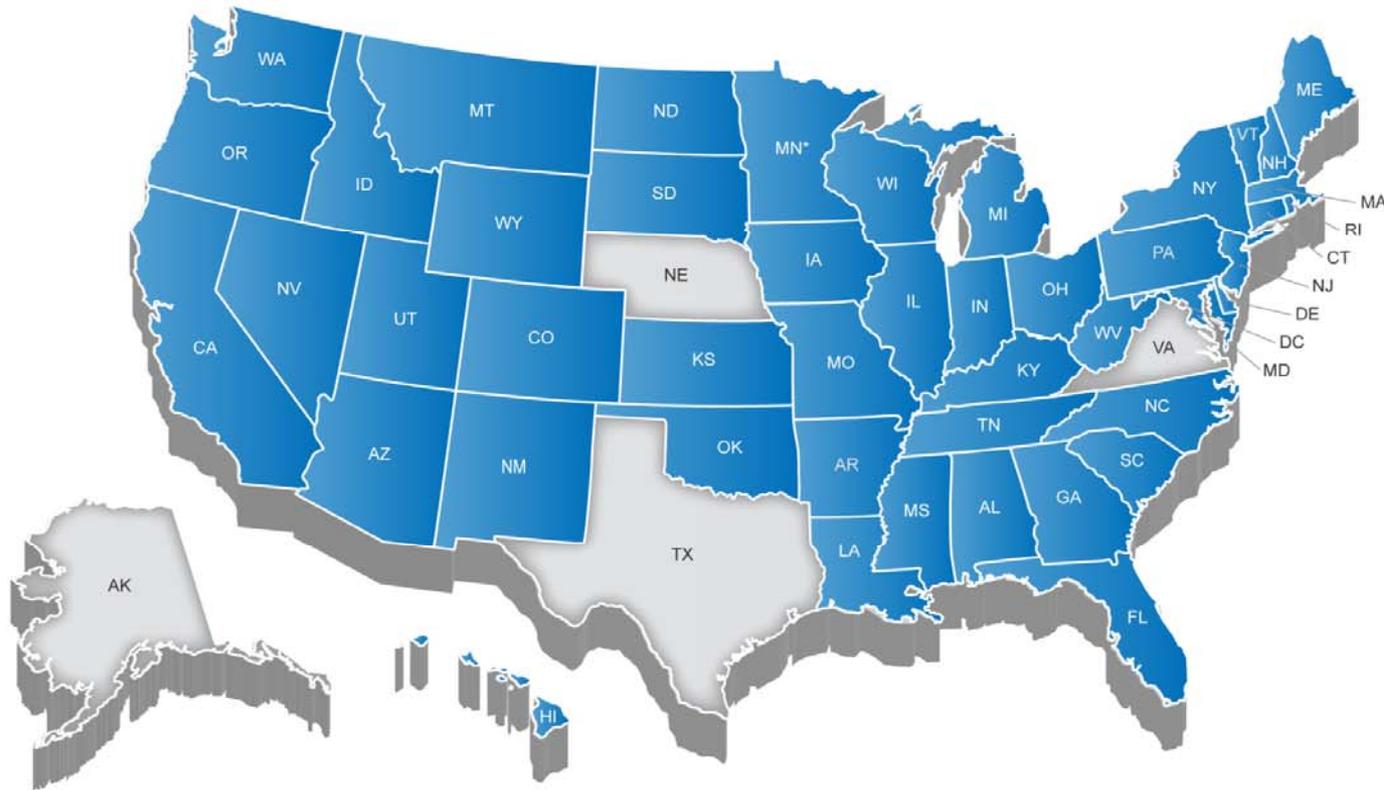
12 graduate with a degree in six

... and only 6 get a good job after graduation



Conley, David. 2012, "The Complexities of College and Career Readiness." https://epiconline.org/files/pdf/07102012_Keene_NH.pdf

46 States + DC Have Adopted the Common Core State Standards



*Minnesota adopted the CCSS in ELA/literacy only

College and Career Readiness Anchor Standards for Reading

The grades 6–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

Responding to Literature

11. Respond to literature by employing knowledge of literary language, textual features, and forms to read and comprehend, reflect upon, and interpret literary texts from a variety of genres and a wide spectrum of American and world cultures.

Instructional Shifts Demanded by the Core

6 Shifts in ELA/Literacy

Balancing Informational and Literary Text
Building Knowledge in the Disciplines
Staircase of Complexity
Text-based Answers
Writing from Sources
Academic Vocabulary

6 Shifts in Mathematics

Focus
Coherence
Fluency
Deep Understanding
Applications
Dual Intensity

ELA/Literacy Shift 1: Balancing Informational and Literary Text

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Build content knowledge• Exposure to the world through reading• Apply strategies	<ul style="list-style-type: none">• Balance informational & literary text• Scaffold for informational texts• Teach “through” and “with” informational texts

What Parents and Care Providers Can Do...

