

Next Generation Learning Standards Resources for Implementation

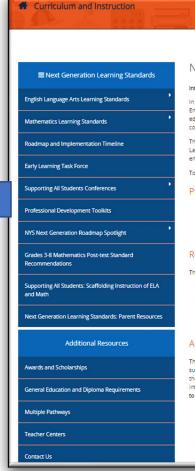
Curriculum Council – Eastern Suffolk BOCES

NYSED Office of Standards and Instruction



ELA Next Gen Resources Website

Supporting Resources



New York State Next Generation English Language Arts Learning Standards

In 2015, New York State (NYS) began a process of review and revision of its current English Language Arts (ELA) Learning Standards adopted in January 2011. The New York State Next Generation English Language Arts Learning Standards (Revised 2017) were developed through numerous phases of public comment as well as virtual and face-to-face meetings with committees consist educators, teachers of English Language Learners/Multilingual Learners and Students with Disabilities, parents, curriculum specialists, school administrators, college professors, and cognitive research. These revised standards reflect the collaborative efforts and expertise among all constituents involved.

The New York State Next Generation English Language Arts Learning Standards (Revised 2017) consist of revisions, additions, deletions, vertical movement, and g Language Arts Standards. They are defined as the knowledge, skills, and understanding that individuals can and do habitually demonstrate over time wh

To compare the changes between the 2011 New York State P-12 Common Core Learning Standards and the 2017 Next Generation andards view the ELA Learning Standards Crosswalks.

Preface and Introductory Documents:

- Preface to the Next Generation P-12 Learning Standards for ELA and Mathematics
- Introduction to the Next Generation P-12 English Language Arts Learning Standards
- Introduction to the Next Generation Early Learning Standards

Revised Learning Standards Documents:

The new revised learning standards for English Language Arts are available at the links below:

- New York State Next Generation English Language Arts Learning Standards
- New York State Next Generation Grades 6-12 Learning Standards for Literacy
- Next Generation English Language Arts Learning Standards: Frequently Asked Questions
- Next Generation English Language Arts Learning Standards Glossary of Terms

At a Glance Standards Documents:

The Next Generation ELA Standards at a Glance provide the progression of standards across grade levels (PK-2, 3-5, 6-8, 9-12). The New York State Education Department created these documents to support curriculum development and instructional design, as well as to increase stakeholders' knowledge of the NYS Next Generation Learning Standards. Educators and families can efficiently view the standards that precede and follow a particular grade level. The grade-level introductions are easily accessible via the links at the top of the at a glance pages. Please note that expenses the standards that precede and follows a particular grade level. introduction includes the range of reading experiences and text complexity expectations for that particular grade. Users are strongly encouraged to familiarize to reading the Next Generation ELA Standards at a Glance.

- PK-2 Next Generation FLA Standards at a Glance 3
- 3-5 Next Generation ELA Standards at a Glance
- 6-8 Next Generation ELA Standards at a Glance 3
- 9-12 Next Generation ELA Standards at a Glance II

Introductory **Documents**

Standards **Documents**

At a Glance



Resource

Next Generation ELA Learning Standards Implementation Timeline

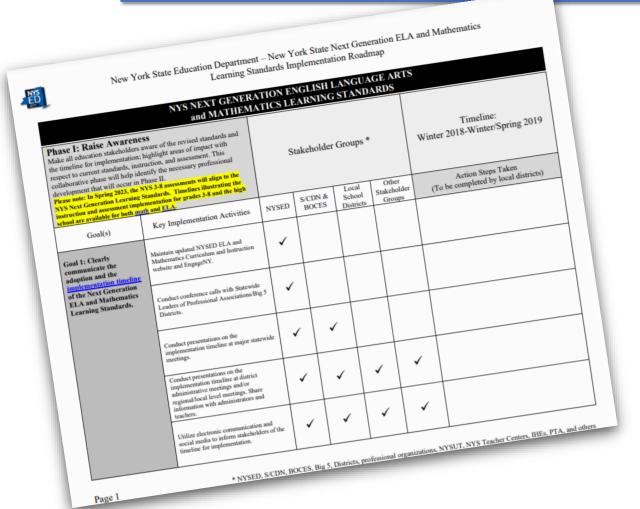


Revised April 2021

New York State Next Generation English Language Arts (ELA) Learning Standards Instruction and Assessment Implementation Timeline

		and Assessment Implementation innerne		
Phase I	Phase II	Phase III		
Raise Awareness	Build Capacity	Full Implementation		
		Ongoing Curriculum & Professional Development		
		Instruction aligned to NYS Next Generation English Language Arts (ELA) Learning Standards begins		
2018	2021-2022	September 2023 for Grade 9 (Grade 10 and Grade 11 remain aligned to NYS P-12 Learning Standards for ELA & Literacy) September 2022 for Grades PK-8 September 2024 for Grade 10 (Grade 11 remains aligned to NYS P-12 Learning Standards for ELA & Literacy) September 2025 for Grade 11 2022-2023 September 2024 for Grade 10 (Grade 11 remains aligned to NYS P-12 Learning Standards for ELA & Literacy) for Grade 11 2023-2026		
April 2018 Release of the NYS Next Generation ELA & Mathematics Learning Standards Implementation	Spring 2022 Last administration of NYS Grades 3-8 state assessments aligned to the NYS P-12 Learning Standards for English Language Arts & Literacy (2010)	Spring 2023 First administration of NYS Grades 3-8 state assessments aligned to the NYS Next Generation English Language Arts Learning Standards June 2026 First administration of ELA Regents Exam aligned to the NYS Next Generation English Language Arts Learning Standards June 2027 Last administration of ELA Regents aligned to the NYS P-12 Learning Standards for English Language Arts Language Arts & Literacy (2010)		
Roadmap		State Level English Language Arts Assessment Development & Implementation		

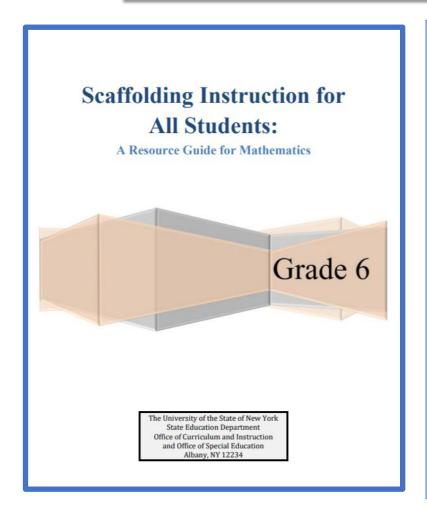
Roadmap Documents

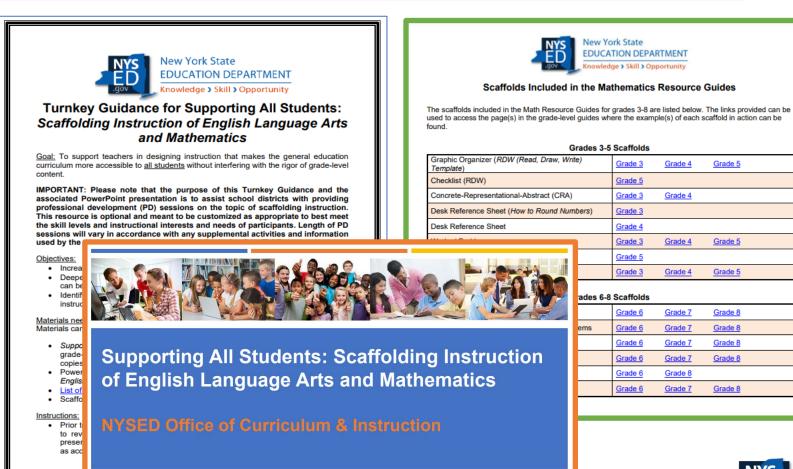


The Roadmap provides goals and activities to help educators prepare for and implement the Next Generation Standards. Documents include:

