

Wallenpaupack Area School District

COURSE: Mathematics

GRADE LEVEL: Kindergarten

LENGTH OF COURSE: 180 Days/40 Minutes Per Day

TEXT: Everyday Mathematics

PUBLISHER: Everyday Learning Corporation

The University of Chicago School Mathematics Project

COPYRIGHT: 2001

COURSE DESCRIPTION:

The Kindergarten math program is designed to allow students to utilize direct experience and participation through real life situations. Students will understand the consistency of numbers, quantities and simple shapes in the everyday environment. They count, describe, sort objects, and develop a sense about properties, time and patterns. The structure of the curriculum ensures that math concepts and ideas are explored and re-explored in a vast array of activities and contexts.

AREAS OF STUDY:

Numeration and Order: Counting and Numeration

Patterns, Functions and Sequences

Measures and Measurement & Reference Frames: Measures, Money, Time

Geometry and Spatial Sense

Exploring Data and chance

Operations

CURRICULUM WRITING TEAM:

Christina M. Mann

Cindy McGinnis

Amy Wacker

DATE OF REVISION:

2002

Wallenpaupack Area School District

KINDERGARTEN: Year End Goals

Rote Counting to 110+

Identifies numerals 0-110+

Counts to 110 by 5's

Counts to 110 by 10's

Counts by 2's to 20

Counts objects in a set to 30

Participates in creating and solving oral number stories

Builds number families to 5

Makes and interprets a simple graph

Identifies geometric shapes: circle, square, triangle, rectangle

Names days of the week

Recognizes and knows value of penny, nickel, dime

Uses correct tools for measuring by comparing length, weight and capacity of objects

Tells time to the hour

Copies and extends, e.g., -3, 3, and 3+

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.1.K.A
2.1.K.B
2.1.K.C
2.1.K.D
2.1.K.E

Topics:	Skills:
Types of numbers	Counting Reading numbers Writing numbers
Activities:	Performance Assessments:
Rote counting to 110+ Identifies numerals 0-110+ Counts to 110+ by 5's Counts to 110+ by 10's Skip counts by 2's to 20 Counts objects in a set to 30 Counts backward to zero Reads and writes numbers 0-100+ Number line Number line games Ongoing daily routine Number families	Teacher observation Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.1.K.F

2.1.K.G

Topics:	Skills:
Equivalent forms	Fractions ($\frac{1}{2}$)
Activities:	Performance Assessments:
Tell and act out fraction stories, write $\frac{1}{2}$	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.1.K.H

2.1.K.I

2.1.K.J

Topics:	Skills:
Number relationships	Place value Greater than/less than
Activities:	Performance Assessments:
Balance scale Play game – pair like numbers Place value bundles Manipulatives Number line Calculators Graphs Calendar Use concepts of greater than and less than to find the “mystery number” Tally marks	Teacher observations Oral questions Check lists Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.1.K.K

Topics:	Skills:
Numbers	Writing numbers
Activities:	Performance Assessments:
Writing numbers 0 – 10 Number books Slate writing Flash cards Computer games Calculators	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.1.K.L

Topics:	Skills:
Money	Identify penny, nickel and dime
Activities:	Performance Assessments:
Name penny, nickel and dime	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.1.K.M

Topics:	Skills:
Numbers	Counting Skip counting
Activities:	Performance Assessments:
Number line Number chart Skip counting	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.1.K.N

Topics:	Skills:
Number relationships	Counting Place values
Activities:	Performance Assessments:
Number line Place value activities (stick bundles) "Teen" numbers and partner games Tally marks/counting	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.2.K.A
2.2.K.B
2.2.K.C
2.2.K.D
2.2.K.E

Topics:	Skills:
Computation	Counting
Activities:	Performance Assessments:
Number families activities Manipulatives Tally marks Number story problems Calculators Dominoes Dice Chicago Math Games Number line	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.2.K.F

Topics:	Skills:
Computation	Counting Counting concrete objects
Activities:	Performance Assessments:
Number line Counting games Counting activities that use varying rhythms, clapping and tapping Tally count Count concrete objects Pennies, nickels, dimes Calculators	Teacher observations Oral questions Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.2.K.G

2.2.K.H

Topics:	Skills:
Computation	More than, less than, equal to
Activities:	Performance Assessments:
Balance scale Manipulatives	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.3.K.A

2.3.K.B

2.3.K.C

2.3.K.D

2.3.K.E

Topics:	Skills:
Measurement	
Activities:	Performance Assessments:
	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.3.K.F

Topics:	Skills:
Measurement	
Activities:	Performance Assessments:
Calendar Weather activities Songs and poems Stories Identifies days of the week	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.3.K.G

