

HEART
MATH TUTORING

Introduction to Heart Math Tutoring - 2023/24 School Year

Goals of Orientation Part 1

- Feel confident about Heart's program and model for supporting students
- Build deeper understanding of the needs of our students and community
- Learn what makes a successful tutor:
 - Relationship-building
 - Following the curriculum
 - Guiding your students' learning – facilitator vs. instructor – and encourage growth mindset

Agenda

- Introductions (5 minutes)
- About Heart Math Tutoring (5 minutes)
- Why math? (15 minutes)
- Who are HMT students? (5 minutes)
- 3 Guidelines for Successful Tutoring (20 minutes)





ABOUT HEART MATH TUTORING



THE NEED

Why Math?

Let's Engage

Take a minute and think about feedback you've been given about your math abilities throughout your life. This could be through grades, comments from others, teachers, etc.

Next, put one word in the chat to describe how you feel about math.

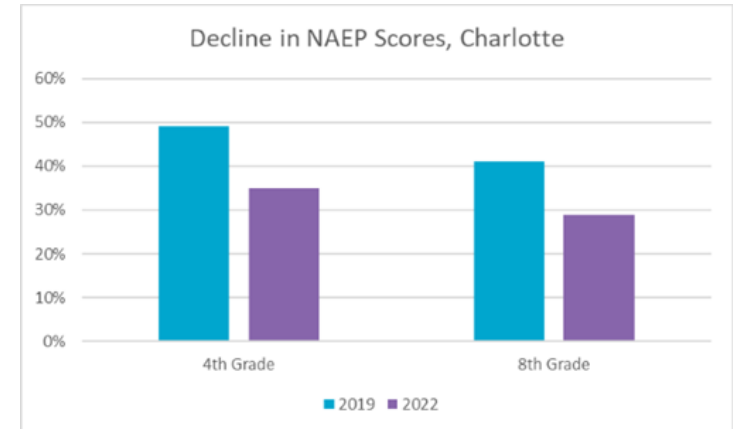


Charlotte Need

2022 NAEP scores indicate that only 35% of Charlotte 4th graders were proficient in math, down from 49% in 2019. Without intervention, math scores tend to decline as course difficulty increases, with math proficiency rates dropping to 29% by 8th grade (2022 NAEP).

Charlotte Stats

- Charlotte ranked last of 50 cities in the likelihood someone from the lowest income quintile can make it to the top income quintile in their lifetime. Public school quality is cited as a factor, along with social capital, segregation, civic engagement, and income inequality (Chetty et al., 2013)
- Math I (Algebra) is necessary for obtaining a high school diploma, which is critical to employment. 75% of US jobs require a high-school diploma, and without one, the median salary is \$25,000 (US BLS, 2015).
- 75% of the fastest growing occupations require significant math or science preparation (AdeccoUSA, 2016), and we want all students to feel empowered and prepared to pursue these opportunities.
- School-entry math skills are correlated with later achievement both in math AND reading (Greg Duncan, et al., 2007).



“If you have a problem with Algebra in your high schools, you have to fix it in K-4.”

-Kathy Richardson, a leading math educator in U.S. and author of Developing Number Concepts



