

*Syosset CSD*

# Elementary Mathematics



# Our Vision

To enable students to realize their full intellectual potential and to inspire lifetime learners. Syosset will be known for:

- Students who are **agile, creative, adaptable learners**;
- Instruction that not only **increases students' knowledge**, but their **capacity to think**;
- Programs that are **innovative, engaging, effective**, and comparable in every building;
- Attracting, training, and retaining outstanding faculty and leaders;
- Exceptional programs in the fine and performing arts.



# History of Mathematics in Syosset

Syosset selects GO Math!  
and moves to Common  
Core Learning Standards

2012-2013

Syosset revamps  
Elementary Report card in  
alignment with newly  
adopted Next Generation  
Learning Standards

2018-2019

Syosset selects updated  
GO Math! Program after  
committee review  
process

2024

2015 & 2017

GO Math! undergoes a  
series of updates to better  
align with the Common  
Core Learning Standards

2023

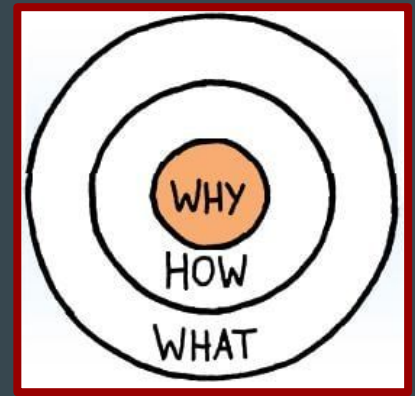
Final year for GO Math!  
2015, a successor program  
is in print as committee  
gathers to discuss  
changes

Curriculum writing to enhance and advance math learning is ongoing

# Resource Selection Process

## Starting with WHY

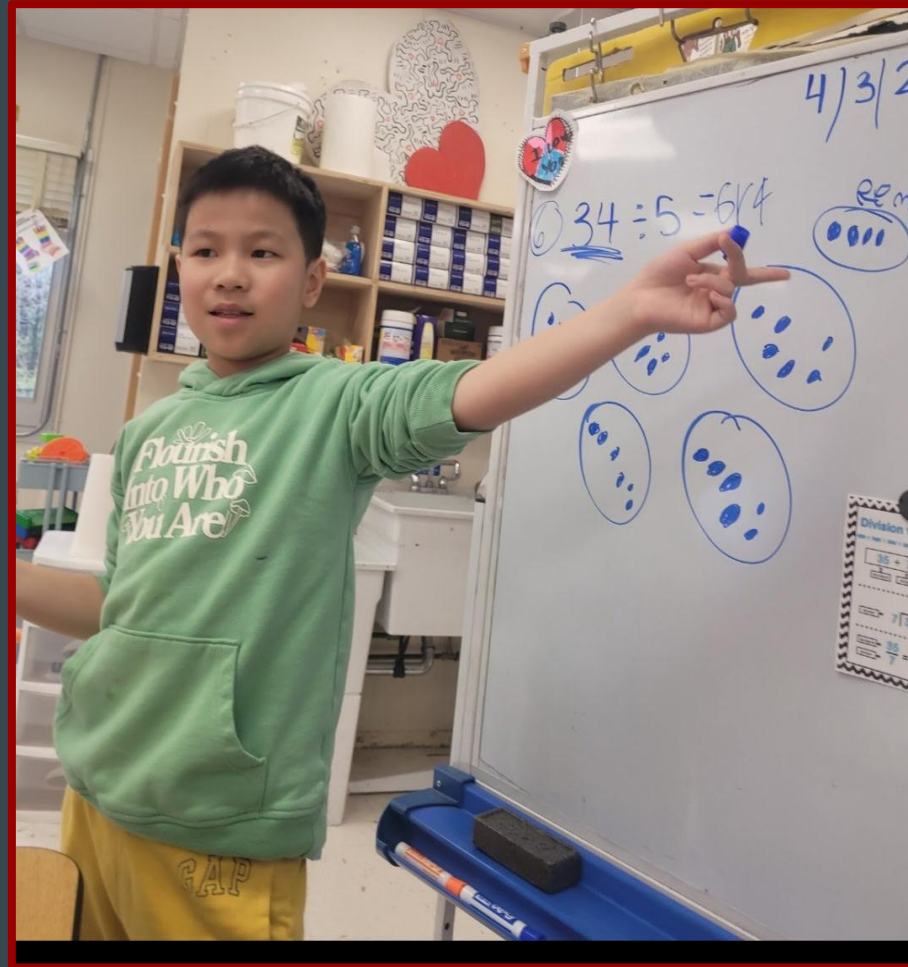
- Selecting a new primary resource
- A primary resource in math ensures equity across seven elementary schools
- An updated resource is an opportunity to:
  - Gain greater alignment with updated standards (Next Generation)
  - Renew and account for our professional growth since we last considered resources
  - Ensure that Syosset is using resources that continue to promote achievement and deep mathematical thinking in the areas of problem solving and critical thinking



