

Curriculum Map: 3rd grade Math 2021-2023

Course: Math3 Sub-topic: General

Grade(s): 3

Course Description: The core mathematics instruction covering the concepts, applications, and procedures of third grade math. EnVision Math combines visual learning with problem based learning to deepen students' conceptual understanding of mathematics concepts.

Course Textbooks, Workbooks, Materials Citations: enVision Mathematics: Teacher's Edition Volume 1 and 2
Student consumable text books volume 1 and 2
manipulative kits

Unit: Topic 1 Understand Multiplication and Division of Whole Numbers

Timeline: 3 Weeks

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

(* standards consolidated from Topic level)

Topic: 1-1 Relate Multiplication and Addition

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 1-2 Multiplication on the Number Line

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 1-3 Arrays and Properties

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.

Topic: 1-4 Division: How Many in Each Group?

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

Topic: 1-5 Division: How Many Equal Groups?

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

Topic: 3-Act Math: What's the Point?

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 1-6 Problem Solving: Use Appropriate Tools

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 1 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 1 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Unit: Topic 2 Multiplication Facts: Use Patterns

Timeline: 2 Weeks

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 2-1 2 and 5 as Factors

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 2-2 9 as a factor

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 2-3 Apply Properties: Multiply by 0 and 1

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 2-4 Multiply by 10

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
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- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 2-5 Multiplication Facts: 0, 1, 2, 5, 9, and 10

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 2-6 Problem Solving Model with Math

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 2 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 2 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Unit: Topic 3 Apply Properties: Multiplication Facts for 3, 4, 6, 7, and 8

Timeline: 2 Weeks

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-1 The Distributive Property

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-2 Apply Properties: 3 and 4 as Factors

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-3 Apply Properties: 6 and 7 as Factors

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-4 Apply Properties: 8 as a Factor

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.2 (Advanced)	Understand properties of multiplication and the relationship between multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.2.3.A.4 (Advanced)	Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-5 Practice Multiplication Facts

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
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- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-Act Math: Thirsty Students

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-6 The Associative Property: Multiply with 3 Factors

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3-7 Problem Solving: Repeated Reasoning

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 3 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 3 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Unit: Topic 4 Use Multiplication to Divide: Division Facts

Timeline: 2 Weeks

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

(* standards consolidated from Topic level)

Topic: 4-1 Relate Multiplication and Division

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

Topic: 4-2 Use Multiplication to Divide with 2, 3, 4, and 5

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

Topic: 4-3 Use Multiplication to Divide with 6 and 7

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

Topic: 4-4 Use Multiplication to Divide with 8 and 9

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

Topic: 4-5 Multiplication Patterns: Even and Odd Numbers

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

Topic: 4-6 Division Involving 0 and 1

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

[CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

Topic: 4-7 Practice Multiplication and Division Facts

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 4-8 Solve Multiplication and Division Equations

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

[CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 4-9 Problem Solving Make Sense and Persevere

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 4 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

[CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 4 Assessment

Minutes for Topic: 60

Unit: Topic 5 Fluently Multiply and Divide Within 100

Timeline: 2 Weeks

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

- | | |
|---|---|
| CC.2.2.3.A.1 (Advanced) | Represent and solve problems involving multiplication and division. |
| CC.2.2.3.A.2 (Advanced) | Understand properties of multiplication and the relationship between multiplication and division. |
| CC.2.2.3.A.3 (Advanced) | Demonstrate multiplication and division fluency. |
| CC.2.2.3.A.4 (Advanced) | Solve problems involving the four operations, and identify and explain patterns in arithmetic. |

Topic: 5-1 Patterns for Multiplication Facts

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- | | |
|---|---|
| CC.2.2.3.A.1 (Advanced) | Represent and solve problems involving multiplication and division. |
| CC.2.2.3.A.2 (Advanced) | Understand properties of multiplication and the relationship between multiplication and division. |
| CC.2.2.3.A.3 (Advanced) | Demonstrate multiplication and division fluency. |
| CC.2.2.3.A.4 (Advanced) | Solve problems involving the four operations, and identify and explain patterns in arithmetic. |