- A Roadmap FAQ
- A PDF Roadmap
- An editable PDF Roadmap
- A shareable flyer with information and links

Scaffolding Resources – ELA & Math





EDUCATION DEPARTMENT vledge > Skill > Opportunity



EDUCATION DEPARTMENT

Grade 3

Grade 5

Grade 3

Grade 3

Grade 4

Grade 3

Grade 5

Grade 3

Grade 6

Grade 6

Grade 6

Grade 6

Grade 6

ades 6-8 Scaffolds Grade 6

Grade 4

Grade 4

Grade 4

Grade 4

Grade 7

Grade 7 Grade 7

Grade 7

Grade 8

Grade 7

Grade 5

Grade 5

Grade 5

Grade 8

Grade 8

Grade 8

Grade 8

ELA NEXT GENERATION CROSSWALKS

NYSED Next Go	eneration	Literacy Grades 6-8 Crosswalk	2017 Revised ELA S	tandard	
1	THE ELA	Standard		ric textual evidence to primary and secondary	
	2011 60		c a gH 1; Cite specif	primary and secondary	
Standard Code		rific textual evidence to support	eupport analysis		
(2011)	Cite spec	ific textual evidence			
6-8RH1	analysis	ific textual evidence to support of primary and secondary sources.	6-8 RH2: Determin	e the central ideas or rimary or secondary source; ite, objective summary of the om prior knowledge or	
11000	1 _	contral ideas of an amide	information	ite, objective surface or	
	Determ	line the central ideas or information in the central ideas or information in the central ideas or information in the course distinct includes the course distinct includes the course includes.	provide all provid	om prior knowledge or	
6-8RH2	of a pri	imary or secondary source; provide imary or secondary source; provide curate summary of the source distinct curate summary of the source distinct	oninions.	Louistens in a text's	
	an acc	curate summary of the source prior knowledge or opinions.	G. RH3: Identify	key steps in a text's	
11	110	ify key steps in a text's description selated to history/social studies		Grade ELA Crosswalk	
	Ident	ify key steps in a text's descriptions ess related to history/social studies have a bill becomes law, how inte	NISCO 4	stade EDA CIOSSWAIK	
6-8RH3	proc	ess resolutiones law, no	Original	2011 ELA Standard	2017 Revised ELA Standard
11	(e.g.	, now or lowered).	Standard Code	2011 ELA Standard	2017 Revised ELA Standard
	rate	es are raised or lowered). se are raised or lowered). termine the meaning of words and termine the meaning of words and termine the meaning of words and termine are related.	(2011)		
6-8RH4	ohi	es are raised to the meaning of words and termine the meaning of words and termine the meaning of words and termine the meaning the meaning termine the meaning of words and termine the meaning termine the meani	4RF1	There is not a grade 4 star	
10000	vo	cabulary specific to de		Please see preceding informa	
11			4RF2	There is not a grade 4 sta	
	D	escribe normality, comparatively,		Please see precedin	
6-8RH5	10	e.g., seque	4RF3	inform Know and apply grade-level phonics and	
11	-+	e.g., sequentily aspects of a text that reve-	4KF3	word analysis skills in decoding words.	4RF3: Know and apply grade-level phonics and word analysis skills in decoding words.
6-8RH6	1	identify aspects of a text author's point of view or purpose author's point of view or purpose		a. Use combined knowledge of all letter-	4RF3a: Use combined knowledge of all letter-
1/0	1			sound correspondences, syllabication	sound correspondences, syllabication
11	1			patterns, and morphology (e.g., roots and affixes) to read accurately	patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar
2017		Integrate visual information graphs, photographs, videos, or graphs, formation in print and di		unfamiliar multisyllabic words in	multisyllabic words in context and out of
6-8RH7				context and out of context.	context.
		other information in print Other information in print Distinguish among fact, opinion, distinguish in a text.			
6-8RH8		Distinguish among fact, op- reasoned judgment in a text.			
11		Analyze the relationship between the	4RF4	Read with sufficient accuracy and fluency to	
6-8RH9		analyze the relationship and secondary source on the		support comprehension. a. Read grade-level text with purpose and	accuracy and fluency to support comprehension.
0.0		Buthe end of grade /social s		understanding,	4RF4a: Read grade-level text across genres
6-8RH	10			b. Read grade level prose and poetry	orally with accuracy, appropriate rate, ar
1/0-		comprehend history/success the grades 6–8 text complex independently and proficies		orally with accuracy, appropriate rate, and expression on successive readings.	expression on successive readings. 4RF4b: Use context to confirm or self-correct
11		independently unit		c. Use context to confirm or self-correct	word recognition and understanding,
11-				word recognition and understanding,	rereading as necessary.
11		\		rereading as necessary.	
		Cite specific textual evide	4R1	RL: Refer to details and examples in a text	4R1: Locate and refer to relevant details and
11		Cite specific textual canalysis of science and te		when explaining what the text says	evidence when explaining what a text says
6-8	RST1	analysis of science		explicitly and when drawing inferences	explicitly/implicitly and make logical
				from the text.	inferences. (RI&RL)
				RI: Refer to details and examples in a text	
1				when explaining what the text says	
				explicitly and when drawing inferences from the text.	
			4R2	RL: Determine a theme of a story, drama,	4R2: Determine a theme or central idea of text
				or poem from details in the text;	and explain how it is supported by key details;
				summarize the text.	summarize a text. (RI&RL)
w York St				RI: Determine the main idea of a text and explain how it is supported by key details;	summarize a text. (RI&RL)

EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

- ☐ To compare the changes between the 2011 New York State P-12 Common Core Learning Standards for ELA and the 2017 Next Generation English Language Arts Learning Standards.
- ☐ Created for grades P-12
- ☐ Literacy Crosswalks for grades 6-12

ELA AT A GLANCE STANDARDS DOCUMENT

- ☐ Designed to view the standards that precede and follow a particular grade level.
- ☐ The grade-level introductions are easily accessible via the links at the top of the "at a glance" pages.



PK-2 Next Generation ELA Standards at a Glance

PK-2 Reading Standards (Literary and Informational Text)

Review the PK, K, 1th, and 2th grade ELA introductions for information regarding: guidance and support, range of student reading experiences, text complexity, English language learners/multilingual learners, and students with disabilities.

Key Ideas and Details

PK	K	1	2
	KR1: Develop and answer questions about a text.	1R1: Develop and answer questions about key ideas and details in a text.	2R1: Develop and answer questions to demonstrate an understanding of key ideas and details in a text.
	KR2: Retell stories or share key details from a text.	1R2: Identify a main topic or central idea in a text and retell important details.	2R2: Identify a main topic or central idea and retell key details in a text; summarize portions of a text.
about characters, major events, and	KR3: Identify characters, settings, major events in a story, or pieces of information in a text.	1R3: Describe characters, settings, and major events in a story, or pieces of information in a text.	2R3: In literary texts, describe how characters respond to major events and challenges. In informational texts, describe the connections among ideas, concepts, or a series of events.

