



# HighScope Math Curriculum Scope and Sequence



Submitted by:

Barbara Decker, Patricia Schueckler, and M'Lou Speranza

July, 2014



**UPK Math Scope and Sequence  
Based on the HighScope Curriculum**

**Table of Contents**

1. Objectives
2. Overview
3. Scope and Sequence from HighScope Numbers Plus Teacher's Manual
4. Math Time Line
5. Math Small Group Activities by Content Area, Session 1
  - a) Materials List
  - b) Vocabulary List
6. Math Small Group Activities by Content Area, Session 2
7. Mathematics Developmental Continuum
8. Math Resource Guide for the Daily Routine
  - a) HighScope Resources
  - b) Children's Books with Math Content
9. NYS Prekindergarten Foundation for the Common Core (NYSFCC)  
Aligned with Mathematics Developmental Continuum
10. Reference
  - a) Developmental Range by Item Report (COR Sample)
  - b) Numbers Plus Activity Grid
  - c) Mathematics: A Summary (General Teaching Strategies for Math) from *The HighScope Preschool Curriculum, Mathematics*
  - d) Reference Sheet for *The HighScope Preschool Curriculum, Mathematics*
  - e) Home Connection: Parent Booklet – *Helping Your Young Child Learn About Mathematics*





**Rochester City School District  
Early Childhood Department**



**UPK Math Scope and Sequence  
Based on the HighScope Curriculum**

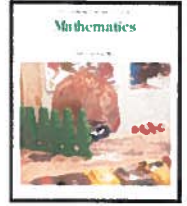
**Objectives:**

- ✚ Develop a Math timeline that supports teachers as they deliver the HighScope Math Curriculum.
- ✚ Create a Developmental Continuum for critical Math skills that aligns with the NYS Prekindergarten Foundations for the Common Core, COR Advantage and the HighScope Key Developmental Indicators.
- ✚ Identify HighScope resources that support Math within the Daily Routine.



## Overview for HighScope Math: Scope and Sequence

At the start of the year, teachers focus on setting up their learning environment in a way that supports children's math development. Chapter 2 of The HighScope Preschool Curriculum, Mathematics supports teachers in selecting materials for each of the learning areas.



Teachers follow the **Math Time Line** (Tab 4) as a guide throughout the year.

For planning Small Group Time in the fall, teachers will utilize the chart **Math Small Group Activities by Content Area** (Tabs 5 & 6). These lessons are taken from the book *Lesson Plans for the First 30 Days, Numbers Plus Preschool Mathematics Curriculum Kit*, and other HighScope sources.



- This document is an alignment of the NYS Pre-K FCC (New York State Pre-K Foundation for the Common Core,) HighScope COR Advantage, and HighScope KDIs by Content Area.
- The colors in the chart align with the content tabs in the HighScope Numbers Plus kit.
- For each lesson, the color-coding indicates the content area(s) where teachers should be observing and taking anecdotes.

After each activity, teachers will use the **Mathematical Developmental Continuum** (Tab 7) for the corresponding content areas: **Numbers and Counting**, **Geometry and Spatial Awareness**, **Measurement**, **Algebra/Patterns and Sequence** and **Data Analysis** to note their observations and track children's progress.

- At the pausing point, this data will be input into the COR Advantage which will identify for teachers the developmental range for children in their classroom or small group. (See Reference Chart A).
- The **Mathematical Developmental Continuum** was designed using information from the following resources: HighScope COR Advantage, NYS Pre-K FCC, HighScope KDIs, RCSD Math Stage Cards, (developed in 1996) and the Common Core Curriculum Map in Mathematics (draft.)
- It identifies the mathematics milestones from beginning development to the kindergarten entry point.
- The COR Advantage levels are identified on the chart, i.e. S-0, S-1. The detailed COR Advantage Scoring Guide for the content area follows each section.
- The goal for teachers will be to move children along the continuum, which aligns with the kindergarten entry point.

The **Math Resource Guide for the Daily Routine** (Tab 8) can be used to infuse math into all the components of the Daily Routine.

Also provided for reference is the **NYS Pre-K FCC Aligned with Mathematics Developmental Continuum** (Tab 9).

- Shaded areas show where the NYS Pre-K FCC benchmarks and benchmark indicators align with a specific point on the **Mathematical Developmental Continuum**.