MATH TEACHER TOOLKIT

Grades K-8



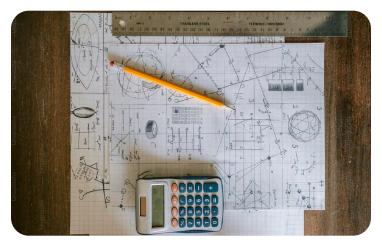
Dear teachers,

Thank you for welcoming Pacific Science Center's Science on Wheels Math program into your school! Please enjoy these additional resources in your class or to send home with families to help students continue to build on the themes addressed during their Science on Wheels day.

AFTER YOUR SCIENCE ON WHEELS VISIT

■ DISCUSSION PROMPTS

Lead α 5–10 minute group discussion after your Science on Wheels visit.



- What did you like best about the Science on Wheels Math program?
- Math is in everything! What is one way you used math today that you were not expecting?
- Inventors use math to design their inventions. Think about an invention you use frequently (a bike, a shovel, a desk chair). How might the inventor have used math to make their design useful?
- Math is used in many jobs from construction workers and engineers to chefs and accountants. What are some of the questions you have that you could use math to help you solve?











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ACTIVITY GUIDES AND VIDEOS

These optional extension resources help students enhance their observation skills and connect to their Science on Wheels experience. These can be used within the learning space or shared with students to do at home with their families.

***** ACTIVITY GUIDES

- Math Battles | Batallas Matemáticas: Use math to solve for the winning number in this puzzling card game for any number of players. Activity time: 20-30 minutes
- Personal Measuring Systems | Sistemas de Medición Personal: Measure things at home based on your own measuring unit in this activity. Activity time: 15-20 minutes
- Rolling with it | Tirando al Azar: What is the mathematical difference between rolling two six sided dice and flipping six two sided coins? If a game asks you to roll two dice, can you roll once and multiply by two? Learn how to calculate the probabilities of different random events in Rolling With It. Activity time: 20 - 30 minutes
- Game of Nim | Juego de Nim: Can you trick your opponent into taking the last token in this classic logic game? Activity time: 10 - 30 minutes
- Decryption Detective | Detective en Desencriptación: Learn to use encryption and decryption like a computer to share secret messages. Activity time: 10-15 minutes

(b) CAREER VIDEOS

• Energy: Calculating a Sustainable Future with Rachel Yeh: Meet Rachel, an applied mathematician working as an analyst at Puget Sound Energy. Learn about Rachel's journey into STEAM and how her love of math is helping our community make the best investments in clean energy technology. Video length: 5 minutes













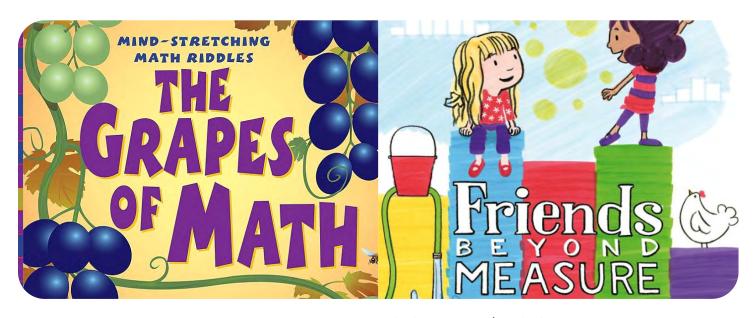
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PREADING LIST

• Check out this **Math Reading List** for STEAM books related to the program themes.



For more activities with simple materials, check out the Curiosity at Home / Curiosidad en Casa web page. Explore activity sheets by age group and topic in both English and Spanish.