Topic: 5-2 Use a Table to Multiply and Divide

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- | | |
|---|---|
| CC.2.2.3.A.1 (Advanced) | Represent and solve problems involving multiplication and division. |
| CC.2.2.3.A.2 (Advanced) | Understand properties of multiplication and the relationship between multiplication and division. |
| CC.2.2.3.A.3 (Advanced) | Demonstrate multiplication and division fluency. |
| CC.2.2.3.A.4 (Advanced) | Solve problems involving the four operations, and identify and explain patterns in arithmetic. |

Topic: 5-3 Use Strategies to Multiply

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- | | |
|---|---|
| CC.2.2.3.A.1 (Advanced) | Represent and solve problems involving multiplication and division. |
| CC.2.2.3.A.2 (Advanced) | Understand properties of multiplication and the relationship between multiplication and division. |
| CC.2.2.3.A.3 (Advanced) | Demonstrate multiplication and division fluency. |
| CC.2.2.3.A.4 (Advanced) | Solve problems involving the four operations, and identify and explain patterns in arithmetic. |

Topic: 3-Act Math: The Cheese Sticks

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- | | |
|---|---|
| CC.2.2.3.A.1 (Advanced) | Represent and solve problems involving multiplication and division. |
| CC.2.2.3.A.2 (Advanced) | Understand properties of multiplication and the relationship between multiplication and division. |
| CC.2.2.3.A.3 (Advanced) | Demonstrate multiplication and division fluency. |
| CC.2.2.3.A.4 (Advanced) | Solve problems involving the four operations, and identify and explain patterns in arithmetic. |

Topic: 5-4 Solve Word Problems: Multiplication and Division Facts

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 5-5 Write Multiplication and Division Math Stories

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 5-6 Problem Solving Look For and Use Structure

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 5 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 5 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.3 \(Advanced\)](#) Demonstrate multiplication and division fluency.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Unit: Topic 6 Connect Area to Multiplication and Addition

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.2.3.A.3 (Advanced)	Demonstrate multiplication and division fluency.
CC.2.3.3.A.2 (Advanced)	Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.
CC.2.4.3.A.1 (Advanced)	Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.
CC.2.4.3.A.5 (Advanced)	Determine the area of a rectangle and apply the concept to multiplication and to addition.
CC.2.4.3.A.6 (Advanced)	Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 6-1 Cover Regions

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.4.3.A.5 (Advanced)	Determine the area of a rectangle and apply the concept to multiplication and to addition.
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Topic: 6-2 Area: Nonstandard Units

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.4.3.A.1 (Advanced)	Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.
CC.2.4.3.A.5 (Advanced)	Determine the area of a rectangle and apply the concept to multiplication and to addition.
CC.2.4.3.A.6 (Advanced)	Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 6-3 Area: Standard Units

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.4.3.A.1 (Advanced)	Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.
CC.2.4.3.A.5 (Advanced)	Determine the area of a rectangle and apply the concept to multiplication and to addition.

Topic: 6-4 Area of Squares and Rectangles

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.3.A.1 (Advanced)	Represent and solve problems involving multiplication and division.
CC.2.4.3.A.5 (Advanced)	Determine the area of a rectangle and apply the concept to multiplication and to addition.
CC.2.4.3.A.6 (Advanced)	Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 6-5 Apply Properties: Area and the Distributive Property

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

Topic: 6-6 Apply Properties: Area of Irregular Shapes

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

Topic: 6-7 Problem Solving Look For and Use Structure

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

Topic: Topic 6 Rview

Minutes for Topic: 60

Topic: Topic 6 Assessment

Minutes for Topic: 60

Unit: Topic 7 Represent and Interpret Data**STANDARDS: STANDARDS**

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 7-1 Read Picture Graphs and Bar Graphs

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 7-2 Make Picture Graphs

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 7-3 Make Bar Graphs

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 7-4 Solve Word Problems Using Information in Graphs

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 7-5 Problem Solving Precision

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 3 Act Math: Swings and Slides

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: Topic 7 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: Topic 7 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Unit: Topic 8 Use Strategies and Properties to Add and Subtract

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-1 Addition Properties

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-2 Algebra: Addition Patterns

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-3 Mental Math: Addition

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-4 Mental Math: Subtraction

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-5 Round Whole Numbers

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-6 Estimate Sums

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-7 Estimate Differences

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 8-8 Problem Solving Model with Math