# Themes from the Committee

*What are the benefits and outcomes we want for students?*

- Increased confidence in applying math to real world situations
- Improved problem solving and critical thinking abilities
- Advanced logical mathematical reasoning
- Better preparation for higher level math and STEM learning
- Targeted and personalized learning





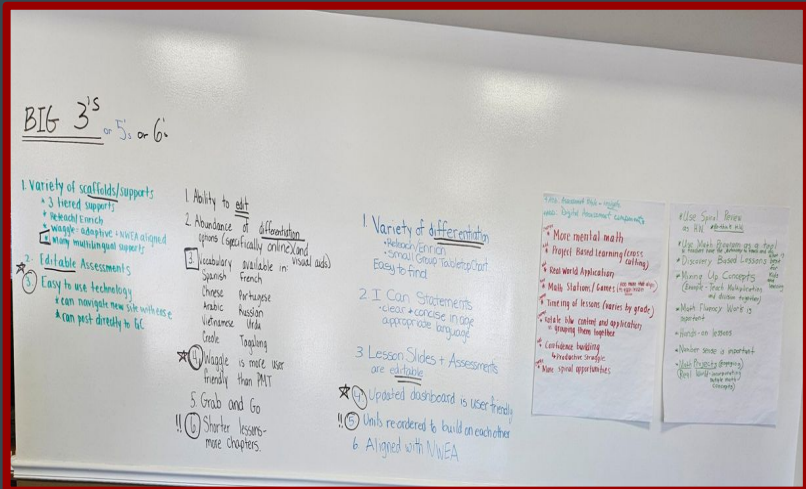
# Themes from the Committee

*What are characteristics of an excellent resource?*

- A balance of teacher-created curriculum and resource materials
- Hands-on learning; engaging (math games and center activities)
- Space for mathematical reasoning and critical thinking
- Striking the balance between computation and deep problem solving
- Student choice & program flexibility (i.e. modes of instruction, differentiation)
- Increasing skill mastery
- Project-based learning opportunities related to real world application

# Resource Selection Process

- Convened a committee comprised of classroom teachers, special educators, DLs, interventionists, enrichment teachers, staff developers, & administrators
- Rubric used for comparative analysis organized in four dimensions:
  - Alignment to the Depth of the Standards
  - Key Shifts of Focus
  - Instructional Supports
  - Assessment
- Evaluated products and participated in demonstrations
  - Envision
  - Investigations
  - Reveal
  - GO Math!



# Benefits of Updated GO Math!

- Aligned to the updated NYS Next Generation Learning Standards
- Focused instruction/conceptual understanding in shorter chapters
- Updated online platform for teachers and students
  - Student Edition Workbook
  - Digital manipulatives
  - Multilingual Learner Support
  - Math on the Spot Videos
- New digital student platform (Waggle®)
  - Provides adaptive practice in an engaging and user friendly platform
  - Connected to the NWEA for adaptive learning
- More online resources for families




**Launch Activity 2**  
**Multiplication**

**A Taste of Sunshine!**

Oranges are citrus fruits. They grow best in tropical and subtropical climates, but are eaten and enjoyed all around the world.

When oranges are ripe, they are picked and sent to a packing house. Oranges are graded on their color, shape, age, and freedom from defects.

Most oranges are made into juice but the most perfect oranges are reserved for gift boxes, which are sent all over the world. Have you ever sent or received a gift box of oranges?



**More About Oranges**

- Oranges were first grown in China.
- There are over 600 varieties of oranges in the world.
- The word "orange" referred to a color first. The fruit was named after the color.

**Three Reads**

First, listen to the problem. What is the math story about?

Next, read the problem aloud with your class. How might you solve it?

