

## K-6 Curriculum Overview

### STEAM

This curriculum overview document identifies the main topics that will be taught throughout the year, and across the grade levels, in the subject areas of math and science.

The teaching of mathematics in the elementary program at the Wappingers Central School District follows the philosophies and practices of Singapore Math. Our District's primary resource for implementing math instruction is the Math In Focus Program.

Our District's primary resource for science is the Science 21 curriculum created and distributed by Putnam Northern Westchester BOCES

### Kindergarten

Date	Math	Science
<b>Sept-Oct</b> <b>Weeks 1-7</b>	Numbers to 5 (Chapter 1) Numbers to 10 (Chapter 2)	Unit 1 - Weather and Climate
<b>Oct</b> <b>Week 8</b>	Order by Size, Length or Weight (Chapter 3)	
<b>Nov</b> <b>Weeks 9-12</b>	Counting and Numbers 0-10 (Chapter 4)	
<b>Nov-Dec</b> <b>Weeks 13-14</b>	Size and Position (Chapter 5)	Unit 2- Pushes and Pulls
<b>Dec-Jan</b> <b>Weeks 15-17</b>	Numbers to 20	
<b>Jan</b> <b>Weeks 18-19</b>	Flat Shapes & Solid Shapes (Chapter 7)	

<b>Jan-Feb Weeks 20-21</b>	Numbers to 100 (Chapter 8)	Unit 3: Environment
<b>Feb Weeks 22-23</b>	Comparing Sets (Chapter 9)	
<b>Feb-Mar Weeks 24-25</b>	Ordinal Numbers (Chapter 10)	
<b>Mar Weeks 26-27</b>	Counting On and Counting Back (Chapter 12)	
<b>Mar Weeks 28-29</b>	Number Facts (Chapter 14)	
<b>Apr Week 30</b>	Length and Height (Chapter 15)	
<b>Apr-May Weeks 31-33</b>	Addition Stories (Chapter 17)	
<b>May-June Weeks 34-37</b>	Subtraction Stories (Chapter 18)	
<b>June Weeks 38-40</b>	Measurement (Chapter 19) Money (Chapter 20)	

## First Grade

<b>Date</b>	<b>Math</b>	<b>Science</b>
<b>Sep-Oct Weeks 1-8</b>	Numbers and Counting (Chapter 1) Number Bonds & Addition Within 10 (Chapter 2 & 3) Subtraction with 10 (Chapter 4)	Unit 1: Space Systems: Patterns and Cycles The Sun, Moon, and Stars
<b>Nov Weeks 9-10</b>	Geometry (Chapter 5 & Chapter 6 if needed)	
<b>Nov-Jan Weeks 11-18</b>	Understanding Numbers to 20 (Chapter 7) Adding and Subtracting Numbers to 20 (Chapter 8)	Unit 2: Waves: Light and Sound
<b>Jan-Feb Weeks 19-22</b>	Length (Chapter 9) Graphs and Data (Chapter 11)	
<b>Feb-Mar Weeks 23-28</b>	Understanding Numbers to 40 (Chapter 12) Adding and Subtracting Numbers to 40 (Chapter 13) Mental Math Strategies (Chapter 14)	
<b>Mar-Apr Weeks 29-30</b>	Calendar and Time (Chapter 15)	
<b>Apr-May Weeks 31-35</b>	Numbers to 120 (Chapter 16) Addition and Subtraction to 100 (Chapter 17)	Unit 3: Structure, Function and Information Processing
<b>May-June Weeks 36-40</b>	Getting Ready for Multiplication and Division (Chapter 18) Money (Chapter 19)	

