MathFinder
Where Is Your Question?

The ***March Mathness Challenge*** is an easy, fun, and innovative way for all educators working with students in grades 4 or up to engage with Math in the real world - right here in Dallas! All you need is a comfortable pair of walking shoes and a smartphone. Whether you are working in public, private, or charter schools, or in after-school programs, we hope you will encourage your students to sign up. And we hope you participate too!

Students get to choose from hundreds of specific locations across 15 Math Walks, all designed by Math and STEM educational experts from talkSTEM, Southern Methodist University, National Museum of Mathematics, and in collaboration with such institutions as the Dallas Arboretum, Dallas Museum of Art, Dallas Zoo, Klyde Warren Park, Frontiers of Flight Museum, and more. These Math Walks are designed with the goal of fostering student engagement in math; research shows us that by upper elementary ages and definitely by the end of middle school, too many children feel like they are not interested in math, which is the bedrock of STEM and which is also a language and way of thinking used by a wide range of STEAM professionals such as artists, chefs, musicians, engineers, and more! There are very few rules and we hope that students, families, and educators enjoy these experiences freely and come to see new Math connections that are fascinating to them. We look at art, architecture, nature and everyday objects through the lens of Math. So, in addition to math teachers, all educators interested in art, architecture, science, STEM, and more will find many of our tours interesting. *This is less Math as presented in a text book and more Math as a language to look at what's around you and to pose questions about it.* Nonetheless, we are professional K-12 teacher educators and recognize the importance of TEKS; most of our stops are TEKS-aligned and we are working on getting all of them to be aligned fairly soon. **Here** is our working document with TEK alignments included.

Note: the math content at all these stops target grades 4-8. Let the students know that when they watch the video or listen to the audio tour at each stop, they should focus on the **key question** and the **general strategy** of the response to that key question. We want them to **start making new math connections** to lots of activities, phenomena, and places as opposed to being bogged down by details. For older students, challenge them to create their own math walk stop at each stop they visit and win prizes for their creative entries. Also, we find age differences tend to pale away when exploring the real world…!

Here are some ways that we recommend engaging your students:

1. Show the instructional video in class and talk about the Challenge. Encourage them to sign up and reinforce that they can work in teams! Share any types of extra credit you are associating with taking the Challenge.

2. Discuss the 2 categories of prizes all participants can win each week in March: Automatic entry into a weekly raffle, once you visit a minimum of 7 stops (does not matter if the stops are within a single Math Walk or from different Math walks).

   i.Highlight that they should watch the video guide or listen to the audio guide at their selected stops and make connections to what they learned in class, if you're a math teacher. ii.You can also ask them to keep a note of their favorite stops, what the key question was at that stop, and what they found most interesting about it. Have students share in class each week and provide some extra credit.iii.Have students share their favorite stops in class and carve out a few minutes to watch the video guide together or to listen to the audio guide together. You can view all our videos here (use filters to easily locate the tour) and to listen to audio guides easily on a computer, visit this site, select Dallas, and select the specific tour to easily visit the desired stop and play audio.

3. Creative entries on social media: take a photo or selfie at any of the stops you visited and listened to the audio tour about; then come up with your own fascinating, math-related question at that stop. Share on Instagram making sure to tag @talkingSTEM and use #MarchMathness.

   You can also ask students to share their photos and questions in class for extra credit.

4. Be inspired to use our methods and create your own Math Walks on campus, in your neighborhoods, or anywhere! Visit this web page with our methods and creative worksheets - all freely accessible.

5. We'd love to know other ways you are encouraging your students. Please share with us on twitter/instagram: @talkingstem #marchmathness

6. Questions? Please email benjamin@talkstem.org