




# Making Meaning of Mathematics

Spencer Jamieson, Ph.D.  
Mathematics Specialist




- As a STUDENT math for me was like \_\_\_\_\_, because\_\_\_\_\_.





# Today we will...

- Talk about mathematics pathways in FCPS
  - Focus on 3 big ideas to help your child in mathematics
- 

# Student-Centered Goals

## Goal 1: Strong Start, Pre-K–12

Every student will develop foundational academic skills, curiosity, and a joy for learning necessary for success in Pre-K through 12th Grade.

## Goal 2: Safe, Supported, Included, and Empowered

Every student will experience an equitable school community where student health and well-being are prioritized, and student voice is centered.

## Goal 3: Academic Growth and Excellence

Every student will acquire critical and creative thinking skills, meet/exceed high academic standards, and achieve their highest academic potential.

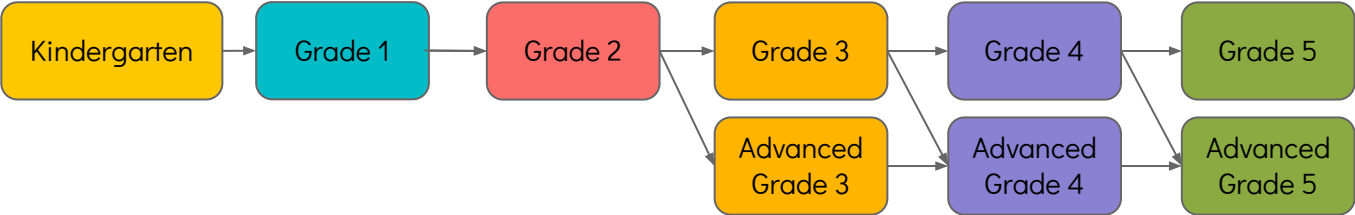
## Goal 4: Equitable Access and Opportunity

Every student will have access to high-quality academic programming and resources to support their success.

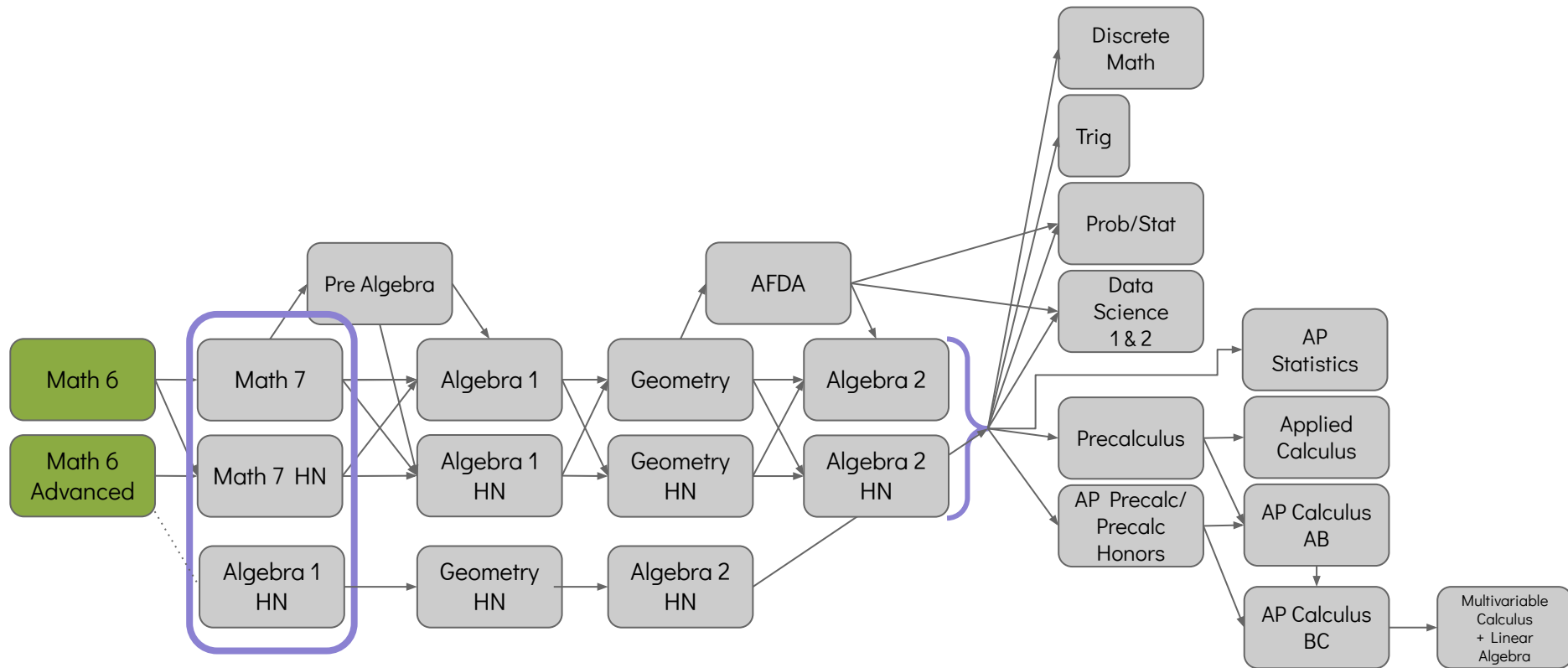
## Goal 5: Leading for Tomorrow's Innovation

Every student will graduate ready to thrive in life after high school and with the skills to navigate, adapt, and innovate for a sustainable future.