**CHAPTER 5**  
**Strategies for Multilingual Learners**

Assessing your student's understanding of mathematical concepts can be done by listening, speaking, reading, and writing. The level of support a student needs determines how best to assess that student's understanding of mathematical concepts and will help meet the needs of all your students.

	Planning for Instruction		
Language	Substantial (WIDA Levels 1)*	Moderate (WIDA Levels 2 & 3)*	Light (WIDA Levels 4 & 5)*
Student understands math concepts	<ul style="list-style-type: none"> <li>• uses single words</li> <li>• uses common short phrases</li> <li>• hears math terms on visual supports</li> <li>• uses of math terms</li> </ul>	<ul style="list-style-type: none"> <li>• uses single words</li> <li>• uses some academic vocabulary</li> <li>• relies on visual supports and use of manipulatives</li> </ul>	<ul style="list-style-type: none"> <li>• uses a variety of sentences</li> <li>• uses academic vocabulary</li> <li>• benefits from visual supports and manipulatives</li> </ul>
Student explains math concepts	<p><b>Listening:</b> points to pictures, or phrases to answer questions</p> <p><b>Speaking:</b> answers yes/no questions</p> <p><b>Reading:</b> matches symbols to math terms and concepts</p> <p><b>Writing:</b> draws a visual representation of a problem</p>	<p><b>Listening:</b> matches, categorizes, or sequences information based on visuals</p> <p><b>Speaking:</b> begins to explain reasoning, asks math questions, repeats explanations from peers</p> <p><b>Reading:</b> identifies important information to solve a problem</p> <p><b>Writing:</b> uses simple sentences and visual representations</p>	<p><b>Listening:</b> draws conclusions and makes connections based on what they heard</p> <p><b>Speaking:</b> explains and justifies concepts and solutions</p> <p><b>Reading:</b> understands information in math contexts</p> <p><b>Writing:</b> completes sentences using some academic vocabulary</p>

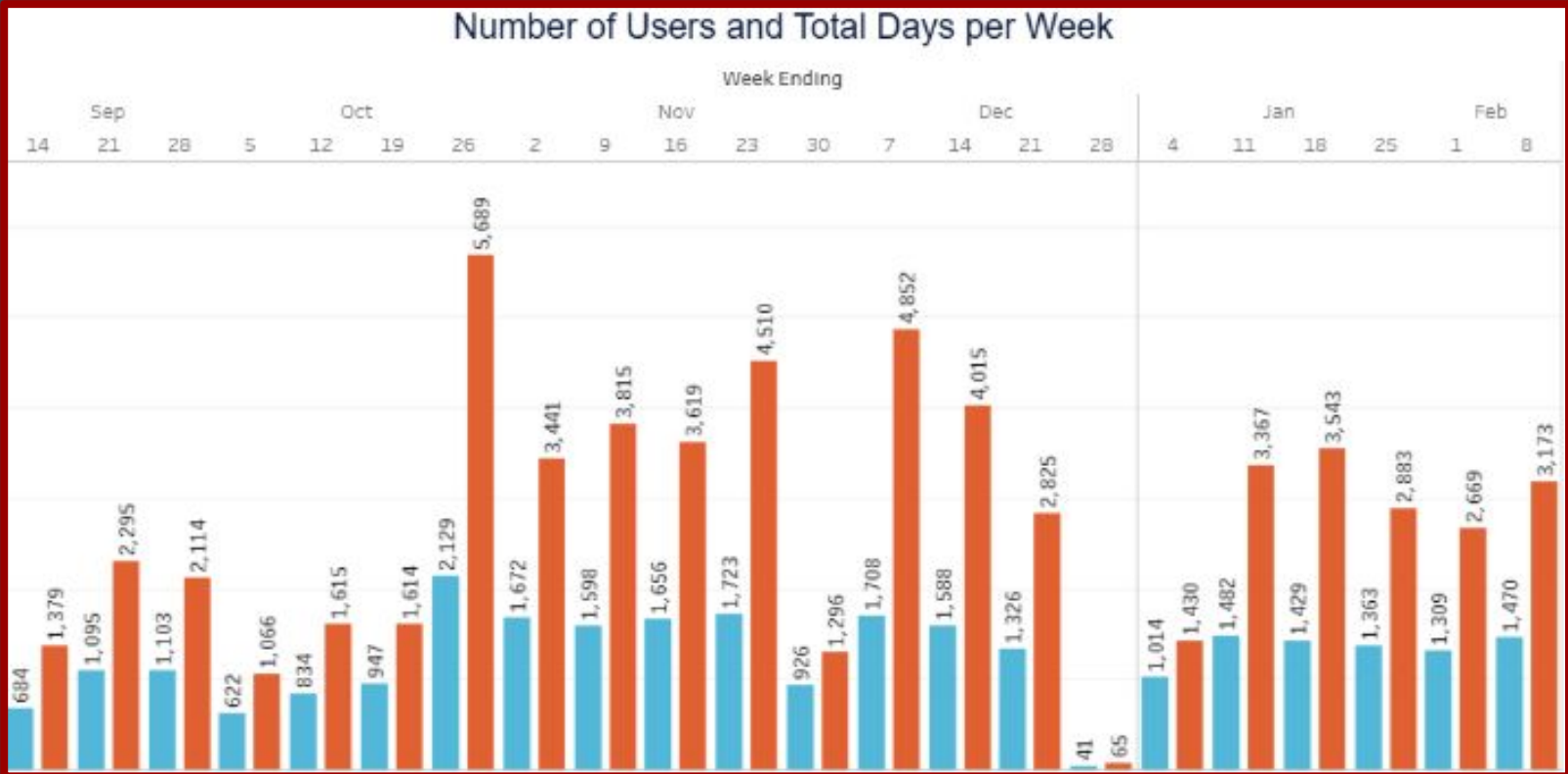
\* For more information on WIDA Standards, visit their website at: <https://wida.wisc.edu/>