Craft and Structure

crujt una structure			
PK	K	1	2
PKR4: Exhibit an interest in learning new vocabulary.	KR4: Identify specific words that express feelings and senses.	1R4: Identify specific words that express feelings and senses.	2R4: Explain how words and phrases in a text suggest feelings and appeal to the senses.
PKR5: Interact with a variety of genres.	KRS: Identify literary and informational texts.	1R5: Identify a variety of genres and explain major differences between literary texts and informational texts.	2R5: Describe the overall structure of a text, including describing how the beginning introduces the text and the ending concludes the text.
PKR6: Describe the role of an author and illustrator.	KR6: Name the author and illustrator and define the role of each in presenting the ideas in a text.	1R6: Describe how illustrations and details support the point of view or purpose of the text.	2R6: Identify examples of how illustrations, text features, and details support the point of view or purpose of the text.

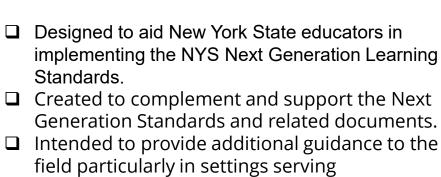
Integration of Knowledge and Ideas

PK	K	1	2
PKR7: Describe the relationship	KR7: Describe the relationship between	1R7: Use illustrations and details in	2R7: Demonstrate understanding of
between illustrations and the text.	illustrations and the text.	literary and informational texts to	story elements and/or topics by
		discuss story elements and/or topics.	applying information gained from
			illustrations or text features.
Begins in Kindergarten	KR8: Identify specific information to	1R8: Identify specific information an	2R8: Explain how specific points the
	support ideas in a text.	author or illustrator gives that supports	author or illustrator makes in a text are
		ideas in a text.	supported by relevant reasons.
PKR9: Make connections between self,	KR9: Make connections between self,	1R9: Make connections between self	2R9: Make connections between self
text, and the world.	text, and the world.	and text (texts and other people/world).	and text (texts and other people/world).

NYSED • PK-2 Next Generation ELA Standards at a Glance • 1

ADVANCED LITERACY BRIEFS







Professional Development Toolkits

Provide prepackaged instructional steps and guidelines for educators and administrators.

Facilitate training on various aspects of the Next Generation Learning Standards.





Turnkey Guidance for Developing a Standards-Based IEP

<u>Goal</u>: To provide educators with essential questions that will guide the transition to the NYS Next Generation Learning Standards and the development of standards-based IEPs.

Materials needed:

- <u>The Standards-Based IEP Process PowerPoint Presentation</u>
- Next Generation English Language Arts (ELA) Learning Standards
- Next Generation Mathematics Learning Standards

Instructions

- Prior to the presentation, send attendees copies of the materials. Encourage participants to review the materials in advance and bring print/digital copies to the session.
- Instruct participants beforehand to prepare by bringing a learning standard for discussion from their respective grade level from math or ELA.
- · Review the PowerPoint prior to presentation and prepare talking points for slides
- After the presentation, share the list of Additional Resources located at the end of this
 document.

PART 1: KEY PRINCIPLES OF AND STEPS TO CREATE A STANDARDS-BASED IEP

<u>Directions</u>: Refer to the following notes for guidance for each of the following slides. Walk the participants through each slide, then pause after the 11th slide for discussion questions for this section.

Slide 1: Explain the following:

This presentation is a guide for developing an IEP with the incorporation of gradelevel standards to help students receive specially designed instruction necessary to access their grade level curriculum. While some of the documents in this presentation, as well as the additional resources, make mention of the 2011 Common Core standards, the guidance is equally applicable to the Next Generation Standards.

- Slide 2: Kathy Gomes and Mary Ann White designed this presentation and originally delivered it at the Next Generation Learning Standards Conference in November, 2017.
- Slide 3: Provides a definition of a standards-based IEP
- Slide 5: This slide introduces the Blueprint for Improved Results for Students with Disabilities. Explain that the blueprints were designed, in consultation with stakeholders, as a statewide framework of expectations to lay the foundation for improved instruction and results for students with disabilities, which includes preschool students with disabilities and school-age students with any of the 13 disability categories of autism, blindness, deafness, deaf-blindness, emotional disabilities, hearing impairment, intellectual disability, orthopedic impairments, multiple disabilities, health impairments, speech and language impairment, traumatic brain injury and visual impairment.

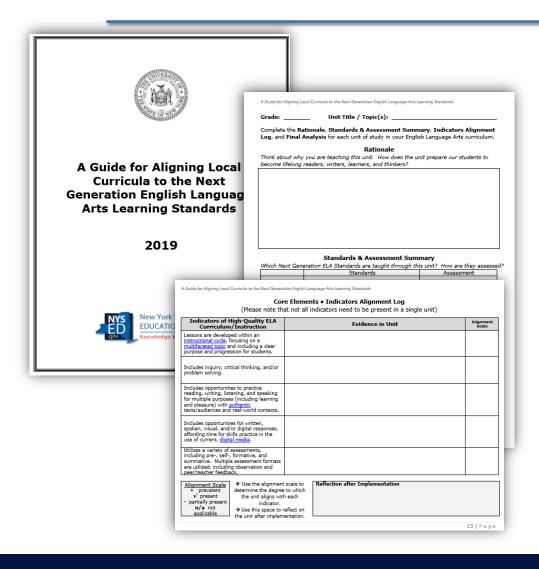
Slide 6: These seven principles, from the Blueprint for Improved Results, follow these essential understandings:

Available for...

- * Advanced Literacies Briefs Guiding Document
- * <u>Family Engagement Toolkit for ELL Standards</u> <u>Support</u>
- * Guide to Aligning Curricula to the Next Generation Learning Standards (ELA & Math)
- * Next Gen Standards Introduction (<u>ELA</u> & <u>Math</u>)
- * Next Gen Math Crosswalk
- * Next Gen Math Teacher-Support Features
- * Standards and the Instructional Cycle: a P-3
 Resource
- * Standards-Based IEP Toolkit
- * Standards, not Standardization: The Early Learning Standards and Diverse Populations

A Guide for Aligning Local Curricula to the Next Generation Learning Standards





- Supports curriculum review or design for alignment to the revised standards
- Includes:
 - Purpose
 - Part I: Learning Standards and Curriculum
 - Overview of the practices
 - Part II: Aligning and Creating Curricular Resources
 - Getting started
 - Determining a curriculum
 - Curriculum Reflection Tool
 - Glossary

Awareness of the Changes (Math) Standards The Results of Standards Review: What happened?