Topics: Measurement	Skills: Tell time to the hour using an analog clock Make a clock Identify parts of a clock (face, hour, hand, minute hand)
Activities: Move hands to show time to the hour Match analog time to digital time	Performance Assessments: Teacher observations Oral questions Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.3.K.H

Topics:	Skills:
Measurement	
Activities:	Performance Assessments:
Chicago Math games Free play with attribute blocks	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.4.K.A

2.4.K.B

2.4.K.C

Topics: Mathematical reasoning	Skills: Compare and order lengths from shortest to longest using manipulatives
Activities: Measure – growth chart Compare and order lengths from shortest to longest using manipulatives Rocker balance Attribute blocks Thermometer Standard and nonstandard units Volume using manipulatives	Performance Assessments: Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.5.K.A
2.5.K.B
2.5.K.C
2.5.K.D
2.5.K.E

Topics:	Skills:
Mathematical problem solving	Interpret a graph Discuss a problem
Activities:	Performance Assessments:
Role playing Discussion Manipulatives Calculators Graphing	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric Paper/pencil

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.6.K.A

2.6.K.B

2.6.K.C

Topics:	Skills:
Collecting data	Create a graph Discuss results
Activities:	Performance Assessments:
Collect and display data on charts and graphs relevant to monthly activities Compare and discuss results	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.6.K.D

Topics:	Skills:
Data analysis	
Activities:	Performance Assessments:
Discussions Stories	Teacher observations Oral questions Check lists Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.7.K.A

2.7.K.B

2.7.K.C

Topics:	Skills:
Probability and prediction	Tally counting
Activities:	Performance Assessments:
Math games, e.g., everyday math games Probability games (dice, penny toss) Tally counts Graphing	Teacher observations Oral questions Check lists Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.8.K.A
2.8.K.B

Topics:	Skills:
Algebra	Patterning
Activities:	Performance Assessments:
Patterns in the environment Manipulatives Paper/pencil activities Dramatization	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.8.K.C
2.8.K.D
2.8.K.E
2.8.K.F
2.8.K.G

Topics:	Skills:
Algebra	Counting Comparing numbers Find number patterns Identify a missing addend (using manipulatives)
Activities:	Performance Assessments:
Number line Number grid Number chart Calculator Computer activities Chicago math explorations Craft sticks (find addend) High roller Dramatization	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.8.K.H
2.8.K.I

Topics:	Skills:
Algebra	Tally count Create a bar graph Participate in a discussion
Activities:	Performance Assessments:
Make a pictograph; discuss outcomes Tally counting Make a bar graph Record and graph monthly activities Compare and discuss results Graph and discuss probability games	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

- PA Standard:** 2.9.K.A
 2.9.K.B
 2.9.K.C
 2.9.K.D
 2.9.K.E
 2.9.K.F
 2.9.K.G
 2.9.K.H
 2.9.K.I
 2.9.K.J
 2.9.K.K

Topics	Skills
Geometry	Find and describe geometric figures in real life Construct two and three dimensional shapes and figures using manipulatives, geoboards and appropriate computer software program Draw two-dimensional geometric shapes Identify and label two-dimensional shapes Identify and draw lines of symmetry in geometric figures through pictures and projects
Activities	Performance Assessments
Manipulatives Geoboards Software programs	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.10.K.A

2.10.K.B

2.10.K.C

Topics:	Skills:
Trigonometry	Identify the number of sides and angles in a square, triangle, and rectangle
Activities:	Performance Assessments:
Sort different triangles Templates Geoboards	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.11.K.A

2.11.K.B

2.11.K.C

Topics:	Skills:
Concepts of calculus	Order whole numbers from least to greatest 0 – 20 Identify before, after, in between Identify left to right Count backwards
Activities:	Performance Assessments:
Number line Manipulatives Pictures Graphs Chicago math games Number grid Number card sets Calendar Dot to dot Counting on Computer software	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.11.K.D

Topics:	Skills:
Concepts of calculus	Compare length of time
Activities:	Performance Assessments:
Relay games Stories Discussions/demonstrations	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric

Wallenpaupack Area School District

Course: Mathematics

Grade Level: Grade K

PA Standard: 2.11.K.E

2.11.K.F

2.11.K.G

Topics:	Skills:
Concepts of calculus	Continuing patterns
Activities:	Performance Assessments:
Number line Number grid Skip counting Calendar Use of manipulatives Paper/pencil	Teacher observations Oral questions Check lists Class projects Teacher made tests Homework assignments Classroom participation Kindergarten rubric