# Implementation & Support

- Initial PD about updates to GO Math! in spring of 2024
- Turnkey of summer curriculum writing during Supt. Conf. Day 2024
- Initial in-person training in fall of 2024
- Ongoing professional development ([Coachly](#)<sup>®</sup>)
- [Parent workshop](#) for families
- Collecting feedback from staff, students, and families
- Additional curriculum writing to enhance math learning summer 2025

# GO Math! Digital Usage Data

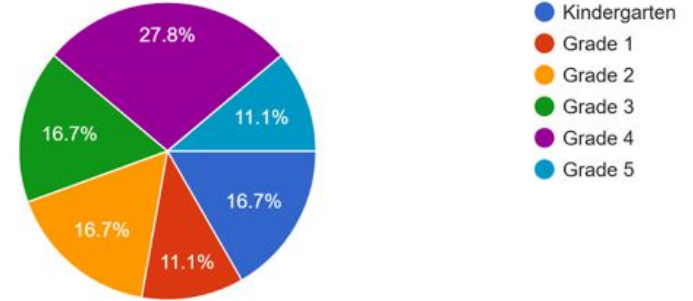


# of unique users

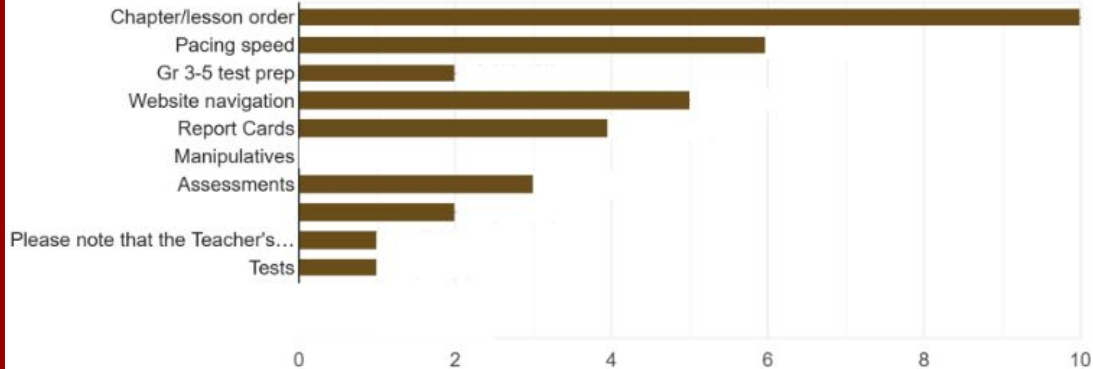
Total number of times logged in

# Ongoing Teacher Feedback

Grade



This feedback is about: (check all that apply & elaborate below)



# Collecting Feedback: What People are Saying!

This year, (5th grade) math is more challenging, because we are being pushed to be more independent and not as reliant on the support of our teachers.