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 8 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 8 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Unit: Topic 9 Fluently Add and Subtract Within 1,000

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

Topic: 9-1 Use Partial Sums to Add

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 9-2 Use Regrouping to Add

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 9-3 Add 3 or More Numbers

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3 Act Math: Fun Raiser

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 9-4 Use Partial Differences to Subtract

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 9-5 Use Regrouping to Subtract

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 9-6 Use Strategies to Add and Subtract

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 9-7 Problem Solving Construct Arguments

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 9 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 9 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Unit: Topic 10 Multiply by Multiples of 10**STANDARDS: STANDARDS**

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.
- [CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

(* standards consolidated from Topic level)

Topic: 10-1 Use Patterns to Multiply

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

Topic: 10-2 Use Mental Math to Multiply

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

Topic: 10-3 Use Properties to Multiply

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.2.3.A.2 \(Advanced\)](#) Understand properties of multiplication and the relationship between multiplication and division.

Topic: 10-4 Problem Solving Look for and Use Structure

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: Topic 10 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

Topic: Topic 10 Assessment

Minutes for Topic: 60

Unit: Topic 11 Use Operations with Whole Numbers to Solve Problems**STANDARDS: STANDARDS**

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

[CC.2.4.3.A.3 \(Advanced\)](#) Solve problems and make change involving money using a combination of coins and bills.

(* standards consolidated from Topic level)

Topic: 11-1 Solve 2-Step Word Problems: Addition and Subtraction

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 11-2 Solve 2-Step Word Problems: Multiplication and Division

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

Topic: 11-3 Solve 2-Step Word Problems: All Operations

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.2.3.A.4 \(Advanced\)](#) Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Topic: 3 Act Math: Cash Bucket

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.4.3.A.3 \(Advanced\)](#) Solve problems and make change involving money using a combination of coins and bills.

Topic: 11-4 Problem Solving Critique Reasoning

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.4.3.A.3 \(Advanced\)](#) Solve problems and make change involving money using a combination of coins and bills.

Topic: Topic 11 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.4.3.A.3 \(Advanced\)](#) Solve problems and make change involving money using a combination of coins and bills.

Topic: Topic 11 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.B.1 \(Advanced\)](#) Apply place-value understanding and properties of operations to perform multi-digit arithmetic.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.4.3.A.3 \(Advanced\)](#) Solve problems and make change involving money using a combination of coins and bills.

Unit: Topic 12 Understand Fractions as Numbers**STANDARDS: STANDARDS**

STATE: PA Core Standards (2014)

- [CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.
- [CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

(* standards consolidated from Topic level)

Topic: 12-1 Partition Regions into Equal Parts

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#)

Explore and develop an understanding of fractions as numbers.

[CC.2.3.3.A.2 \(Advanced\)](#)

Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 12-2 Fraction and Regions

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#)

Explore and develop an understanding of fractions as numbers.

[CC.2.3.3.A.2 \(Advanced\)](#)

Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 12-3 Understand the Whole

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#)

Explore and develop an understanding of fractions as numbers.

[CC.2.3.3.A.2 \(Advanced\)](#)

Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 12-4 Number Line: Fractions Less Than 1

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#)

Explore and develop an understanding of fractions as numbers.

[CC.2.3.3.A.2 \(Advanced\)](#)

Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 12-5 Number Line: Fractions Greater than 1

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#)

Explore and develop an understanding of fractions as numbers.

[CC.2.3.3.A.2 \(Advanced\)](#)

Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 12-6 Line Plots and Length

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#)

Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 12-7 More Line Plots and Length

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.4 \(Advanced\)](#)

Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: 12-8 Problem Solving Make Sense and Persevere

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.
- [CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: Topic 12 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Topic: Topic 12 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.
- [CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.
- [CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.
- [CC.2.4.3.A.4 \(Advanced\)](#) Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

Unit: Topic 13 Fraction Equivalence and Comparison**STANDARDS: STANDARDS**

STATE: PA Core Standards (2014)

- [CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.
- [CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 13-1 Equivalent Fractions: Use Models

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.
- [CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 13-2 Equivalent Fractions: Use the Number Line

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

- [CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 13-3 Use Models to Compare Fractions: Same Denominator

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 13-4 Use Models to Compare Fractions: Same Numerator

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 13-5 Compare Fractions: Use Benchmarks

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 13-6 Compare Fractions: Use the Number Line

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: 13-7 Whole Numbers and Fractions

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: Topic 13 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Topic: Topic 13 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.1.3.C.1 \(Advanced\)](#) Explore and develop an understanding of fractions as numbers.