- Read non-fiction books aloud or with your child
- Enjoy and discuss the details of non-fiction
- Have fun with non-fiction in front of your child

TEXT #2

A Brief History of Wolves in the United States

Cornelia N. Hutt
Defenders of Wildlife

<http://kidsplanet.org/www/index.html>

Wolves once roamed across most of North America. Over hundreds of thousands of years they developed side by side with their **prey** and filled an important role in the web of life. **Opportunistic** hunters, wolves preyed on deer, elk and beaver, killing and eating the young, the sick, the weak and the old and leaving the fittest to survive and reproduce. **P1**

5 Wolf kills provided a source of food for numerous other **species** such as bears, foxes, eagles and ravens. Wolves even contributed to forest health by keeping deer and elk populations in check, thus preventing overgrazing and soil erosion.

Not surprisingly, the cultures which inhabited North America before the time of European exploration **revered** the wolf and its role in nature. Many **indigenous** groups **P2**
10 relied on hunting as their major source of food and goods and were keenly **attuned** to their environment. The elements of the natural world, including the wolf, were important to their everyday lives and spirituality.

TEXT #6

White Fang Jack London Macmillan, 1906

<http://www.gutenberg.org/files/910/910-h/910-h.htm>

Excerpt: Pt. II, C.h. I THE BATTLE OF THE FANGS

It was the she-wolf who had first caught the sound of men's voices and the whining **P1**
of the sled-dogs; and it was the she-wolf who was first to spring away from the cornered
man in his circle of dying flame. The pack had been **loath** to **forego** the kill it had hunted
down, and it lingered for several minutes, making sure of the sounds, and then it, too,
5 sprang away on the trail made by the she-wolf.

Running at the forefront of the pack was a large grey wolf—one of its several **P2**
leaders. It was he who directed the pack's course on the heels of the she-wolf. It was he
who snarled warningly at the younger members of the pack or slashed at them with his
fangs when they **ambitiously** tried to pass him. And it was he who increased the pace
10 when he sighted the she-wolf, now trotting slowly across the snow.

She dropped in alongside by him, as though it were her **appointed** position, and **P3**



Red Riding Hood meets old Father Wolf
Gustave Dore



Odin at Ragnarok
Emil Doepler, 1905



ELA/Literacy Shift 2: Knowledge in the Disciplines

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Build content knowledge through text• Handle primary source documents• Find evidence	<ul style="list-style-type: none">• Shift identity: “I teach reading.”• Stop referring and summarizing and start reading

What Parents and Care Providers Can Do...

- Supply series of texts on topics that interest your child
- Find books that explain how things work and why
- Discuss non-fiction texts and their ideas

Interdisciplinary Research

From Grade 5, Module 4, Unit 3

- Research teams to investigate natural disasters
- Connection to Social Studies
- Primary source documents
 - Response to disasters in the Western Hemisphere
 - United States
 - Red Cross
- Draft and revise an opinion speech
- “How Should Aid Be Prioritized Following a Natural Disaster in a Neighboring Country?”
 - Speech to the class

This written and public speaking performance task centers on NYSP12 ELA Standards RI.5.7, RI.5.9, W.5.1, W.5.4, W.5.5, W.5.7, W.5.8, W.5.9, SL.5.4, SL.5.6, L.5.1, L.5.2, L.5.3, and L.5.6.



A Growing Global Need

Global trends such as rapid population growth, unplanned urbanization, environmental degradation and climate change have caused an increase in the frequency and severity of natural disasters. Communities living in disaster-prone areas are the most at risk, and often the least able to cope with the effects of disaster.

The American Red Cross helps vulnerable people worldwide prevent, prepare for and respond to disasters. Through our emergency disaster response efforts, we provide relief and recovery assistance to millions of people annually.

The Red Cross Advantage

In collaboration with the global Red Cross network, the American Red Cross is constantly monitoring disasters around the globe. When disasters occur, the local Red Cross or Red Crescent can often handle crises alone. Other times, they need a helping hand and request assistance through the global Red Cross system. This



specializing in specific disaster services. A Relief ERU

http://www.redcross.org/images/MEDIA_CustomProductCatalog/m16740817_Fact_Sheet-_Disaster_Response_Feb_2013.pdf