Movement of Standards to different grade levels to improve the focus of major content and skills for each grade-level and course; providing more time for students to develop deep levels of understanding of grade-level appropriate content;

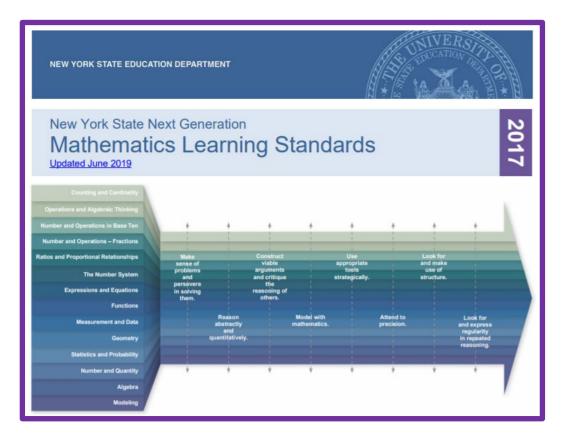
Clarification of Standards to make expectations more clearly defined, without limiting instructional flexibility;

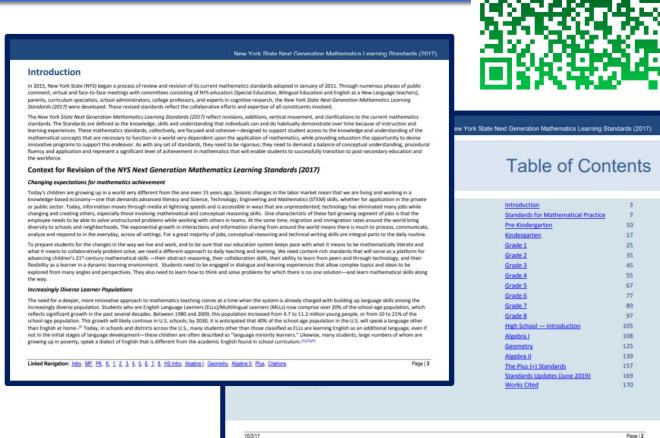
Addition and Consolidation of Standards to improve coherence, focus and reduce redundancy amongst grade levels;

Maintain the Rigor of the Standards by improving the balance of conceptual understanding, procedural skill and application;

Provide opportunities for students to **Explore** certain standards to ensure that the standards are grade-level appropriate. Exploring a standard allows a student to be introduced to and learn a concept without the expectation of mastering the concept at that grade level.

Next Generation Mathematics Learning Standards Document

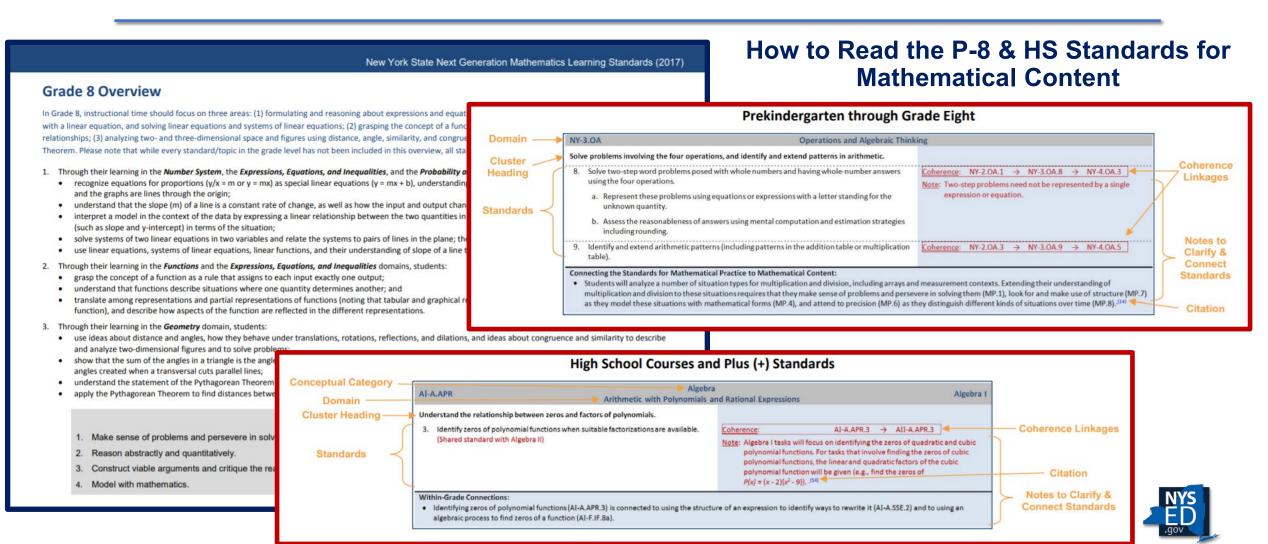




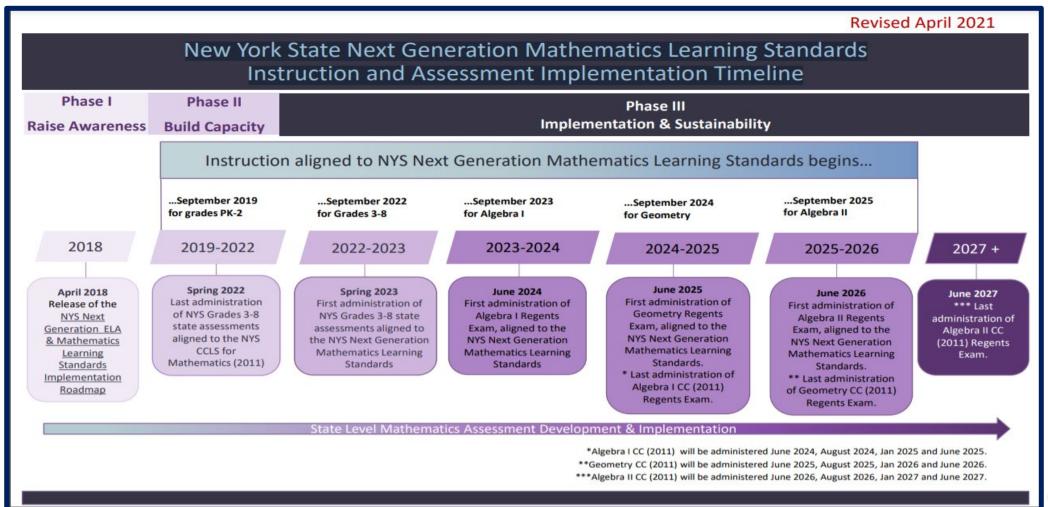
New York State Next Generation Mathematics Learning Standards



Within the NGMLS document



NYS Next Generation Mathematics Learning Standards Instruction and Assessment Implementation Timeline





Next Generation Mathematics Learning Standards Crosswalks & Snapshots

Grade 6 Snapshot



Standards New to Grade 6

NY-6.G.5 Use area and volume models to explain perfect squares and perfect cubes. NY-6.SP.1b Understand that statistics can be used to gain information about a populati sample is representative of that population.

NY-6.SP.1c Understand that the method and sample size used to collect data for a part valid inferences can be drawn about the population. Generate multiple samples (or sim NY-6.SP.6 Understand that the probability of a chance event is a number between 0 an probability near 0 indicates an unlikely event, a probability around 1/2 indicates an even NY-6.SP.7 Approximate the probability of a simple event by collecting data on the cha frequency given the probability.

NY-6.SP.8 Develop a probability model and use it to find probabilities of simple event sources of the discrepancy.

NY-6.SP.8a Develop a uniform probability model by assigning equal probability to all NY-6.SP.8b Develop a probability model (which may not be uniform) by observing fro

Standards Moved from Grade 6

No standards moved.

Highlights/Instructional Considerations

NY-6.RP.2 Unit rates are limited to non-complex fractions.

NY-6.RP.3 Students may utilize a strategy of their choice when solving real-world and

NY-6.RP.3b Unit rate problems may include unit pricing and constant speed.

NY-6.RP.3c Percent problems involve finding a percent as a rate per 100, finding the v

NY-6.RP.3d Conversions are not across different measurement systems.

NY-6.NS.1 Students may utilize a strategy of their choice when interpreting, computing

NY-6,NS.2 (and 3) Any standard algorithm may be used for the division of multi-digit NY-6.EE.2b Added "difference" as one of the mathematical terms.