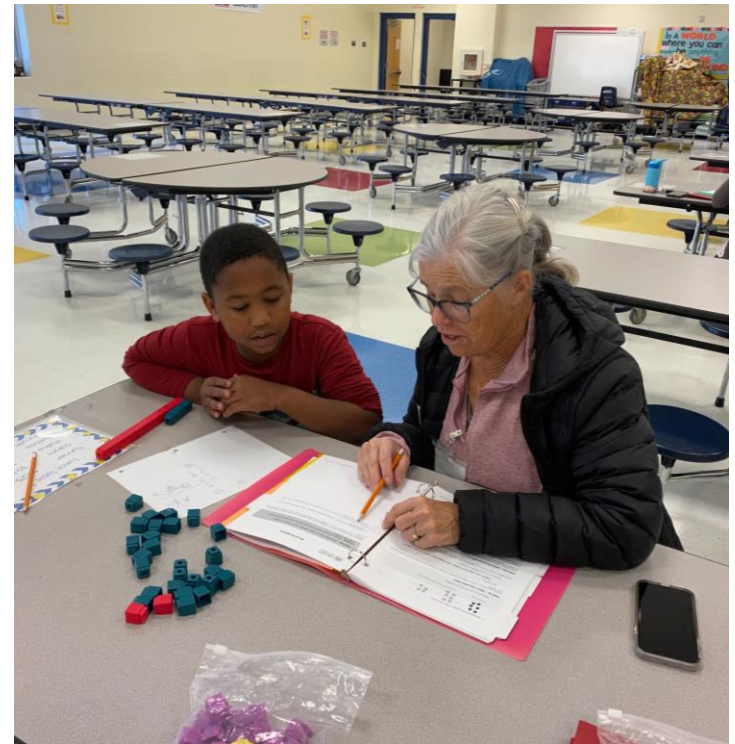
NEED FOR A STRONG
MATH FOUNDATION

Let's Discuss

Did anyone have surprises related to the math need in Charlotte?

Any reflections on long-term impacts of being below grade level in math?

Please unmute and share out!





HEART STUDENTS



50% MATH TUTOR

50% POSITIVE INFLUENCE



Let's Discuss

Think of someone (teacher, coach, colleague etc.) who made you feel seen and understood.

What did they do to make you feel that way? What qualities make someone a positive mentor?

Take a minute to reflect, then unmute and share out!





You will work with each student for 30 minutes. Because of the one-on-one format, these 30 minutes could be the most challenging and mentally rewarding minutes of the student's day.



Build a Relationship with your Student



- Be a mentor - take the time to learn & remember things about your students.
- Understand the *whole* child.

Follow the Curriculum

- The proven curriculum is fun, easy-to-follow, hands-on and targeted to student specific needs... but might be different from how we all learned math.
- "Math makes sense!" vs. Rules & Procedures.
- 98% of over 3,000 Heart students tutored to date showed growth in 2 or more concepts.



Make your Student do the Work!

- Facilitator vs. Instructor - Your role is to ask questions & require good explanations.
 - *How did you get your answer? Are you sure about your answer?*
 - *I'm not sure I understand; can you explain that to me again?*
 - *Did you Notice...?*
- Growth Mindset, Power of Goal Setting.

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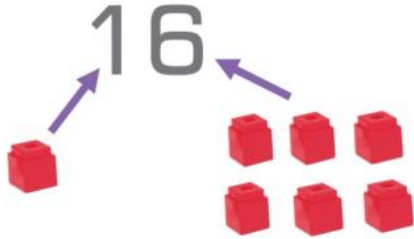
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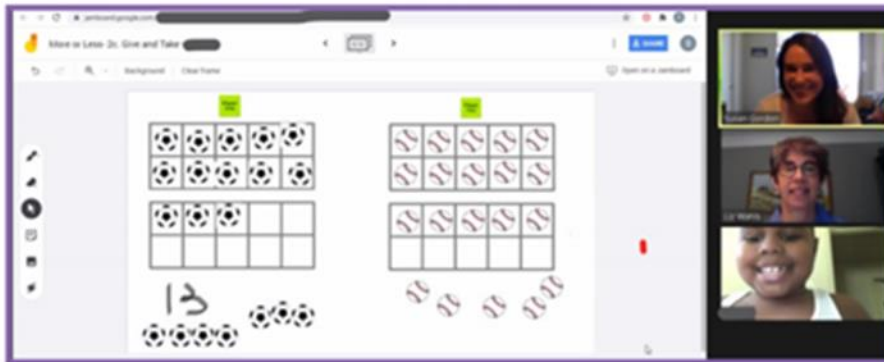
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Lack of foundational and conceptual understanding of numbers has been well-documented in elementary students across the United States.