- 20 pages
- Statistics
- Photos
- Quotes
- Facts

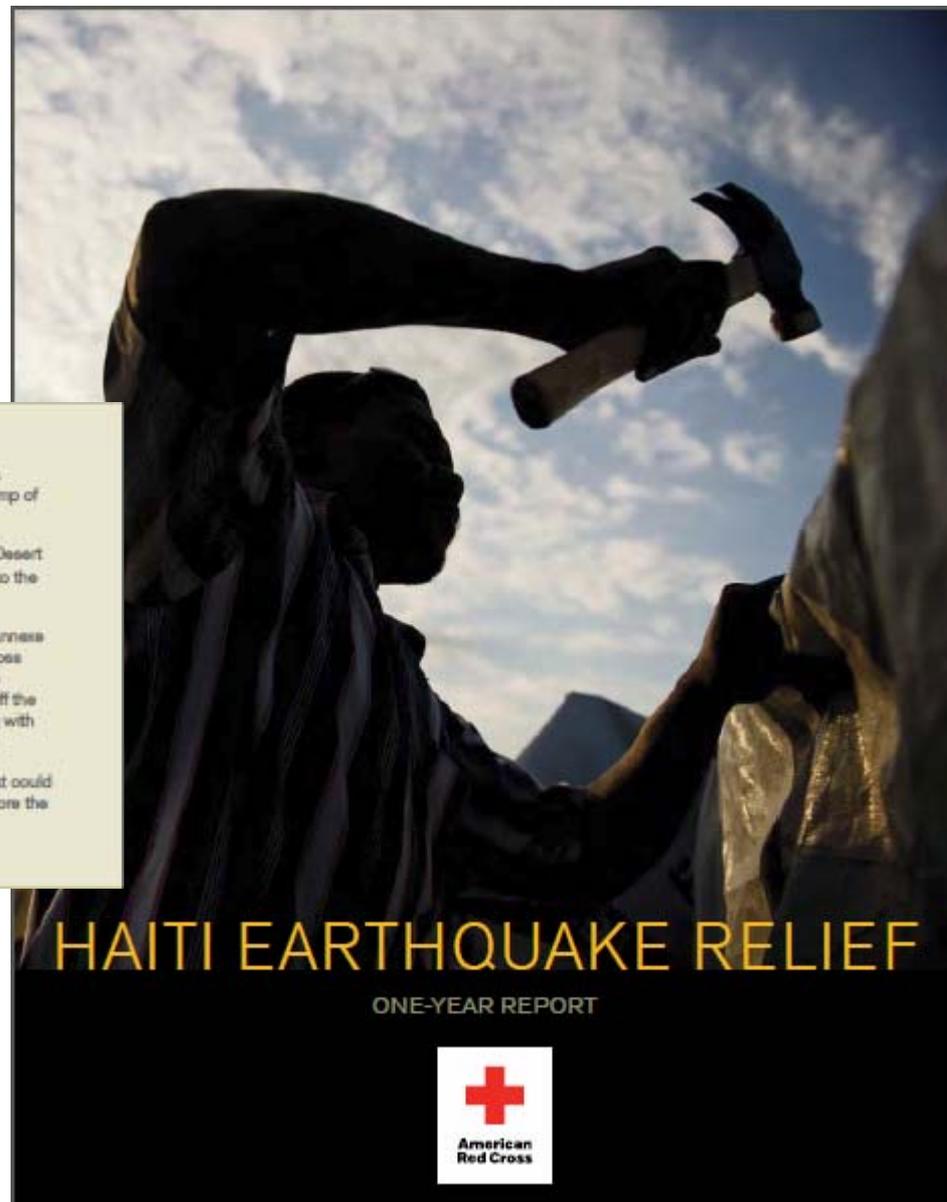
Helping Haitians Help Themselves: One Red Cross Worker's Story

Desert Jean Daniel started working for the Red Cross as a carpenter building transitional homes. Now a supervisor, the father of four is among more than 100 workers the Red Cross has hired from the tent camp of L'Anness de la Mairie to build new homes for camp residents.

"It's very important to have people from the community helping to build the homes," Desert said. "It makes sure that people are invested in their work, and it also brings money to the camp."

Like so many settlements that sprang up in Port-au-Prince after the earthquake, L'Anness de la Mairie is packed with families living under tarps and tents. The global Red Cross network is building approximately 350 semi-permanent homes here, funded by the American Red Cross and other Red Cross societies. These homes are elevated off the ground to offer added protection from heavy rains. The Red Cross is also working with the community to improve drainage on the site in order to prevent future flooding.

His experience with the Red Cross has given Desert hope. "It's the best thing that could have happened to me," he said. "I used to work on electronics and carpentry before the earthquake, and now I can use those skills to help the community."



ELA/Literacy Shift 3: Staircase of Complexity

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Re-read• Read material at own level to enjoy	<ul style="list-style-type: none">• More complex texts at every grade level• Give students less to read, let them re-read• More time on more complex texts• Provide scaffolding & strategies
<p><u>What Parents and Care Providers Can Do...</u></p> <ul style="list-style-type: none">• Know what is grade-level appropriate• Provide challenging texts as well as books they can read easily• Read challenging books with your child• Show that challenging books are worth reading	

Reading After School

- Start a book club/reading group
- Read aloud
- Fiction and non-fiction
- Varied difficulty level
- Reading logs
- Discussion
- Questioning
- Encouragement
- Vocabulary



ELA/Literacy Shift 4: Text Based Answers

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Find evidence to support their argument• Form own judgments and become scholars• Conducting reading as a close reading of the text• Engage with the author and his/her choices	<ul style="list-style-type: none">• Facilitate evidence based conversations about text• Plan and conduct rich conversations• Keep students in the text• Identify questions that are text-dependent, worth asking/exploring, deliver richly• Spend much more time preparing for instruction by reading deeply.