~SyoTeacher

As a teacher, I love the lesson: slides-simple and to the point. Waggle is easy to assign, kids do it daily and it reinforces the concepts taught and the kids love doing it. ~SyoTeacher

We had our first GO Math! Coachly session. We had accumulated many questions through our rollout of the new GO Math! program. This particular session was geared towards the Waggle feature. The GO Math! coach welcomed our questions, presented personalized training and was receptive to our concerns and suggestions. Overall, we felt this was an amazing resource and will definitely utilize it again. ~SyoTeacher

We like the online platform. It's much more accessible and easier to find things. We've enjoyed watching the students on Waggle and it's very helpful that it is aligned to the NWEA's without the need for us to input any data on our end. Having the option for editable tests has also been a game changer! We are not only able to change the questions, but it helps us to make custom review sheets and differentiate for students who need special education supports such as additional space between questions, large font etc.

~SyoTeacher

Waggle is fun because if you complete a mission, you earn a token and then you can play games with your friends.

~SyoStudent

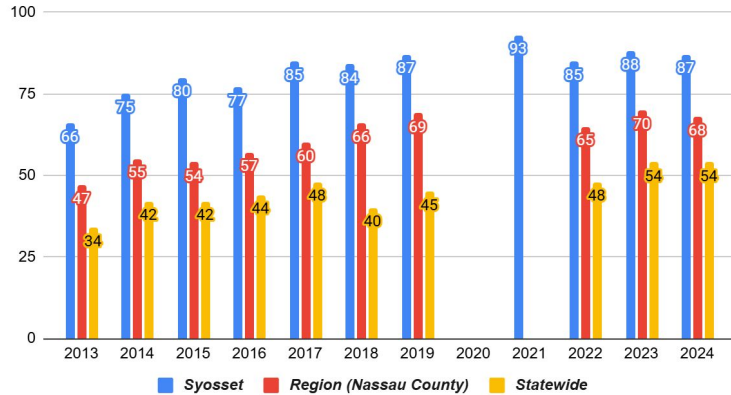
I love how I can access the workbook online to help my child. The workshop was informative! ~SyoParent

This year we have so much fun doing stations with games!

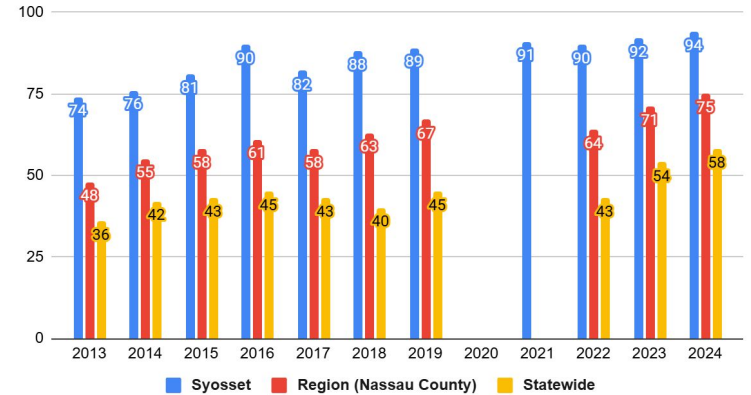
~SyoStudent

# NYS Math Assessment: Longitudinal Student Achievement

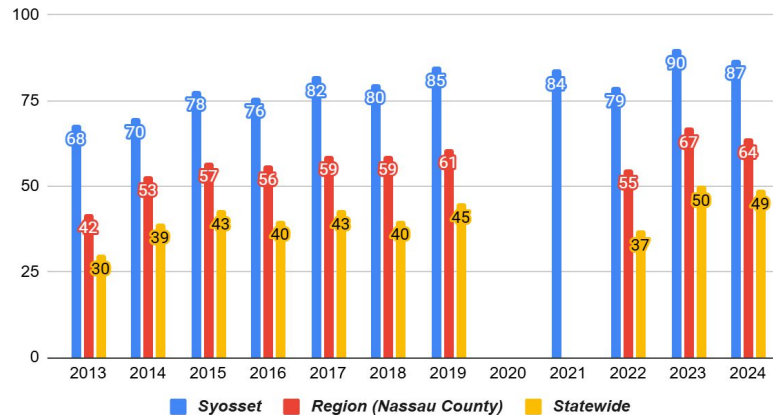
## Grade 3: Math Proficiency Scores (%) (Levels 3 and 4)