NY-6,EE.2c Order of operations, expressions may or may not include parentheses. Exp

NY-6.EE.7 All four single-step equations are included. See standards document for an NY-6.EE.8 Added $x \ge c$ and $x \le c$. Compound inequalities could be introduced here.

NY-6.EE.9 Students will be given an equation (no longer need to write) and will need

NY-6.G.1 Replaced special quadrilaterals with trapezoids; using the inclusive definition

NY-6.G.4 Clarification of three dimensional figures for nets/surface area; right rectang

	New York State Next Generation Mathematics Learning Standards						
	Grade 2 Crosswalk						
	Operations and Algebraic Thinking						
-	Cluster	NYS P-12 CCLS	NYS Next Generation Learning Standard				
pro add	present and solve oblems involving dition and otraction.	2.OA.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.	NY-2.OA.1a Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. e.g., using drawings and equations with a symbol for the unknown number to represent the problem. NY-2.OA.1b Use addition and subtraction within 100 to develop an understanding of solving two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. e.g., using drawings and equations with a symbol for the unknown number to represent the problem.				
	d and subtract hin 20.	2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. Note: See standard 1.OA.6 for a list of mental strategies.	NY-2.OA.2a Fluently add and subtract within 20 using mental strategies. Strategies could include:				



NGMLS Glossary of Verbs

Explore	Explore requires the student to learn the concept in the stand activities. Repeated experiences with these concepts, with in
	Explore indicates that the topic is an important concept that toward mastery in later grades. However, mastery at the cur standard.
Express	Express requires students to change an amount or quantity i
Fluent	The word <i>fluent</i> is used in the Standards to mean "fast and a mixture of just knowing some answers, knowing some answers from the use of strategies.
	For additional information refer to pages 18-19 of Progressio in Mathematics (draft)
	Principles and Standards for School Mathematics states, "Co efficient and accurate methods for computing. Students exhibited demonstrate flexibility in the computational methods they cho methods, and produce accurate answers efficiently.
	Required Grade Level Fluencies for Grades K-8:
	Required grade level fluencies are available from EngageNY Standards for Mathematics.
	Standards that are recommended fluencies at the High Scho standards for Algebra I, Algebra II and Geometry.
Generate	Generate requires students to create something by the applic or operations.
Identify	Identify requires students to recognize a mathematical concept of

Word	Definition/context of use in the standards
Analyze	Analyze requires students to examine carefully, take apart mathematically, and break down into components or essential characteristics to identify causes, key factors, and possible results.
Apply	Apply requires a student to use mathematical knowledge in a variety of situations.
Calculate	Calculate requires a student to determine an answer.
Classify	Students <i>classify</i> by determining characteristics (attributes) that objects (numbers, shapes, etc.) share, and characteristics (attributes) they don't share.
Compare	Students <i>compare</i> by examining two or more objects, numbers or mathematical situations in order to determine similarities and differences.
Compose	Compose requires students to form or make something (numbers, functions, sets, etc.) by combining parts.
Convert	Students <i>convert</i> by changing the form (e.g. measurement, different units) without a change in the size or amount.

Downloadable Resource: PDF Version of this Glossary



NGMLS Unpacking Documents



A Guide for Unpacking the New York State Next Generation Mathematics Learning Standards

The Unpacking Document provides educators with a ten conversations about what they want their students to ke is not a lesson plan, but rather an analysis of a grade-lev around the intent and rigor of the standard(s) will aid ed may choose to unpack all standards for a specific grade I standards in adjacent grade(s), providing educators the progressions of mathematical concepts so that curricula unpacking process should include teachers from other d lingual, and other content areas (e.g., science, art, etc.), further support and inter-disciplinary connections.

The Unpacking Document is arranged in three sections, the unpacking process: (1) Analyzing How the Standard I Learning Targets; (3) Identifying Foundational Understar the Standards for Mathematical Practice; and (5) Design the Content Standard and the Attainment of the Learnin



New York State Next Generation Mathematics Learning Standards Unpacking Document (DRAFT)

GRADE	DOMAIN:	
CLUSTER:		
Grade Level	Standard:	

New York State Next Generation Mathematics Learning Standards Unpacking Document (DRAFT)

GEOMETRY DOMAIN: Similarity, Right Triangles, and Trigonometry

CLUSTER: Apply trigonometry to general triangles.

With the introduction of the formula A=1/2 ab $\sin(C)$, students discover how prior knowledge of trigonometric ratios can help with area alculations in cases where the measurement of the height is not provided. In order to determine the height in these cases, students must draw an altitude to create right triangles within the larger triangle. With the creation of the right triangles, students will set up the necessary trigonometric nts will carefully connect the meanings of formulas to the diagrams they

Section I

Step 1: Analyzing How the Standard Relates to its Domain and Cluster

Educators should understand how an individual standard relates to the key ideas and concepts of the individual cluster as well as the other clusters of standards that comprise the domain for that grade level. Educators should also keep in mind that standards from different clusters and domains can be closely related. These standards are identified as "within grade-level connections." Additionally, educators will want to examine related clusters in adjacent grade levels to assist in developing a solid sense of the progression of skills. Resources for understanding how the grade-level standards relate to one another include, but are not limited to:

- Progressions Documents for the Common Core Math Standards
- . EngageNY Curriculum Module (and Topic) Overviews (Introductory material provided in the beginning of each module and its sections) Note: The PreK-Grade 5 Math Curriculum Map, Grades 6-8 Math Curriculum Map, Grades 9-12 Math Curriculum Map, the CCLS Checklist for a Story of Units, CCLS Checklist for a Story of Ratios, and CCLS Checklist for Algebra I each provide an at-a-glance view of where each standard is addressed in the EngageNY modules.
- Achieve the Core Coherence Map

Section II

Step 2: Identifying Learning Targets

Learning targets are brief, concise statements written in student-friendly language that describe what a student can do when demonstrating mastery of the content standard. Attention should be given to the nouns and verbs used in the standard, and both should be reflected in the learning targets. The learning targets for a standard should be observable and measurable. The Glossary of Verbs Associated with the NYS Next Generation Mathematics Learning Standards contains a list of verbs that appear throughout the Mathematics Standards and are explained in the context in which they are used.

Step 3: Identifying Foundational Understanding

The NYS Next Generation Mathematics Learning Standards were developed with a purposeful sequencing of learning expectations across multiple developmental stages, ages, or grade levels. Identifying foundational understanding provides educators with an excellent insight into the relevance of a standard, its role at a particular level (focus), and how other levels continue to develop this standard (coherence). Pertinent foundational mathematical vocabulary should also be listed in this section. Resources that aid in identifying foundational knowledge include, but are not limited to:

A Guide for Unpacking the New York State Next Generation Mathematics Learning Standards

PERFORMANCE/KNOWLEDGE TARC (measurable and observable)

ASPECTS OF RIGOR

Conceptual

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.

Construct viable arguments and critique the reasoning of 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.

New York State Next Generation Mathematics Learning Standards Unpacking Document (DRAFT)

GRADE: 7 DOMAIN: Ratio and Proportional Reasoning

CLUSTER: Analyze proportional relationships and use them to solve real-world and mathematical problems Students build upon their reasoning about ratios, rates, and unit rates to formally define proportional relationships and the constant of oportionality. Reasoning is extended about ratios and proportional relationships by computing unit rates for ratios and rates specified by rational numbers. Their analysis is applied to relationships given in tables, graphs, and verbal descriptions. Students relate the equation of a

NY-7.RP.2 Recognize and represent proportional relationships between quantities

NY-7.RP.2a Decide whether two quantities are in a proportional relationship.

