

# Changes to the Math Curriculum Guides

Math Department



**Discuss how you used the Curriculum Guides for your instructional planning last year.**

# Accessing the District Curriculum

**PATERSON PUBLIC SCHOOLS**  
 Preparing All Children for College and Career  
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- Curriculum**
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- District Videos
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- Policies & Regulations
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- Transportation (Busing)

**Graduation 2017**

**Announcements**

- Summer School Schedule
- Kindergarten and In-District Preschool Registration: Call 973-321-2501 for an appointment. Visit our Parent/Student page for more information.

**Social Media**

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**District Events**

- July 5 - Aug. 11: Summer School**  
 Summer School Brochure
- July 10-28 Preschool Summer Enrichment Program**  
 Flyer: [English](#) [Spanish](#) [Arabic](#) [Bengali](#)
- July 29: Board of Education Retreat**  
 10:00 a.m.-1:00 p.m. at the Administrative Offices, 90 Delaware Ave. [Board Notice](#)
- Sept. 1, 5 & 6: Staff In-Service**

**Antibullying Program**

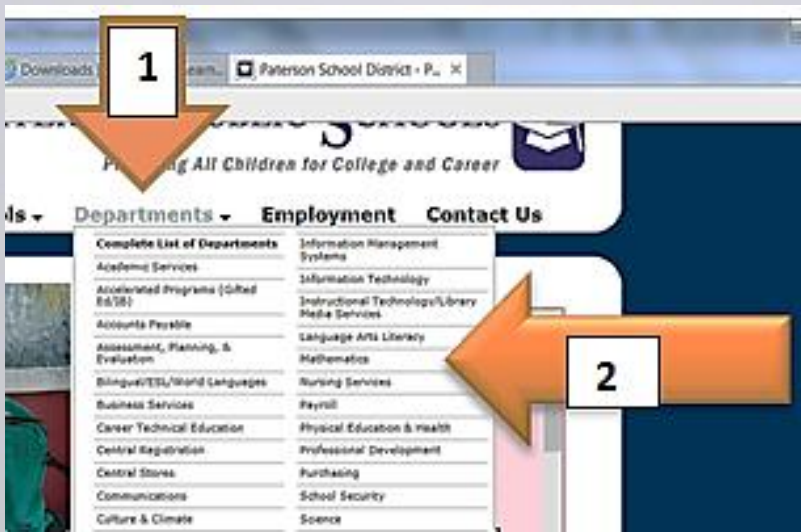
## District-Wide Curriculum

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<a href="#">Bilingual/ESL/World Lang.</a>	<a href="#">College &amp; Career Readiness/CTE</a>	<a href="#">Early Childhood</a>	<a href="#">Fine Arts</a>	<a href="#">Music</a>
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Mathematics					
Kindergarten	Curriculum Guides	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
	Math Tasks (Zip file)	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
	IFL Sets	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>		
	Pacing Guides	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
Grade 1	Curriculum Guides	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
	Math Tasks (Zip file)	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
	IFL Sets	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>		
	Pacing Guides	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
Grade 2	Curriculum Guides	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
	Math Tasks (Zip file)	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	<a href="#">Unit 4</a>
	IFL Sets	<a href="#">Unit 1</a>	<a href="#">Unit 2</a>	<a href="#">Unit 3</a>	

# Accessing the District Curriculum



Mathematics						
Kindergarten	Curriculum Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	Math Tasks (Zip file)	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	IFL Sets	Unit 1	Unit 2			
	Pacing Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Grade 1	Curriculum Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	Math Tasks (Zip file)	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	IFL Sets	Unit 1	Unit 2			
	Pacing Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Grade 2	Curriculum Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	Math Tasks (Zip file)	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	IFL Sets	Unit 1			Unit 4	Unit 5
	Pacing Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Grade 3	Curriculum Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	Math Tasks (Zip file)	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	IFL Sets		Unit 2	Unit 3	Unit 4	
	Pacing Guides	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5

# What's NEW?

## Changes to the Curriculum Guides:

- Examples Educational Technology
- Examples for Career Ready Practices
- Differentiation based on content
- Interdisciplinary content standards were added
- Tasks were reviewed for alignment with standards and evidence statements

# Educational Technology

Educational Technology
Standards
8.1.5.A.1, 8.1.5.A.3, 8.1.5.E.1, 8.1.5.F.1
<p>➤ <b>Technical Operations and Concepts</b></p> <ul style="list-style-type: none"><li>• <b>Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</b> <b>Example:</b> Use this Order of Operations interactive game to improve math fluency. <a href="http://learningwave.com/chapters/numbers/ordofops.html">http://learningwave.com/chapters/numbers/ordofops.html</a></li><li>• <b>Use a graphic organizer to organize information about problem or issue.</b> <b>Example:</b> Project the Bowling for Numbers task on an electronic board. Practice the activity with the whole class so that students in small groups can demonstrate strategies and how to play the game. <a href="https://www.illustrativemathematics.org/content-standards/tasks/969">https://www.illustrativemathematics.org/content-standards/tasks/969</a></li><li>• <b>Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models. 8.2.5.C.4</b></li></ul>

Examples of technology were added that can be used during math instruction, such as websites and programs for digital manipulatives.

# Career Ready Practice

## Career Ready Practices

Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

- **CRP2. Apply appropriate academic and technical skills.** Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.

**Example:** Students will apply prior knowledge when solving real world problems. Students will make sound judgements about the use of specific tools and use tools to explore and deepen understanding of place values.

Career Ready Practices highlight how Mathematical Practices can continuously be incorporated during instruction, such as reasoning and use of tools. Examples are provided in how it can specifically address the content within the unit.

# Differentiation Based on Content

## Differentiated Instruction

### Accommodate Based on Content Specific Needs:

#### **Teacher modeling**

**Use base ten manipulatives and color tiles to represent whole numbers, fractions and decimals while solving word problems.**

**Use centimeter, inch and unifix cubes to represent and solve real world problems.**

**Use base ten manipulatives to explore powers of ten.**

**Use interactive technology to improve fluency with multiplication.**

**Use rectangular arrays of objects to calculate whole number quotients.**

**Use concrete models to add, subtract, multiply and divide decimals to hundredths.**

**Use interactive technology to support steps in evaluating numerical expressions with parenthesis, brackets and braces.**

**Chart academic vocabulary with visual representations.**

Previously there were differentiation strategies based on learning styles, and now there are additional differentiated strategies to address specific content with units.



# Interdisciplinary Connections

## Art Connection:

### *Art Murals (1.3.8.D.3)*

- Students will determine the number of small squares that need to be used to cover the mural. Teachers can explain what a mural is and be shown various murals.

Content standards are provided as evidence of which additional content standards are addressed during the implementation of a task.

# Math Task Revisions

- Ensured they are aligned to the content standards and PARCC evidence statements.
- Only relevant information is now provided.
- Some tasks have been removed and new tasks have been added per specific SLO.