# Math Pathways Grades K-5



# Math Pathways Grades 6 - 12 (AP)



## 7<sup>th</sup> Grade Mathematics Courses



Both Mathematics 7 **and** Mathematics 7 Honors prepares students for Algebra 1 or Algebra 1 Honors in Grade 8.





**How do I help  
my child?**



How is Math  
Different?

$$2 + 1 = 3$$



Focus on  
Understanding



$$\begin{array}{r} 12 \\ - 9 \\ \hline \end{array}$$



Focus on  
Understanding



A photograph of a piece of lined paper with a handwritten math problem in green ink. The problem is  $12^0 \times 12^{12} = \underline{9}$ . The '12' in the first term has a '0' as a superscript, and the '12' in the second term has a '12' as a superscript. The result '9' is underlined.



## Focus on Understanding



Which  
One  
Doesn't  
Belong



Which  
One  
Doesn't  
Belong



$$\frac{1}{2}$$

$$\frac{5}{3}$$

$$\frac{2}{10}$$

$$\frac{2}{5}$$





What do you notice?

What do you wonder?

Where is the math?



# Ask Questions



# Focus on Questioning

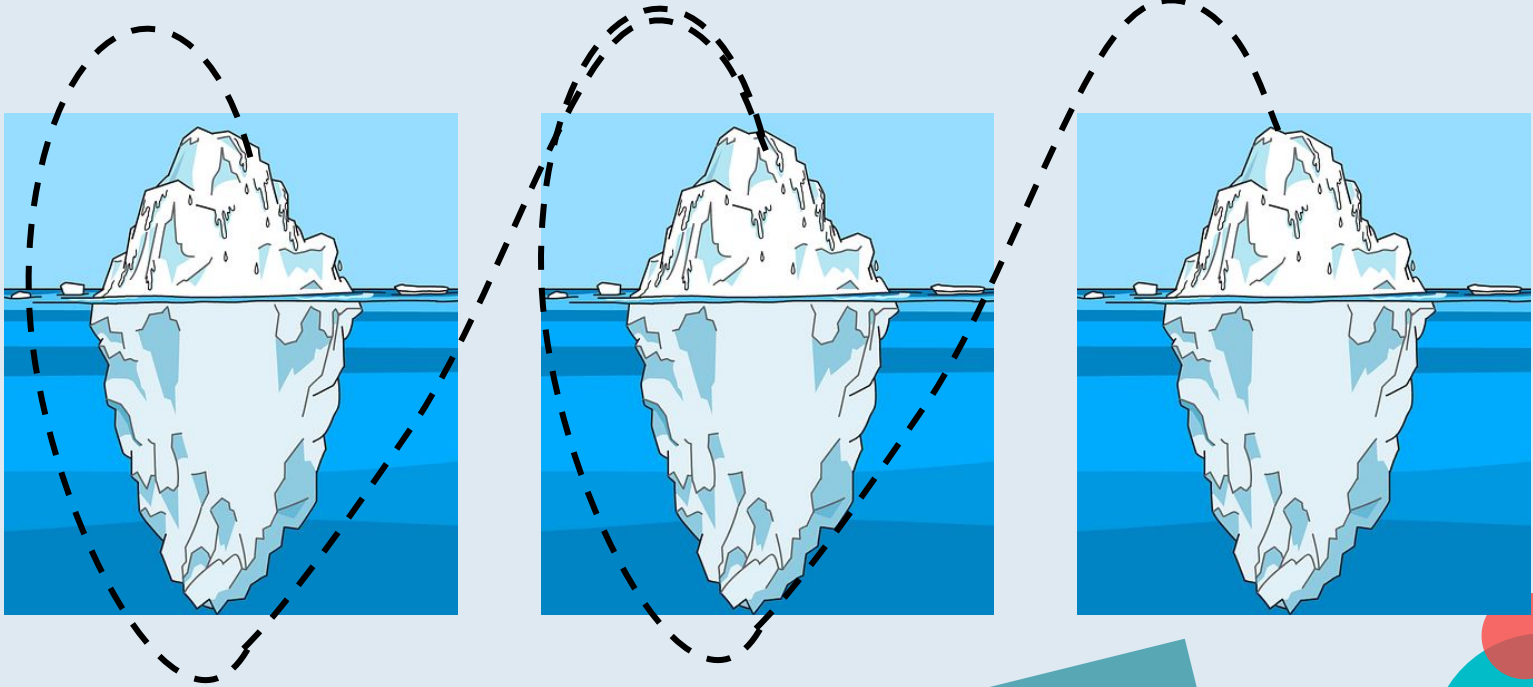
- What do you notice?
- What do you wonder?
- Where is the math?

# Jumping from Skill to Skill





# Going Deeper and Seeing the Big Concept



Math Takes Time





## 3 Things to Support Your Child in Math

1. Focus on Understanding
2. Asking Questions
3. Math Takes Time



Be a **Math** Person



If you love Math...  
Your child will Love Math

$\sqrt{-1}$  ❤️  
**Math**



**Spencer Jamieson, Ph.D.**  
Mathematics Educational  
Specialist  
Fairfax County Public Schools  
[tsjamieson@fcps.edu](mailto:tsjamieson@fcps.edu)