Note: Strategies include but are not limited to the following: testing for equivalent ratios in a table and/or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

portional relationship to ratio tables and to graphs and interpret the points on the graph within the context of the situation

NY-7.RP.2d Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the

PERFORMANCE/KNOWLEDGE TARGETS (measurable and observable)

- Analyze ratios in a table or diagram to determine if the ratios are equivalent and if possible, identify the constant of proportionality/unit
- · Calculate the constant of proportionality/unit rate given a verbal description of a proportional relationship
- Graph ratios on a coordinate plane to determine if the ratios are proportional by observing if the graph is a straight line through the origin
- Identify the constant of proportionality/unit rate given a graph of a proportional relationship. Using a graphical representation of a proportional relationship in context, explain the meaning of any point (x, y), including (0,0).
- . Explain that the y-coordinate of the ordered pair (1, r) corresponds to the unit rate and explain its meaning in context.
- · Write and explain an equation that models a proportional relationship between two quantities.
- . Explain what the constant of proportionality means in the context of a given situation

ASPECTS OF RIGOR Procedural Conceptual Application

MATHEMATICAL PRACTICES

- Make sense of problems and persevere in solving ther Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others. Model with mathematics.
- Look for and make use of structure.
- FOUNDATIONAL
- UNDERSTANDING NY-6.RP. Ta Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the

In the Large and a close to equivariant tanks relating quantities with whole manuscribes assumements, and missing values in the tables, and play the pairs of values on the coordinate plane. Use tables to compare ratios, $N-4.RP_{\rm c} = 0.00$ by the pairs of values on the coordinate $N-4.RP_{\rm c} = 0.00$ by the pair of values N=q for cases in which ρ , q, and x are all nonnegative rational numbers.

NY-6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another. Given a NT-9.4E-9 Use variables to represent two quantities in a rear-word problem that change in real-borsons to one another, unvein a verbal context and an equation, identify the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables and relate these to) to find the area of any triangle by drawing an auxiliary line from a vertex

NCE/KNOWLEDGE TARGETS urable and observable

 $=\frac{1}{a}ab\sin(C)$.

product of two side lengths times the sine of the included angle.

SPECTS OF RIGOR

Conceptual

d persevere in solving them.

and critique the reasoning of others

toids, and other polygons by composing into rectangles or decomposing into ese techniques in the context of solving real-world and mathematical problems atical problems involving area of two-dimensional objects composed of triangles

crity, side ratios in right triangles are properties of the angles in the triangle, nd tangent ratios for acute angles.

t, the Pythagorean Theorem and properties of special right triangles to solve right



NGMLS Pk-8 Glossary



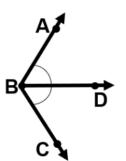
Disclaimers and Notices

New York State Next Generation Mathematics Learning Standards GLOSSARY

Grades PreK - 8

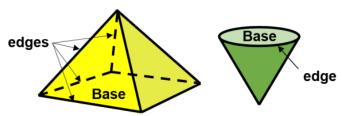
angle bisector A line, line segment, ray, or plane that divides an angle into two congruent angles.

Example: $\angle ABC$ is bisected by ray BD therefore $\angle ABD \cong \angle CBD$.



edge The boundary where a base and a lateral face, a base and lateral surface(s), two lateral faces, or two lateral surfaces of a three-dimensional figure intersect.

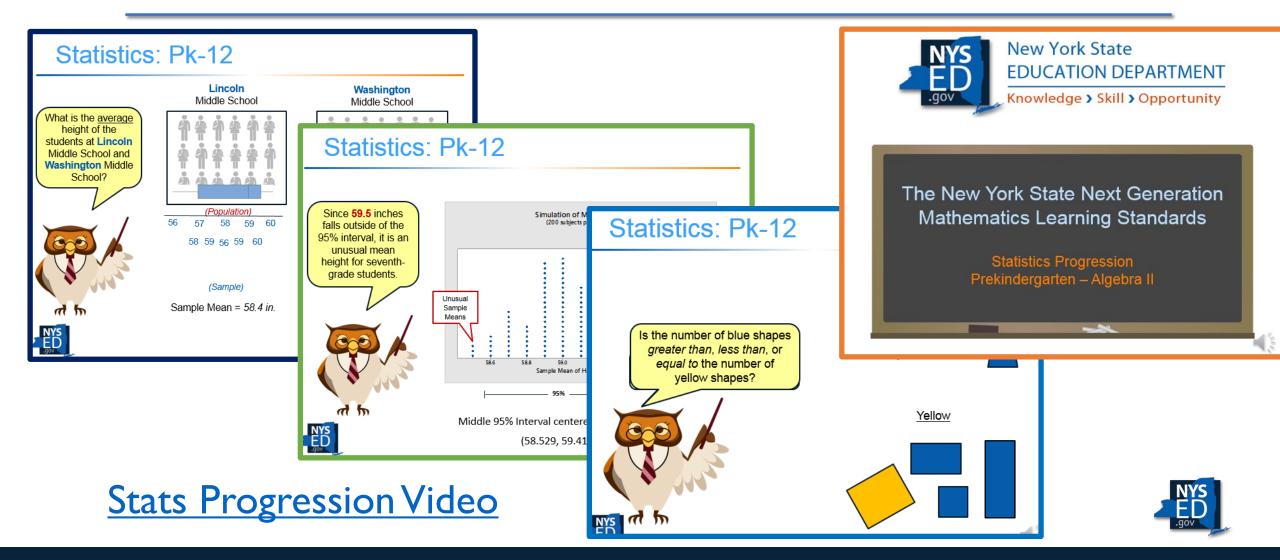
Examples:



<u>A</u>	<u>F</u>	<u>L</u>	Q	<u>V</u>
<u>B</u>	<u>G</u>	<u>M</u>	<u>R</u>	<u>w</u> <u>x</u>
<u>C</u>	<u>H</u>	<u>N</u>	<u>S</u>	<u>X</u>
<u>D</u>	1	<u>O</u>	Ī	<u>Y</u>
<u>E</u>	<u>K</u>	<u>P</u>	<u>U</u>	<u>Z</u>



Statistics Progression Video & Toolkit



NGMLS Post-test Standard Designations

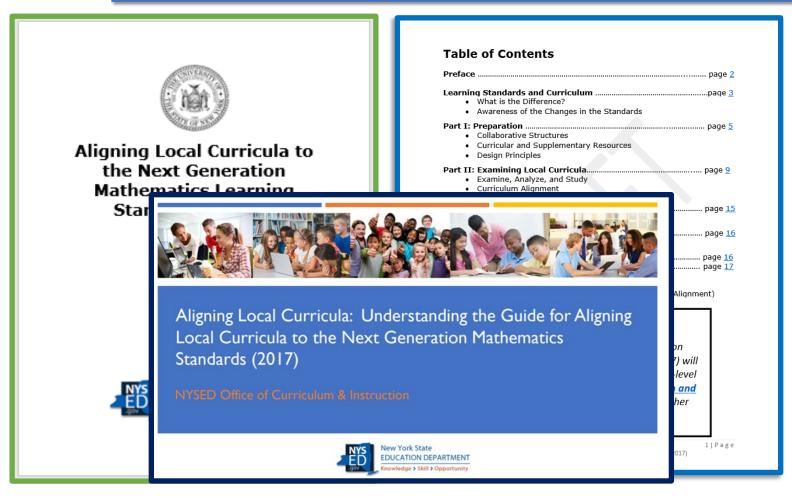
- Grade 3: Scaled pictograph/bar graph (NY-3.MD.3) (Additional)
- Grade 5: Order of Operations Standards (NY-5.OA.1 and 2) (Additional)
- Grade 6: All Probability and Statistics
- Grade 7: Area and Circumference of a Circle (NY-7.G.4)
 (Additional)
- **Grade 8:** Scientific Notation (NY-8.EE.3 and 4), Linear Systems of Equations (NY-8.EE.8)

Post-test content
(at teacher's discretion)
may be introduced at
various points through
out the year. Then,
reinforced during the
remaining months of
school.