## Second Grade

Date	Math	Science  *The WCSD New York State Science Learning Standards mini-unit are located on the WCSD Leading & Learning website
<b>Sep-Oct Weeks 1-6</b>	Back to Basics: Addition/Subtraction Review Numbers to 1,000 (Chapter 1)	Unit 4: Observing And Measuring Changes In The Environment (Summer)  Unit 1: Tools
<b>Oct- Nov Weeks 7-10</b>	Addition Up to 1,000 (Chapter 2)	Unit 4: Observing And Measuring Changes In The Environment (Fall)
<b>Nov-Jan Weeks 11-21</b>	Subtraction up to 1,000 (Chapter 3) Using Bar Models: Using Addition and Subtraction (Chapter 4)	Unit 2: Observing and Measuring Changes In Energy Unit 4: Observing And Measuring Changes In The Environment (Winter)
<b>Feb-Mar Weeks 22-29</b>	Metric Measurement of Length (Chapter 7) Customary Measurement of Length (Chapter 13) ***Can be taught during Science.	Unit 1: Tools To Measure Our World (Measurement)  <a href="#">WCSD NYSSLS Mini-Unit: Matter and Energy in Organisms</a>
<b>Feb Weeks 22-24</b>	Multiplication (Chapter 5) and Multiplication Tables of 2, 5 and 10 (Chapter 6)	
<b>Feb-Mar Weeks 25-26</b>	Mental Math and Estimation (Chapter 10)	
<b>Mar Weeks 27-29</b>  <b>Mar Week 30</b>	Money (Chapter 11)  Fractions (Chapter 12)	Unit 3: Observing and Measuring Changes in Living Things Unit 4: Observing And Measuring Changes In The Environment  <a href="#">WCSD NYSSLS Mini-Unit: States of Matter</a>

<b>Apr Weeks 31-32</b>	Time (Chapter 14)	Continue Unit 3: Observing and Measuring Changes in Living Things Continue Unit 4: Observing And Measuring Changes In The Environment  <a href="#">WCSD NYSSLs Mini-Unit: Earth's History</a>
<b>Apr-May Weeks 33-35</b>	Multiplication Tables (Chapter 15) and Using Bar Models: Multiplication (Chapter 16)	
<b>May Weeks 36-37</b>	Graphs and Line Plots (Chapter 17)	
<b>May-June Weeks 38-40</b>	Lines and Surfaces (Chapter 18)  Shapes and Patterns (Chapter 19)	

## Third Grade

Date	Math	Science
<b>Sep-Nov</b> <b>Weeks 1-9</b>	Back to Basics (Numbers and Estimation) (Chapter 1 & 2) More or Less (Addition & Subtraction) (Chapter 2, 3, 4 & 5)	Unit 1: How a scientist investigates plant cycles  <a href="#">WCSD NYSSLS Mini-Unit: Ecosystem</a>
<b>Nov-Jan</b> <b>Weeks 10-20</b>	Multiplication & Division (2, 5, 10, 3, 4) (Chapter 5, 6, 15 & 16) Multiplication & Division (0, 1, 6, 7, 8, 9) (Chapter 6 & 9)	Continue Unit 1: How a scientist investigates plant cycles  Begin Unit 2: How a scientist investigates electricity  <a href="#">WCSD NYSSLS Mini-Unit: Forces and Interactions</a>
<b>Jan-Feb</b> <b>Weeks 21-22</b>	Ready, Set, Graph (Chapter 13)	Continue Unit 2 : How a scientist investigates electricity  Begin Unit 3: How a scientist investigates water cycles
<b>Feb-Mar</b> <b>Weeks 23-28</b>	Fun With Fractions (Chapter 12, 14)	
<b>Mar-May</b> <b>Weeks 29-33</b>	Measure Up (Chapter 15, 16, 19, 11) Navigating Numbers	Complete Unit 3: How a scientist investigates water cycles Begin Unit 4: How a scientist investigates animal cycles  <a href="#">WCSD NYSSLS Mini-Unit: Weather and Climate</a>
<b>May</b> <b>Weeks 34-37</b>	Shaping Up (Chapter 17 & 18)	Continue Unit 4: How a scientist investigates animal cycles  <a href="#">WCSD NYSSLS Mini-Unit: Inheritance and Variation of Traits</a>
<b>June</b> <b>Weeks 38-40</b>	More Multiplication & Division (Chapter 7 & 8) Post 3rd grade topics and projects	

## Fourth Grade

Date	Math	Science
<b>Sept-Oct</b> <b>Weeks 1-8</b>	Whole Numbers and Estimation (Chapter 1 & 2)	Unit 1: Organizing ourselves for doing science  <a href="#">WCSD NYSSLS Mini-Unit: Waves: Waves and Information</a>
<b>Nov-Jan</b> <b>Weeks 9-17</b>	Multiplication and Division (Chapter 3 & 2)	Complete Unit 1: Organizing ourselves for doing science  Unit 2: Digestion, nutrients, food chains, and food webs
<b>Jan-Mar</b> <b>Weeks 18-26</b>	Fractions and Mixed Numbers (Chapter 6)	Begin Unit 3: Simple Machines  <a href="#">WCSD NYSSLS Mini-Unit: Structure, Function and Information Processing</a>
<b>Mar</b> <b>Weeks 27-28</b>	Area Perimeter (Chapter 13)	Continue Unit 3: Simple Machines  Begin Unit 4: Organization of the Earth (constructive and destructive forces, rocks, and minerals.)
<b>Mar-May</b> <b>Weeks 29-33</b>	Geometry (Chapter 9, 10, 11, 14)	<a href="#">WCSD NYSSLS Mini-Unit: Energy Definitions</a>
<b>May</b> <b>Weeks 34-36</b>	Decimals (Chapter 7, 8)	Continue Unit 4: Organization of the Earth (constructive and destructive forces, rocks, and minerals.)  <a href="#">WCSD NYSSLS Mini-Unit: Processes that Shape the Earth</a>
<b>May-June</b> <b>Weeks 37-39</b>	Conversion of Measurements (Chapter 12)	
<b>June</b> <b>Week 40</b>	Post 4th grade topics and projects	