What Parents and Care Providers Can Do...

- Talk about texts
- Demand evidence in everyday discussions and disagreements
- Read aloud or read the same book as your child and discuss
- Discuss predictions

ELA/Literacy Shift 5: Writing from Sources

What the Student Does...

- **Generate informational** texts
- **Make arguments using evidence**
- **Organize** for persuasion
- Compare **multiple sources**

What the Teacher Does...

- Spending much less time on **personal narratives**
- Present opportunities to write from **multiple sources**
- Give **opportunities to analyze, synthesize** ideas
- Develop students' voice so that they can **argue a point with evidence**

What Parents and Care Providers Can Do...

- Encourage writing at home and outside of school
- Write “books” together using evidence and detail
- Review samples of exemplar student writing



CLAIM: Venus Williams argues that although Wimbledon outwardly appears to value men and women equally, really they are promoting a message that women's roles and achievements are less important.			
Point 1 Wimbledon's public image of gender equality		Point 2 The true message of Wimbledon's policies	
A Supporting Evidence "winners receive the same trophy and honorary membership" (Reference: line 44)	B Supporting Evidence "the two photographs of last year's men's and women's champions are hung side by side, proudly and equally" (Reference: lines 45-46)	A Supporting Evidence "undeserving of the same amount of prize money" (Reference: line 16)	B Supporting Evidence "the winner of the ladies' singles receives £30,000 less than the men's winner" (Reference: lines 28-29)
C Supporting Evidence "in the eyes of the general public the men's and women's games have the same value." (Reference: lines 61-62)	D Supporting Evidence "Wimbledon treats men and women the same in so many other respects" (Reference: lines 43-44)	C Supporting Evidence "Wimbledon has argued that women's tennis is worth less for a variety of reasons; it says, for example, that because men play a best of five sets game they work harder for their prize money" (Reference: lines 52-54)	D Supporting Evidence "It can only be trying to make a social and political point, one that is out of step with modern society" (Reference: lines 88-89)

ELA/Literacy Shift 6: Academic Vocabulary

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Use high octane words across content areas• Build “language of power” database	<ul style="list-style-type: none">• Develop students’ ability to use and access words• Sequence texts so that students encounter high-octane words within a particular domain over and over in increasingly complex contexts

What Parents and Care Providers Can Do...

- Read often and constantly with young children
- Read multiple books on the same topic
- Talk to your children, read to them, listen to them, sing with them, make up silly rhymes and word games

Reinforcing Vocabulary

Content Area Example: Business

Vocabulary Words

market price
capitalism
capital
free enterprise
supply
scarcity
interest
labor
land

Summary/Reflection

I chose my words based on a conversation with my father. I will admit that, at first, I thought all the words could go under either category my teacher gave us. After I started talking to my dad and then my group, I saw that all the factors of production really makes sense to me.

Without labor, nothing would be produced.

Without land, we wouldn't have trees and materials to possibly produce anything or maybe just not room to make a factory.

Capital is needed to often start production.

My mind changed a lot about supply. I thought it would have an even higher value on production than scarcity but I'm not so sure anymore.

Relating to factors of production

labor
land
capital
scarcity
supply

Relating to a Market Economy
capitalism
interest
free enterprise
market price

- Have a “word of the day”
- Analyze/define specific words from the texts students are reading
- Help students with context clues
- Bring in word games
- Dictionaries/thesauruses

Types of Analogies

Part to whole	battery : flashlight :: hard drive : computer
Cause and effect	fatigue : yawning :: itching : scratching
Person to situation	mother : home :: teacher : school
Synonym	obese : fat :: slender : thin
Antonym	poverty : wealth :: sickness : health
Geography	Chicago : Illinois :: Denver : Colorado
Measurement	pound : kilogram :: quart : liter
Time	March : spring :: December : winter

Curriculum and Module Use

- Curriculum is a local responsibility in New York State.
- Modules are free, optional and adaptable.
- All of the ELA and Mathematics modules and curriculum materials are available on EngageNY at <http://www.engageny.org>.
- If creating your own curriculum/lessons, there are several resources on EngageNY to guide development.

Turn and Talk: ELA

- How can your afterschool program help students achieve the Common Core Learning Standards for English Language Arts?
- What resources do you have?
- What do you need?



Mathematics Shift 1: Focus

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Spend more time on fewer concepts.• Thinking and reflecting about problems that require a longer amount of time than traditional problems.	<ul style="list-style-type: none">• Excise content from the curriculum, spend more time on fewer topics allowing for more depth.• Focus instructional time on priority concepts

What Parents and Care Providers can Do:

- Know what the priority work is for your child at their grade level

Domains in the Common Core

K 1st Grade 2nd Grade 3rd Grade 4th Grade 5th Grade 6th Grade 7th Grade 8thGrade

Counting and
Cardinality

Operations and Algebraic Thinking

Number and Operations in Base 10

Measurement and Data

Geometry

Number and Operations-
Fractions

Ratio/Proportions

The Number System

Expressions and Equations

Statistics and Probability

Functions

[Back](#)

Understand place value.

