## **Common Core State Standards for Mathematics**

## **PowerZone Intermediate Math Series Correlation**

Algebra, Geometry & Measurement Grade 3 (Level 1)
 Number Sense & Data Analysis Grade 3 (Level 1)

Algebra, Geometry & Measurement Grade 4 (Level 2)
 Number Sense & Data Analysis Grade 4 (Level 2)

Algebra, Geometry & Measurement Grade 5 (Level 3)
 Number Sense & Data Analysis Grade 5 (Level 3)

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# **Common Core State Standards for Mathematics PowerZone Intermediate Math Correlation**

The PowerZone Intermediate Math Series consists of six Content Set titles, two each for grades three, four, and five:

•	Algebra, Geometry & Measurement	Grade 3 (Level 1)
•	Number Sense & Data Analysis	Grade 3 (Level 1)
•	Algebra, Geometry & Measurement	Grade 4 (Level 2)
•	Number Sense & Data Analysis	Grade 4 (Level 2)
•	Algebra, Geometry & Measurement	Grade 5 (Level 3)
•	Number Sense & Data Analysis	Grade 5 (Level 3)

The following pages represent the correlation of PowerZone Intermediate Math titles to the Common Core State Standards for Mathematics. The first page for each grade level is the correlation chart. The second page displays "Pick the Question Mix" screen shots. Each screen shot includes PowerZone topics for a specific grade: three, four, or five, and title: <a href="Number Sense">Number Sense & Data Analysis</a> or <a href="Algebra">Algebra</a>, Geometry & Measurement.

Prior to using the software in a PowerZone classroom session, teachers have the option to select specific questions by using the "Pick the Question Mix" capability. Teachers first select any combination of topics and then preview and turn individual questions "off" or back "on". The correlation chart facilitates selection of topics and questions related to the Common Core State Standards.

An optional Toolkit is available which allows teachers to author and add questions to Content Sets. Teachers can organize and save authored questions by Common Core State Standards or by other standards and organizational structures as desired. The Toolkit links the authored questions to a "Bonus Questions" button that is accessible during a PowerZone session.

#### Common Core - Grade 3 Overview

#### **Operations and Algebraic Thinking**

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns.

#### **Numbers and Operations in Base Ten**

• Use place value understanding and properties of operations to perform multi-digit arithmetic.

#### **Numbers and Operations—Fractions**

Develop understanding of fractions as numbers.

#### **Measurement and Data**

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

#### Geometry

• Reason with shapes and their attributes.

## PowerZone - Grade 3 (Level 1) Overview

#### **Operations and Algebraic Thinking**

• PowerZone, AGM, Level 1, Topics: 1, 3, 4\*

PowerZone, AGM, Level 1, Topics: 2, 3, 4

#### **Numbers and Operations in Base Ten**

PowerZone, NS & DA, Level 1, Topics: 1, 2, 3, 4, 5, 6, 7, 8

#### **Numbers and Operations—Fractions**

PowerZone, NS & DA, Level 1, Topic: 9

#### Measurement and Data

- PowerZone, AGM, Level 1, Topics: 10, 11, 13
- PowerZone, AGM, Level 1, Topics: 13, 14;
   NS & DA, Level 1, Topics: 10, 11, 12, 13
- PowerZone, AGM, Level 1, Topic: 12

#### Geometry

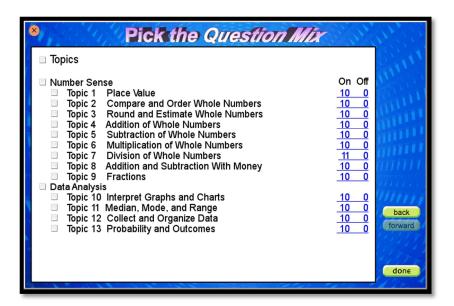
PowerZone, AGM, Level 1, Topics: 6, 7

AGM: Algebra, Geometry & Measurement NS & DA: Number Sense & Data Analysis

\*See Reverse for PowerZone Topic Names

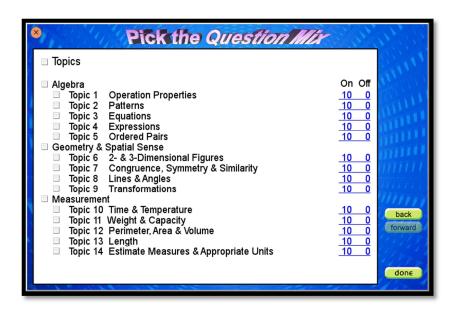
## PowerZone, Intermediate Math Series

Grade 3 (Level 1), Number Sense & Data Analysis (NS & DA)
Windows/Macintosh



## PowerZone, Intermediate Math Series

Grade 3 (Level 1), Algebra, Geometry & Measurement (AGM)
Windows/Macintosh



#### Common Core Math - Grade 4 Overview

#### **Operations and Algebraic Thinking**

- Use the four operations with whole numbers to solve problems.
- Gain familiarity with factors and multiples.
- Generate and analyze patterns.

#### **Numbers and Operations in Base Ten**

- Generalize place value understanding for multi-digit whole numbers.
- Use place value understanding and properties of operations to perform multi-digit arithmetic.