Post-test Standards Designations



Guide to Aligning Local Curricula & Toolkit



- Curriculum decisions are locally determined
- Optional resource for school districts to utilize.
- Designed to assist districts in the curriculum alignment process.
- Empower educators to do the necessary alignment work.



Suggested Breakdown of Instructional Time

- Planning units of study

 quality instructional &
 culturally responsive sustaining practices
- Teacher preference and flexibility
- Standards-based curriculum – curriculum & instruction are locally determined



Next Generation Mathematics Learning Standards: Suggested Breakdown of Instructional Time





- Individualized math instruction – prioritizing the needs of all students (ELLs, MLLs, SWDs, students who need extra support)
- Using appropriate scaffolds when needed



Arrangement of Information

Grade 4:

In Grade 4, instructional time should focus on three areas:

- developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends;
- (2) developing an understanding of fraction equivalence, addition, and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and
- (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

Suggested Instructional Time Percentages for Grade 4 by Domain:

Operations and Algebraic Thinking	Number and Operations in Base Ten	Number and Operations – Fractions	Measurement and Data	Geometry	
15% - 25%	20% - 30%	20% - 25%	15% - 25%	10% - 15%	

Notes/Considerations:

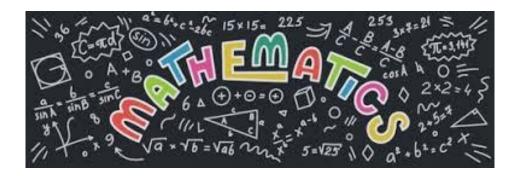
The instructional time percentage range in the **Geometry** domain does not indicate that the standards are less important. The grade 4 **Geometry** standards, which involve working with lines and angles and classifying shapes, cohesively connect the **Geometry** standards from Grade 3 and supports student work along the progression into Grade 5 and through the high school course of Geometry.

Please Note:

The Grade 4 Suggested Percentage of Instructional Time Ranges consider instruction for a complete school year from September – June. These Suggested Percentage of Instructional Time Ranges do not necessarily reflect the Grade 4 assessment blueprint. Certain concepts may take more instructional time to develop within a classroom to achieve the expectation of the standards than may be evidenced on a grade-level State assessment.

Grade-level/Course Foci

Suggested Instructional Time Percentages by Domain



Notes/Considerations

Please Note:



NGMLS Webinar – Now posted!



Recorded webinar includes:

- How to navigate the Next
 Generation Mathematics Learning
 Standards webpage and where the
 resources for implementation are
 housed
- Additional resources from the Office of State Assessment (OSA)

Next Generation Mathematics Learning Standards Implementation Resources Presentation Slides

- this resource provides a slide-by-slide listing of all the resources covered in the webinar, including helpful descriptions, information, and links.



Expanded Math Access Program

- State initiative to promote the math fluency and the love of math in K-5 students across New York.
- Not a curriculum; Curriculum decisions are locally determined
- Online, standards-based math games and activities at no cost to districts; standards correlation document available
- Optional program with flexible use
- Use of free resource is not a requirement for districts; an additional asset to promote mathematical thinking and fluency

FIRST IN MATH®

Energizing Every Child to Learn, Love and Live Math®



Until 6/30/2025



PAEMST Announcement

2022-2023 PAEMST Award Cycle grades 7-12 educators

Nominations are open!

End January 9th, 2023

Applications are now open!

Deadline: February 6th, 2023

The Nation's Highest Honors for Teachers of Science, Technology, Engineering, and Mathematics (STEM, including Computer Science)

Please visit www.paemst.org for more information.



NGLS Parent Brochure – ELA & Math

A Parent's Guide to the NYS Next Generation ELA & Math Learning Standards





A Parent's Guide to the New York State Next Generation ELA & Math Learning Standards





What are the Next Generation Learning Standards?

The Next Generation Learning Standards are the educational goals for all of New York State's students from prekindergarten through grade 12 in English Language Arts and Mathematics.

Why were the standards revised?

The standards were revised to ensure they are appropriate for students' grade levels and reflect what students should know and be able to do in math and ELA.

When will the Next Generation Standards be implemented?

Full implementation of the NYS Next Generation Learning Standards begins during the 2022-2023 school year for prekindergarten through grade 8. The implementation timeline can be found at http://www.nysed.gov/curriculuminstruction/next-generation-learningstandards-and-assessment-implementationtimeline.

How will the standards be assessed?

While teachers assess standards daily in their classrooms, students will also be assessed on the Next Generation Learning Standards beginning in spring of 2023 on the Grades 3-8 New York State ELA and Mathematics Assessments.

How can I learn more?

You can learn more about the <u>Next</u> <u>Generation ELA and Mathematics Learning</u> <u>Standards</u> by talking to your child's teacher or visiting www.nysed.gov/next-generation-learning-standards.

Parent Resources

Supporting Learning at Home



Next Generation Learning Standards in English Language Arts & Mathematics

www.nysed.gov/next-generation-learningstandards

New York State Parent Teacher Association (PTA) Parent Resources

nyspta.org/home/parent-resources/

Resources for Parents of Students with Disabilities

www.p12.nysed.gov/specialed/quality/ parents.htm

Multilingual Learner/English Language Learner Parent Resources

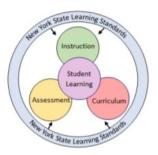
www.nysed.gov/bilingual-ed/englishlanguage-learnermultilingual-learner-parentresources

New York State Education Department Office of Curriculum & Instruction

www.nysed.gov/curriculum-instruction Email: EMSCURRIC@nysed.gov Phone: (518) 474-5922

Standards and My Child's Classroom Learning





Standards

"What do we need to learn?"

tandards are

- goals for New York State students
- organized by subjects and grade levels
 the learning intended to be accomplished by the end of a specific
- school year
- approved by the New York State Board of Regents

Example of a Kindergarten Math Standard: Duplicate and extend simple patterns using concrete objects. Ex: Colored blocks or tiles.

Curriculum

"What are we learning?"

. 11

 the content, concepts, and skills students will learn to enable them to meet the standards

· determined by individual school districts

Example: locally developed units of study, such as a unit on poetry or multiplication of two-digit numbers.

Instruction

Assessment

"How are we learning?"

"What have we learned?"