1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
 - a. 100 can be thought of as a bundle of ten tens — called a “hundred.”
 - b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
2. Count within 1000; skip-count by 5s, 10s, and 100s.
3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Use place value understanding and properties of operations to add and subtract.

5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
6. Add up to four two-digit numbers using strategies based on place value and properties of operations.
7. Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
9. Explain why addition and subtraction strategies work, using place value and the properties of operations.¹

¹ Explanations may be supported by drawings or objects.

High School Domains

Algebra I

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

Algebra II

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

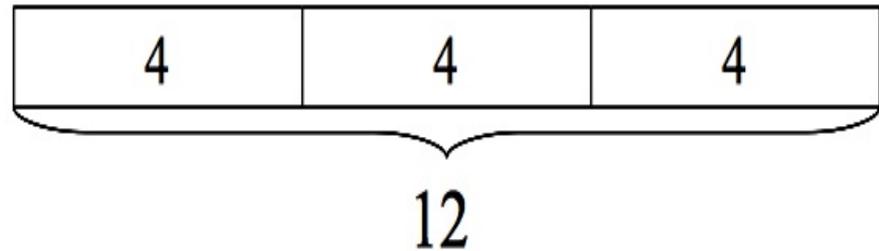
Geometry

- Geometry
- Modeling

Mathematics Shift 2: Coherence

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Build on knowledge from year to year, in a coherent learning progression	<ul style="list-style-type: none">• Connect the threads of math focus areas across grade levels• Connect to the way content was taught the year before and the years after• Focus on priority progressions
<p><u>What Parents and Care Providers can Do:</u></p> <ul style="list-style-type: none">• Be aware of what your child struggled with last year and how that will effect ongoing learning• Advocate for your child• Ensure that support is given for “gap” skills, such as negative numbers, fractions, etc.	

Tape Diagram: Looks like a segment of tape used to illustrate number relationships.