## Fifth Grade

Date	Math	Science
<b>Sept-Nov Weeks 1-10</b>	Place Value of Whole Numbers/Whole Number Operations/Algebra (Chapters 1, 2, 5)	Unit 1: Interactions of Chemical Matter  <a href="#">WCSD NYSSLS Mini-Unit: Conservation of Matter</a>
<b>Nov-Dec Weeks 11-16</b>	Adding & Subtracting Fractions (Chapter 3)	Unit 2: Interactions in the Micro-world  <a href="#">WCSD NYSSLS Mini-Unit: Matter and Energy in Organisms</a>
<b>Jan Weeks 17-20</b>	Multiplying and Dividing Fractions (Chapter 4)	
<b>Jan-Feb Weeks 21-24</b>	Place Value of Decimals & Decimal Operations (Chapter 8 & 9)	Unit 3: Interactions in the Human Body  <a href="#">WCSD NYSSLS Mini-Unit: Earth's Gravitation Force</a>
<b>Feb-May Weeks 25-33</b>	Geometry/Masurement & Data (Chapters 13 & 14)	
<b>May Weeks 34-35</b>	Graphing (Chapter 11)	Unit 4: Interactions in the Environment - Energy Transfer  <a href="#">WCSD NYSSLS Mini-Unit: Humans and Earth's Systems</a>
<b>May-June Weeks 36-40</b>	Review/Project/Prepare for 6 <sup>th</sup> Grade	



## Sixth Grade

Date	Math	Science
<b>Sept Weeks 1-3</b>	Positive Numbers & The Number Line (Chapter 1)	Unit 1: Investigating the Nature of Science and Technology Begin Unit 2: Investigating Energy (Electromagnetism, Potential/Kinetic)  <a href="#">WCSD NYSSLS Mini-Unit: Structure and Properties of Matter</a>
<b>Sept Weeks 3-4</b>	Negative Numbers & The Number Line (Chapter 2)	
<b>Oct Weeks 5-8</b>	Multiplying & Dividing Fractions & Decimals (Chapter 3)	
<b>Nov Weeks 9-13</b>	Ratio (Chapter 4)	
<b>Dec Weeks 14-15</b>	Rates (Chapter 5)	Continue Unit 2: Investigating Energy (Electromagnetism, Potential/Kinetic)  <a href="#">WCSD NYSSLS Mini-Unit: Chemical Change &amp; Endothermic Reaction</a>
<b>Dec-Jan Weeks 16-18</b>	Percent (Chapter 6)	
<b>Jan Weeks 19-21</b>	Algebraic Expressions (Chapter 7)	
<b>Feb Weeks 22-24</b>	Equations & Inequalities (Chapter 8)	Unit 3: Investigating Earth in Space  <a href="#">WCSD NYSSLS Mini-Unit: Creating a Stronger Electromagnet</a>
<b>March Weeks 25-26</b>	The Coordinate Plane (Chapter 9)	
<b>March Weeks 27-29</b>	Area of Polygons (Chapter 10)	
<b>April Weeks 30-32</b>	Surface Area and Volume of Solids (Chapter 12)	Unit 4: Investigating the Environment (Ecosystems, Human Interactions with the Environment)  <a href="#">WCSD NYSSLS Mini-Unit: Matter and Energy in Organisms and Ecosystems/Interdependent Relationships in Ecosystems</a>
<b>May Weeks 33-35</b>	Introduction to Statistics (Chapter 13)	
<b>May-June Weeks 36-38</b>	Measures of Central Tendency (Chapter 14)	
<b>Weeks 39-40</b>	Post 6th Grade Topics Projects	