What should we do

Instruction is

- the approaches and strategies an educator chooses to teach the curriculum
- based on the needs of students
- determined by classroom teachers and districts

Example: small group instruction or cooperative learning

Assessments:

- · are processes used to learn about student progress
- guide and inform teaching
- are determined by local districts and/or teachers, as well as New York State

* New York State administers:

- . ELA and Mathematics Assessments in Grades 3-8
- Science Assessments in Grades 4 & 8
- Regents Examinations
- English as a Second Language Achievement Test (NYSESLAT)
- Alternate Assessment (NYSAA)

Example: classroom observation of a student recognizing patterns or analyzing a student's classroom writing sample



Grades 3 – 8 Performance Level Descriptions

New York State Testing Program
Next Generation Mathematics Test

Performance Level Descriptions

GRADE 8

Performance level descriptions (PLDs) help communicate to the public the specific knowledge and skills expected of proficiency of a learning standard. The PLDs serve several pu assessment. They are the foundation of rich discussion are perform at higher levels and to explain the progression of le are also crucial in explaining student performance on the NY connection between the scale score, the performance level, typically demonstrated at that level.

Policy Definitions of Performance Levels

For each subject area, students perform along a continuum of to meet the demands of the Learning Standards for English There are students who excel in standards, students who are proficient, and students who are below proficient. New York classify student performance into one of four levels based on thas demonstrated. These performance levels are defined as:

NYS Level 4

Students performing at this level **excel** in standards for their gr skills, and practices embodied by the Learning Standards **sufficient** for the expectations at this grade.

NYS Level 3

Students performing at this level are **proficient** in standards knowledge, skills, and practices embodied by the Learnin **sufficient** for the expectations at this grade.

NYS Level 2

Students performing at this level are partially proficient in demonstrate knowledge, skills, and practices embodied by considered partial but insufficient for the expectations at this g 2 are considered on track to meet current New York high schol not yet proficient in Learning Standards at this grade.

NYS Level 1

Students performing at this level are **below proficient** in may demonstrate **limited** knowledge, skills, and practices em that are considered **insufficient** for the expectations at this g



Past Grades 3-8 Tests

Grades 3-8 Test Schedules

Grades 3-8 Test Manuals

Grades 3-8 English Language Arts and Mathematics

Science

Scoring Information

Field Testing

Technical Information and Reports

Grades 3-8 ELA and Mathematics Tests

- Past Grades 3-8 Released Questions
- Memo: Spring 2021 Grades 3–8 English Language Arts and Mathematics Tests 🖥
- 2021 Grades 3-8 English Language Arts and Mathematics Test Manuals, Educator Guides and Teacher's Directions
- 2019 Grades 3-8 English Language Arts and Mathematics Score Report and Understanding Report Samples
- Grades 5-8 Mathematics Reference Sheets (All Languages)

Next Generation Learning Standards

- Next Generation Learning Standards English Language Arts Performance Level Descriptions
- Next Generation Learning Standards Mathematics Performance Level Descriptions

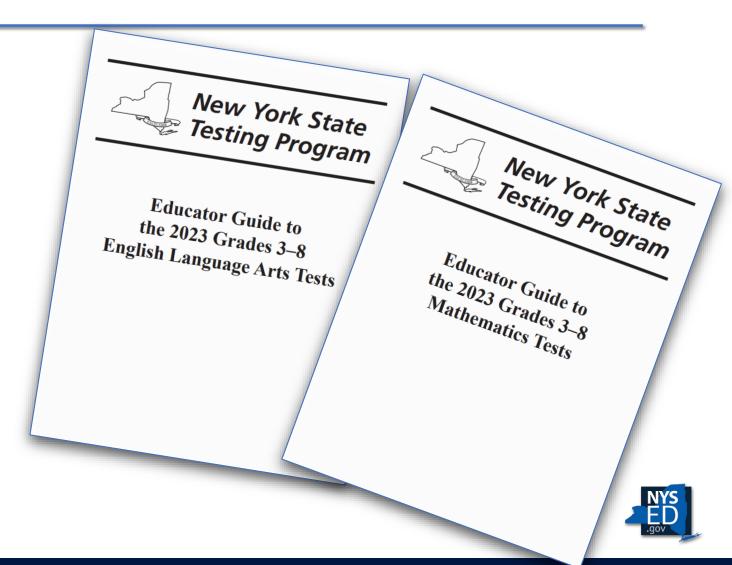




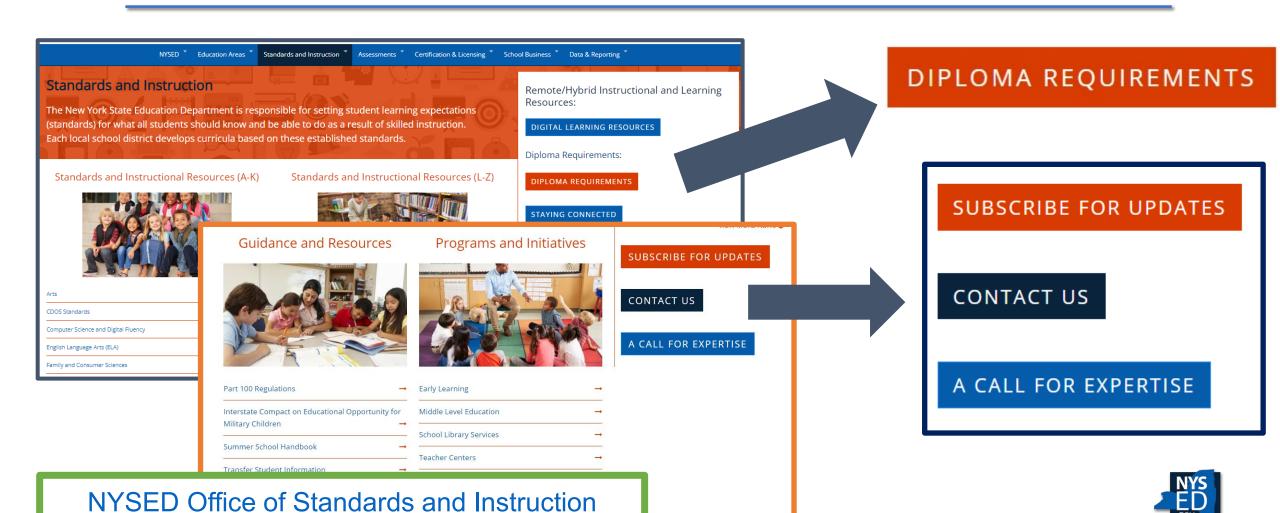
Grades 3-8 ELA and Math Test Manuals

The Office of State Assessments has the following test manuals available:

- Educator Guide to the 2023
 Grades 3-8 ELA Tests
- Educator Guide to the 2023
 Grades 3-8 Math Tests
- 2022 Grades 3-8 ELA and Mathematics Tests School Administration Manuals



NYSED Office of Standards and Instruction



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School Counselors







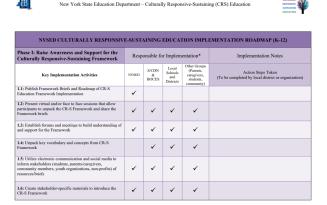




Culturally Responsive-Sustaining Education Framework Resources



FRAMEIWORK BRIEFS













The <u>Culturals Reaconsive-Sustaining (CR-S) Education Framework</u> is an initiative by the New York State Education Department (NYSED) that establishiese outlimpt responsive-sustaining guidelines for students, teachers, school and district leadership, families and community advocates, higher education, and the state education department. This framework reflects the state's commitment to improving learning account of the state of the

NYSED, in collaboration with the Region 2 Comprehensive Center and members of the Culturally Responsive-Sustaining Education Strategy Team, has developed this professional development (PD) toolkit to help build teacher awareness of the CR-S

PROFESSIONAL DEVELOPMENT TOOLKITS

eTEACHNY RESOURCES

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