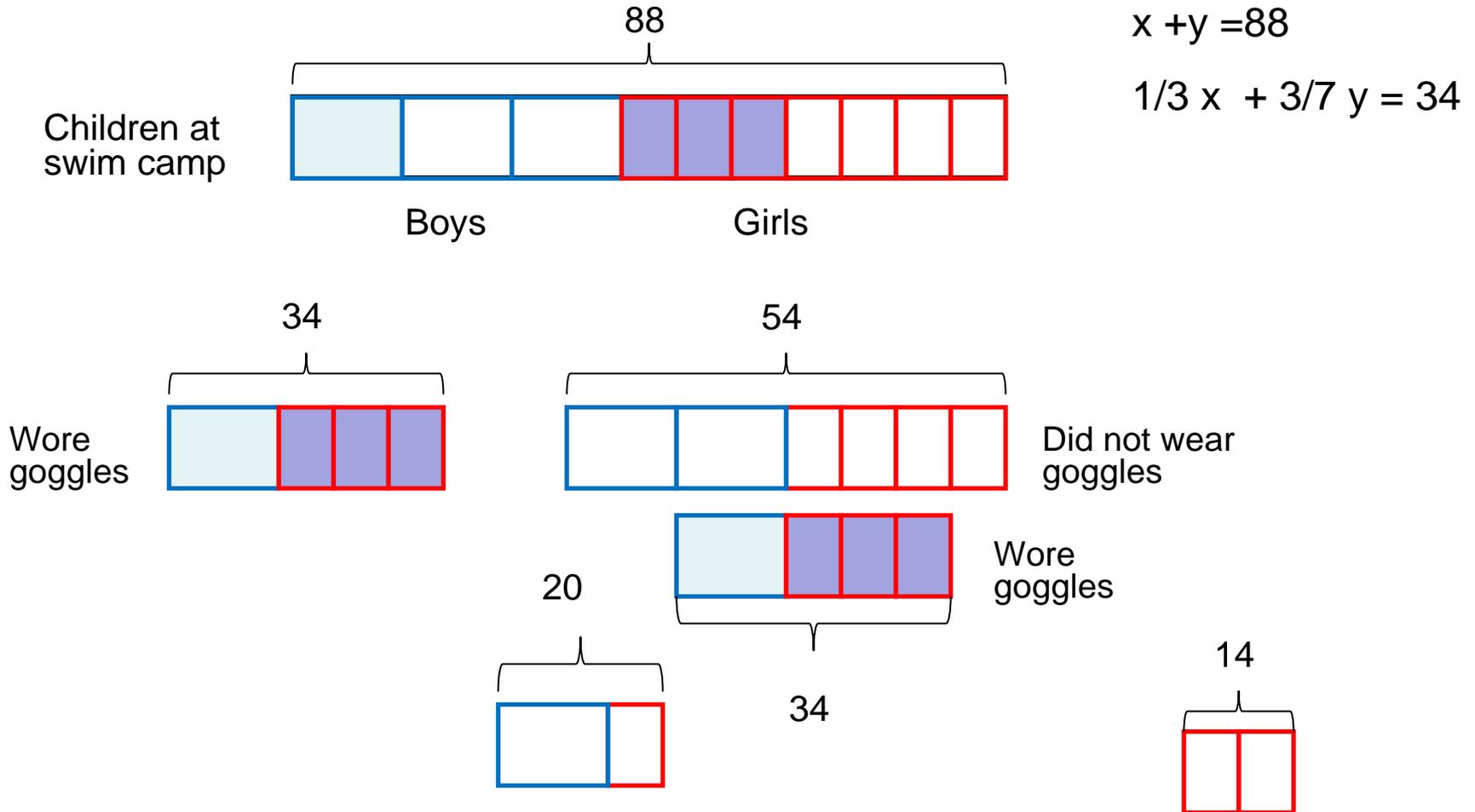


Sara brought 4 apples to school. After Mark brings her some more apples, she has 9 apples altogether. How many apples did Mark bring her?

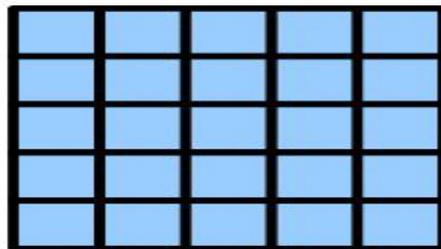


9 apples

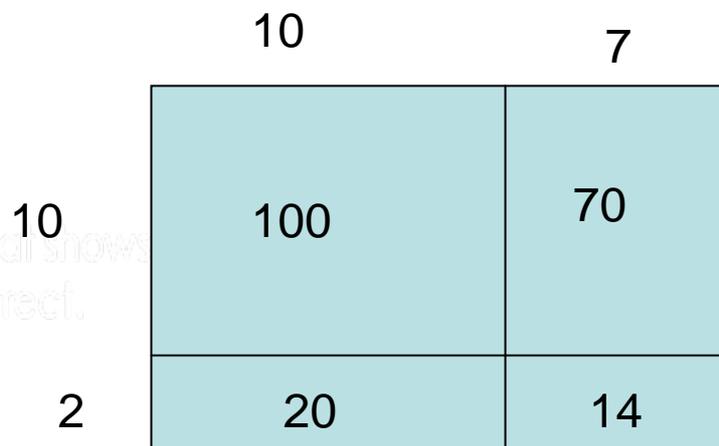
88 children were in swimming camp. One-third of the boys and three-sevenths of the girls wore goggles. If 34 students wore goggles, how many girls wore goggles?



Draw a 12 x 17 **array** (rectangle). Are there easier multiplication facts that would help you determine 12 x 17 if you did not know the answer? Use your grid paper and draw arrays for these facts that you could either split or add to help you fill a 12 x 17 array.



What is $\frac{2}{3} \times \frac{4}{5}$?
 Draw a picture that shows your answer is correct.

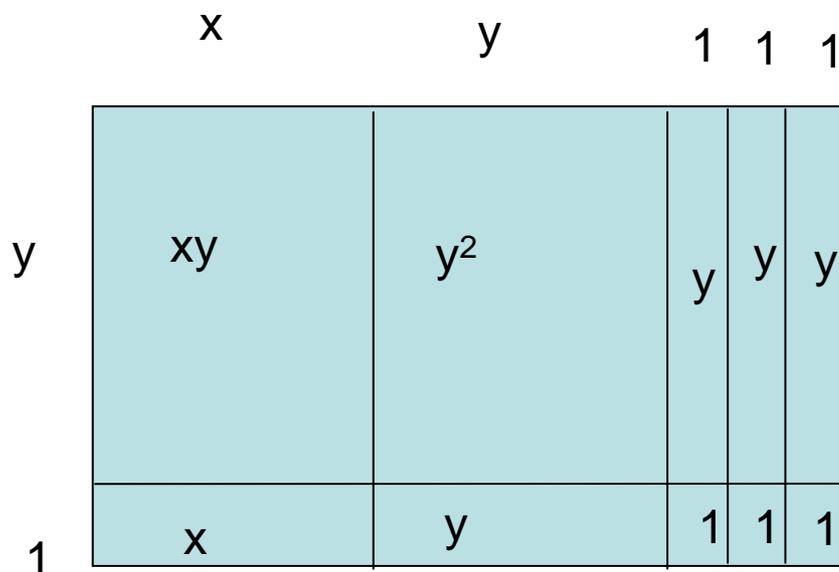


$$\begin{array}{r}
 (10 \times 10) + (10 \times 7) + (2 \times 10) + (2 \times 7) \\
 100 \quad + \quad 70 \quad + \quad 20 \quad + \quad 14 \\
 \hline
 204
 \end{array}$$

This leads into the distributive property
 $10(10+7) + 2(10 + 7)$
 $(10+2)(10+7)$

$(x+y+3)(y+1)$ is equivalent to

$$xy + y^2 + 4y + x + 3$$



Where can I find these instructional tools/modeling strategies ?