## Grade 4: Math Proficiency Scores (%) (Levels 3 and 4)

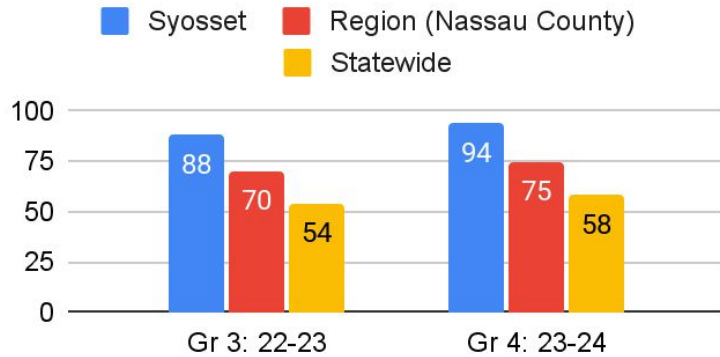


## Grade 5: Math Proficiency Scores (%) (Levels 3 and 4)

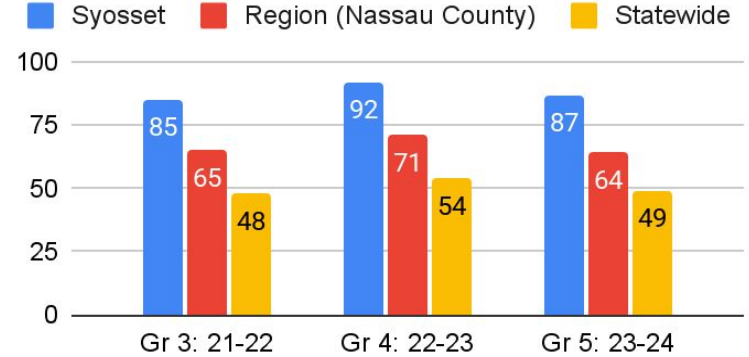


# NYS Math Assessment: Cohort Data

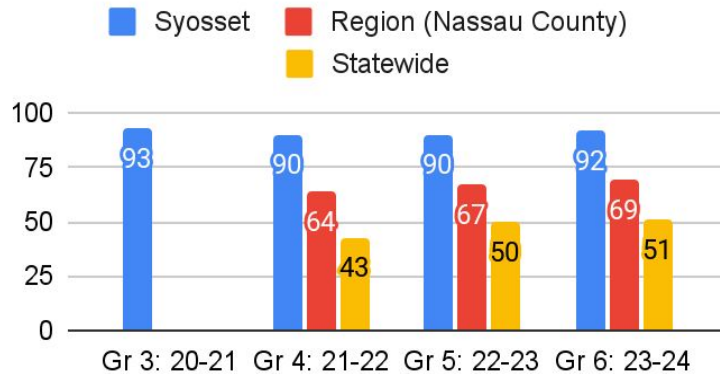
## Current Grade 5 Cohort



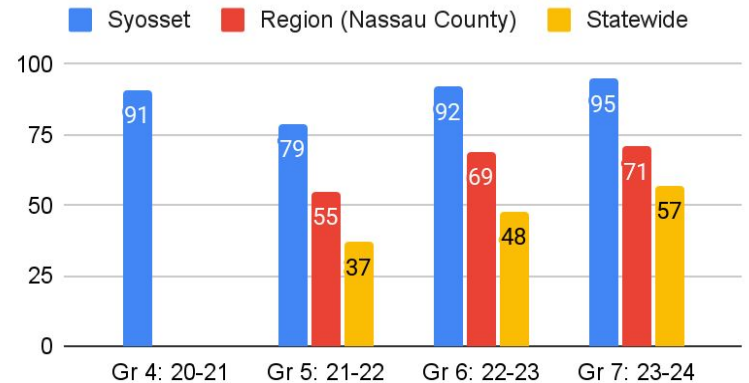
## Current Grade 6 Cohort



## Current Grade 7 Cohort



## Current Grade 8 Cohort



# Moving Forward

- Continue to evaluate the effectiveness of our primary resource:
  - Feedback from all participants
  - Student mastery of skills
  - Performance on NYS Assessments
- Identify enhancements to be made through summer curriculum writing based upon the feedback
- Continue to develop more project-based learning opportunities designed to promote the following skills:
  - Mathematical reasoning
  - Critical thinking
  - Problem solving



THANKS A  
 $10^6$