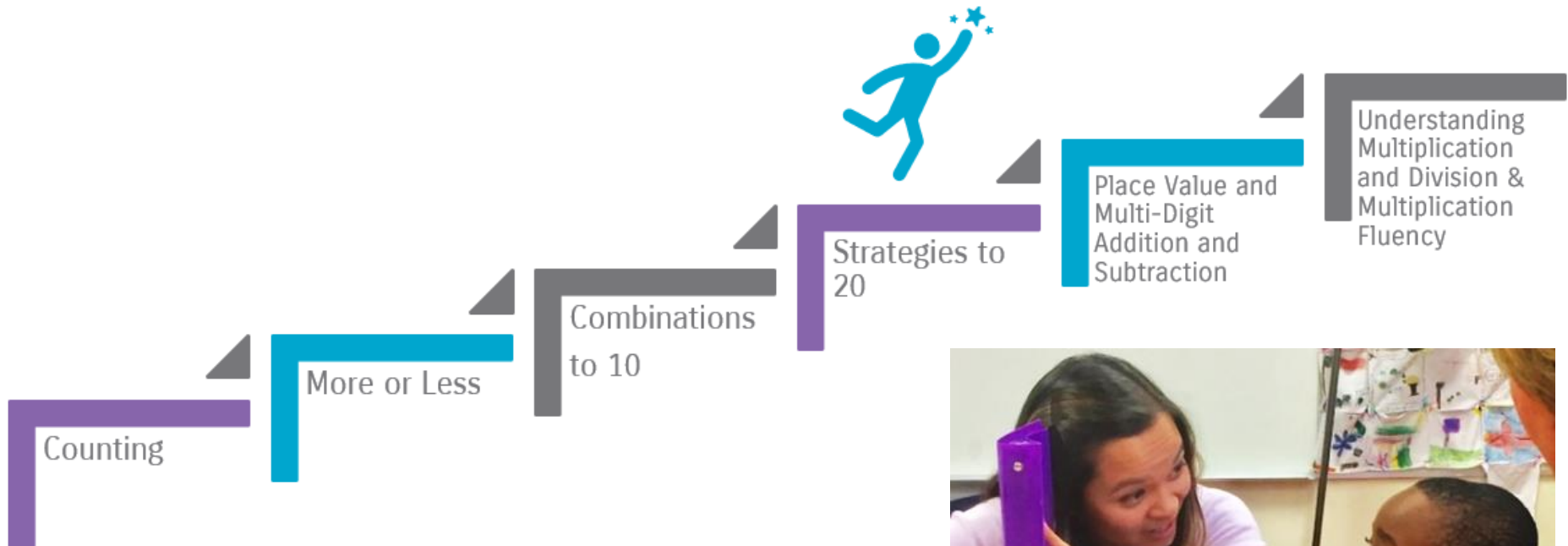
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“The kind of mathematical thinking that can provide a foundation for learning algebra must be developed over an extended period of time, starting in the early elementary grades.”

- *Carpenter, Franke, Levi - Integrating Arithmetic and Algebra in Elementary School*

Students complete a pre-assessment to determine their starting notebook and work through the material at their own pace with tutor and coordinator support!



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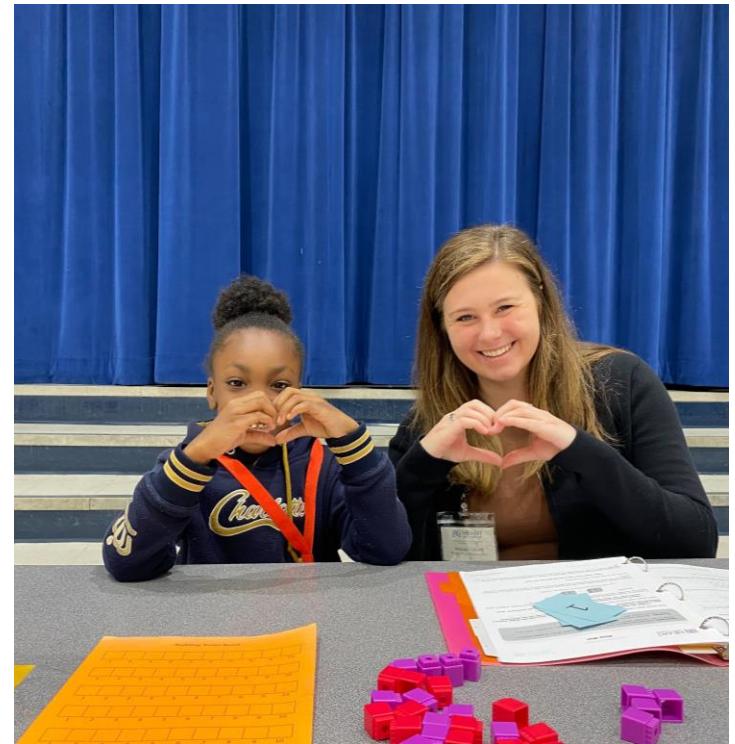
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Let's Discuss

What do you think you will enjoy most about building relationships with children?