HOW TO IMPLEMENT THE STORY OF UNITS [EngageNY](https://www.engageny.org/)

Mathematics Shift 3: Rigor - Fluency

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Spend time practicing, with intensity, skills (in high volume)	<ul style="list-style-type: none">• Push students to know basic skills at a greater level of fluency• Focus on the listed fluencies by grade level• Uses high quality problem sets, in high volume

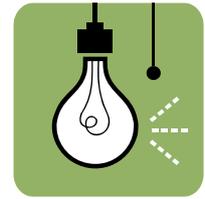
What Parents and Care Providers Can Do:

- Push children to know, understand and memorize basic math facts
- Know all of the fluencies your child should have
- Prioritize learning the fluencies your child finds most difficult

Key Fluencies

Grade	Required Fluency
K	Add/subtract within 5
1	Add/subtract within 10 Add/subtract within 20
2	Add/subtract within 100 (pencil and paper)
3	Multiply/divide within 100 Add/subtract within 1000
4	Add/subtract within 1,000,000
5	Multi-digit multiplication
6	Multi-digit division Multi-digit decimal operations
7	Solve $px + q = r$, $p(x + q) = r$
8	Solve simple 2×2 systems by inspection

Sprints are designed to develop “automaticity” with previous learned material in an adrenaline-rich motivating classroom experience. Automatic “light switch” ON , Ready to GO



**Type of
Sprint
#1**

**Red Light/Green Light: Counting by
Ones (5 minutes)**

Say a number between 1 and 100. When you say “green light,” students begin running in place and counting aloud together, beginning with the number you said. When you say “red light,” they stop counting and freeze. Any students who are still moving or counting after you say “red light” sit down until the next game. Continue playing with a new starting number every time you say “green light.” Play until only a few students are standing, or when you see fit. Then instruct the whole class to stand and start the game again.

**Type of
Sprint
#2**

*Write the number of dots. Find 1 or 2 groups that make finding the total number of dots easier!

1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		

Number Bond Dash!

Directions: Do as many as you can in 90 seconds. Write the amount you finished here:

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

21.

22.

23.

24.

25.

© Kelly Spinks

Teacher takes on a role of athletic coach...

- 60-90 seconds, students do as many as they can
- Teacher goes over answers, students keep track of number correct (GOAL)
- Break for physical exercise
- Repeat



Mathematics Shift 4: Rigor - Deep Understanding

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Show mastery of material at a deep level• Articulate mathematical reasoning• Demonstrate deep conceptual understanding of priority concepts	<ul style="list-style-type: none">• Create opportunities for students to understand the “answer” from a variety of access points• Ensure that EVERY student GETS IT before moving on• Get smarter in concepts being taught

What Parents and Care Providers Can Do:

- Ask questions and review homework to see whether your child understands *why* as well as *what* the answer is.
- Provide time for your child to work on math skills at home

Mathematics Shift 5: Rigor- Application

What the Student Does...

- Apply math in other content areas and situations, as relevant
- Choose the right math concept to solve a problem when not necessarily prompted to do so

What the Teacher Does...

- Apply math including areas where its not directly required (i.e. in science)
- Provide students with **real world experiences** and opportunities to apply what they

What Parents and Care Providers Can Do:

- Ask your child to do the math that comes up in daily life

Mathematics Shift 6: Rigor - Dual Intensity

What the Student Does...	What the Teacher Does...
<ul style="list-style-type: none">• Practice math skills with an intensity that results in fluency• Practice math concepts with an intensity that forces application in novel situations	<ul style="list-style-type: none">• Find the dual intensity between understanding and practice within different periods or different units• Be ambitious in demands for fluency and practice, as well as the range of application

What Parents and Care Providers Can Do:

- Show how to apply math in real world situations
- Know and show which math skills to use for which situation

**Word
Walls**

operations
add
addend
sum
difference
subtract
unknown
estimate
equation
strategy
column
row
factor
equal shares
array
multiple
multiply
product
divide
remainder
quotient
digit
greater than
less than

ones place
tens place
hundreds
place
round
pattern
rule
sequence
decreasing
increasing
term
whole
one-half
one-third
one-fourth
one-sixth
one-eighth
numerator
denominator
equivalent
unit fraction
hour
second
minute

quadrilateral
pentagon
hexagon
2-dimensional
sides
vertices
polygon
parallelogram
parallel
edge
congruent
similar
base
face
symmetrical
3-dimensional
curved surface
flat surface
pyramid
cube
cone
cylinder
sphere
rectangular prism



Baseball Jerseys

Bill wants to order new jerseys for his baseball team. He sees the following advertisements for two printing companies, 'PRINT IT' and 'TOP PRINT'. Bill doesn't know which company to choose.

PRINT IT



Get your baseball jerseys printed with your own team names here.
Only \$21 per jersey.