#### **Numbers and Operations—Fractions**

- Extend understanding of fraction equivalence and ordering.
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
- Understand decimal notation for fractions, and compare decimal fractions.

#### **Measurement and Data**

- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
- Represent and interpret data.
- Geometric measurement: understand concepts of angle and measure angles.

#### Geometry

 Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

## PowerZone Math - Grade 4 (Level 2) Overview

#### **Operations and Algebraic Thinking**

- PowerZone, AGM, Level 2, Topics: 1, 3, 4, 5\*
- PowerZone, NS & DA, Level 2, Topic: 11
- PowerZone, AGM, Level 2, Topic: 2

#### **Numbers and Operations in Base Ten**

- PowerZone, NS & DA, Level 2, Topics: 1, 2
- PowerZone, NS & DA, Level 2, Topics: 3, 4, 5, 6

#### **Numbers and Operations—Fractions**

- PowerZone, NS & DA, Level 2, Topic: 7
- PowerZone, NS & DA, Level 2, Topics: 8, 9

#### **Measurement and Data**

- PowerZone, AGM, Level 2, Topics: 11, 12, 13, 14, 15
- PowerZone NS & DA, Level 2, Topics: 10, 12, 13, 14, 15;
   AGM, Level 2, Topics: 6, 16
- PowerZone, AGM, Level 1, Topic: 8

#### Geometry

• PowerZone, AGM, Level 1, Topics: 8, 9: Level 2, Topics: 7, 8, 9, 10

AGM: Algebra, Geometry & Measurement NS & DA: Number Sense & Data Analysis

\*See Reverse for PowerZone Topic Names

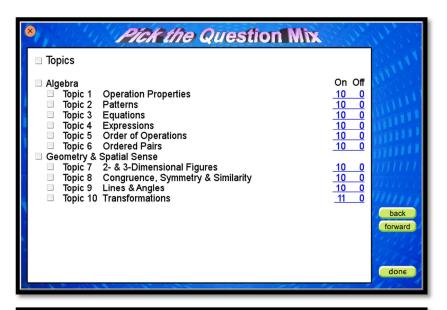
## PowerZone, Intermediate Math Series

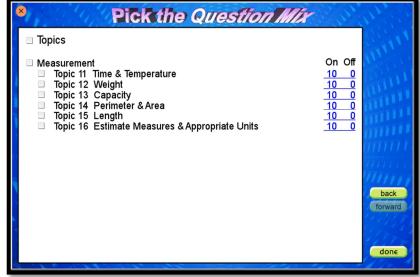
Grade 4 (Level 2), Number Sense & Data Analysis (NS & DA)
Windows/Macintosh



## PowerZone, Intermediate Math Series

Grade 4 (Level 2), Algebra, Geometry & Measurement (AGM)
Windows/Macintosh





#### **Common Core Math - Grade 5 Overview**

#### **Operations and Algebraic Thinking**

- Write and interpret numerical expressions.
- Analyze patterns and relationships.

#### **Numbers and Operations in Base Ten**

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

#### **Numbers and Operations—Fractions**

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

#### Measurement and Data

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

#### Geometry

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

## PowerZone Math - Grade 5 (Level 3) Overview

#### **Operations and Algebraic Thinking**

- PowerZone, AGM, Level 3, Topics: 2, 3, 4\*
- PowerZone, AGM, Level 3, Topic: 1

#### **Numbers and Operations in Base Ten**

- PowerZone, NS & DA, Level 3, Topics: 1, 2
- PowerZone, NS & DA, Level 3, Topics: 3, 5, 8, 9

#### **Numbers and Operations—Fractions**

- PowerZone, NS & DA, Level 3, Topics: 4, 8
- PowerZone, NS & DA, Level 3, Topic: 7

#### Measurement and Data

- PowerZone, AGM, Level 3, Topics: 10, 11, 12
- PowerZone, NS & DA, Level 3, Topics: 6, 10, 11, 12, 13
- PowerZone, AGM, Level 3, Topics: 13, 14

#### Geometry

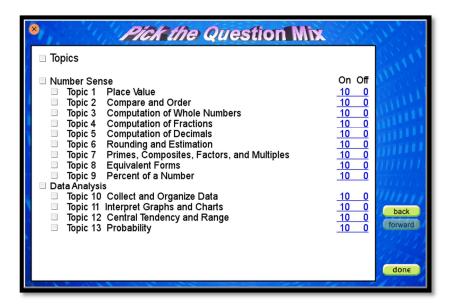
- PowerZone, AGM, Level 3, Topic: 5
- PowerZone, AGM, Level 3, Topics: 6, 7, 8, 9

AGM: Algebra, Geometry & Measurement NS & DA: Number Sense & Data Analysis

<sup>\*</sup>See Reverse for PowerZone Topic Names

## PowerZone, Intermediate Math Series

Grade 5 (Level 3), Number Sense & Data Analysis (NS & DA)
Windows/Macintosh



## **PowerZone, Intermediate Math Series**

Grade 5 (Level 3), Algebra, Geometry & Measurement (AGM)
Windows/Macintosh