[CC.2.2.3.A.1 \(Advanced\)](#) Represent and solve problems involving multiplication and division.

[CC.2.3.3.A.2 \(Advanced\)](#) Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

Unit: Topic 14 Solve Time, Capacity, and Mass Problems

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

[CC.2.4.3.A.2 \(Advanced\)](#) Tell and write time to the nearest minute and solve problems by calculating time intervals.

(* standards consolidated from Topic level)

Topic: 14-1 Time to the Minute

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.2 \(Advanced\)](#) Tell and write time to the nearest minute and solve problems by calculating time intervals.

Topic: 14-2 Units of Time: Measure Elapsed Time

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.2 \(Advanced\)](#) Tell and write time to the nearest minute and solve problems by calculating time intervals.

Topic: 14-3 Units of Time: Solve Word Problems

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.2 \(Advanced\)](#) Tell and write time to the nearest minute and solve problems by calculating time intervals.

Topic: 14-4 Estimate Liquid Volume

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

Topic: 14-5 Measure Liquid Volume

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

Topic: 14-6 Estimate Mass

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

Topic: 14-7 Measure Mass

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

Topic: 14-8 Solve Word Problems Involving Mass and Liquid Volume

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

Topic: 14-9 Problem Solving Reasoning

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

[CC.2.4.3.A.2 \(Advanced\)](#) Tell and write time to the nearest minute and solve problems by calculating time intervals.

Topic: Topic 14 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

[CC.2.4.3.A.2 \(Advanced\)](#) Tell and write time to the nearest minute and solve problems by calculating time intervals.

Topic: Topic 14 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.1 \(Advanced\)](#) Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

[CC.2.4.3.A.2 \(Advanced\)](#) Tell and write time to the nearest minute and solve problems by calculating time intervals.

Unit: Topic 15 Attributes of 2D Shapes

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.1](#)
(Advanced)

Identify, compare, and classify shapes and their attributes.

Topic: 15-1 Describe Quadrilaterals

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.1](#) (Advanced)

Identify, compare, and classify shapes and their attributes.

Topic: 15-2 Classify Shapes

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.1](#) (Advanced)

Identify, compare, and classify shapes and their attributes.

Topic: 15-3 Analyze and Compare Quadrilaterals

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.1](#) (Advanced)

Identify, compare, and classify shapes and their attributes.

Topic: 15-4 Problem Solving Precision

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.1](#) (Advanced)

Identify, compare, and classify shapes and their attributes.

Topic: Topic 15 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.1](#) (Advanced)

Identify, compare, and classify shapes and their attributes.

Topic: Topic 15 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.3.3.A.1](#) (Advanced)

Identify, compare, and classify shapes and their attributes.

Unit: Topic 16 Solve Perimeter Problems

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.5](#)
(Advanced)

Determine the area of a rectangle and apply the concept to multiplication and to addition.

[CC.2.4.3.A.6](#)
(Advanced)

Solve problems involving perimeters of polygons and distinguish between linear and area measures.

(* standards consolidated from Topic level)

Topic: 16-1 Understand Perimeter

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 16-2 Perimeter of Common Shapes

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 16-3 Perimeter and Unknown Side Lengths

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 16-4 Same Perimeter, Different Area

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 16-5 Same Area, Different Perimeter

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: 16-6 Problem Solving Reasoning

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: Topic 16 Review

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.

Topic: Topic 16 Assessment

Minutes for Topic: 60

STANDARDS

STATE: PA Core Standards (2014)

[CC.2.4.3.A.5 \(Advanced\)](#) Determine the area of a rectangle and apply the concept to multiplication and to addition.

[CC.2.4.3.A.6 \(Advanced\)](#) Solve problems involving perimeters of polygons and distinguish between linear and area measures.