TOP PRINT



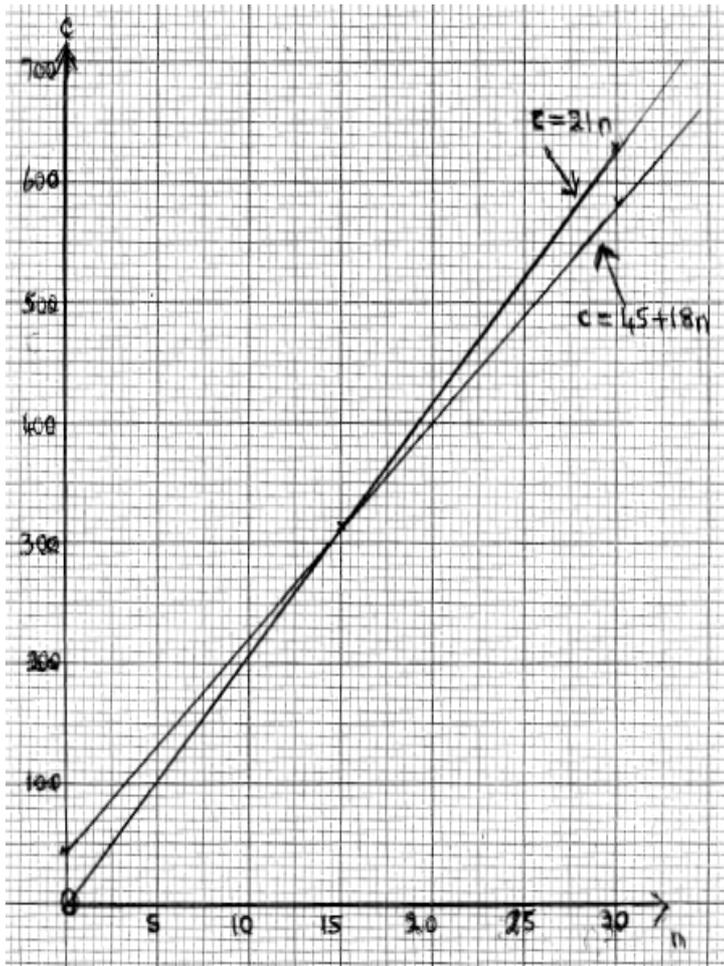
We will print your baseball jerseys - just supply us with your design.
Pay a one-off setting up cost of \$45; we will then print each jersey for only \$18!

VS

Task 1

Give Bill some advice on which company he should buy from.
When should he choose 'PRINT IT'?
When should he choose 'TOP PRINT'? Explain your answer fully.

Students are not directed on how to solve, they come up with their own method of solution.



Number of Jerseys	Cost at 'Print it'	Cost at Top Print
5	\$105	\$135
10	\$210	\$245
15	\$315	\$315 ←
20	\$430	\$405
16	\$336	\$333

Top Print cheaper more than 15 Jerseys.

Print it cost $\$21n$
 Top Print cost $\$45 + 18n$

$$21n = 45 + 18n$$

$$3n = 45$$

$$n = 15$$

$n = 16$ Print it $\$336$ Top Print $\$333$

Task 2

A third company called 'VALUE PRINTING' wants to start trading. It wants its prices to be between those of 'PRINT IT' and 'TOP PRINT'. This company never wants to be the most expensive and never wants to be the cheapest.

Can you complete this poster for the new Company ? Defend your answer mathematically.

VALUE PRINTING



We print baseball jerseys.
Pay a one-off set up cost of \$.....
Then each jersey will cost \$.....

Old Problem: Solve the following system of equations $y = \frac{1}{2}x + 6$ $y = x - 2$ graphically.

Common Core: Developing the “**Habits of the Mind**”

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Turn and Talk: Mathematics

- **What can your after school programs do to support the mathematical instructional shifts that are occurring in the classroom ?**
- **What resources do you need ?**
- **How can we help ?**

Math Night

- Estimation Jar
- Tangrams and Grandfather Tang's Story (Deconstructing Shapes)
- Multiplication and Division themed bugs (4 x 3 legs) (16 / 4 antennae)
- Ordered pair graphs for constellations
- Volume and surface area utilizing nets...take a cube and determine the least amount of cuts needed to create a 2D shape that is not detached.
- Patterns...beads...predict what color would the 100th bead be ?
- Simultaneous Puzzles $\bigcirc + \square = 8$ $\bigcirc - \square = 4$

Additional Resources

All available on EngageNY (www.engageny.org)

- **Common Core State Standards**
- **Publisher's Criteria for ELA and Mathematics**
- **New York State Metrics and Expectations**
- **Video Library-with classroom examples**
- **Parent Resources: Guide to Common Core Standards, Educational Activities**
- **NYS Assessment Resources**
- **ELA and Mathematics Curriculum Modules**
- **Progressions Documents for the Common Core Math Standards University of Arizona –Institute for Math and Education**
- **Illustrative Mathematics**

Thank You!

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