Which of the tips seems the most challenging to you?

You'll have 3 minutes to share in your breakout room!



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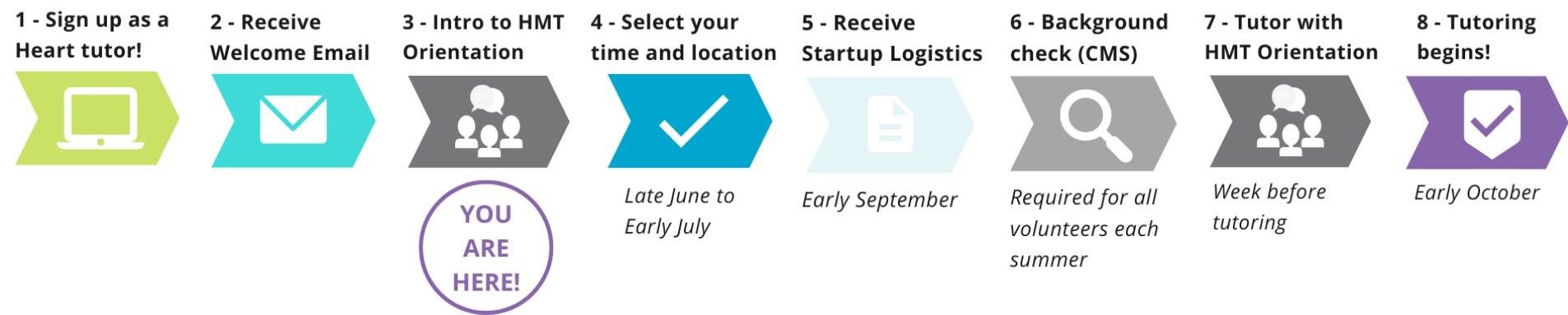


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LOGISTICS AND NEXT STEPS



(4) Select your time and Location

- If you haven't already selected your school(s) and tutoring times, you will receive an email from us this summer with available tutoring options that you can choose

(5) Receive Startup Logistics

- You will receive an email from us in late August/early September which will include your assigned school and outline all additional next steps!

(6) Background Check (CMS)

- Before you begin tutoring you will need to complete the CMS Volunteer registration

(7) How to tutor with HMT training in Oct.

- Meet your Program Coordinator and fellow tutors at your school
- Learn how to tutor virtually or in person using HMT curriculum – including what needs to happen before, during and after a tutoring session
- Leave confident in your ability to facilitate your first session and excited to meet your students!



About

Programs

Families

Volunteers

News

Become a Volunteer

Tutor Resources

Recruit a tutor!

General Resources



IN PERSON LESSON GUIDES

HMT In Person Lesson Guide
(password protected)



CURRICULUM VIDEOS

HMT Curriculum Videos



NOTEBOOK OVERVIEW

HMT Notebook Overview



ADDITIONAL RESOURCES

HMT Additional Resources



VOLUNTEER RECRUITMENT
KIT

Recruit a Tutor!

Virtual Tutoring Resources



VIRTUAL LESSON GUIDES

HMT Virtual Lesson Guide
(password protected)



HMT MATERIALS MAILING

Have a Virtual Lesson Guide
Mailed



TECHNOLOGY GUIDES

Technology Guides for Virtual
Tutoring

Charlotte Resources



CLT TUTOR CODE OF
CONDUCT

CLT Tutor Code of Conduct



CLT CHILD PROTECTION
POLICY

CLT Child Protection Policy



SIGN CLT TCC AND CPP

Virtually Sign the CLT TCC and CPP



CMS BACKGROUND CHECK

CMS Volunteer Registration



Thank You!