

# Crunching the Numbers

**Instructors:** Don't forget to make an Achievery account for each student! [Make your account for the Achievery in English](#) or [Make your Account for the Achievery in Spanish](#).

**Objective:** By the end of this lesson, your students should have some familiarity with options for resources that help students build math skills.

**Grade Span:** PreK-12

**Subjects:** Math

**Lesson Introduction:** Math is so much more than just  $2+2 = 4$ . Math weaves through our everyday experiences. Math makes up the music in our ears, the food on our plate, and the roof over our heads. It is crucial to nurture math skills in students of every age.

**Lesson:** Your goal is to help students and families get comfortable using literacy tools and resources like the ones in the [IDRC Student & Family Resource Portal](#), the Achievery, & more.

Translate this page? BETA

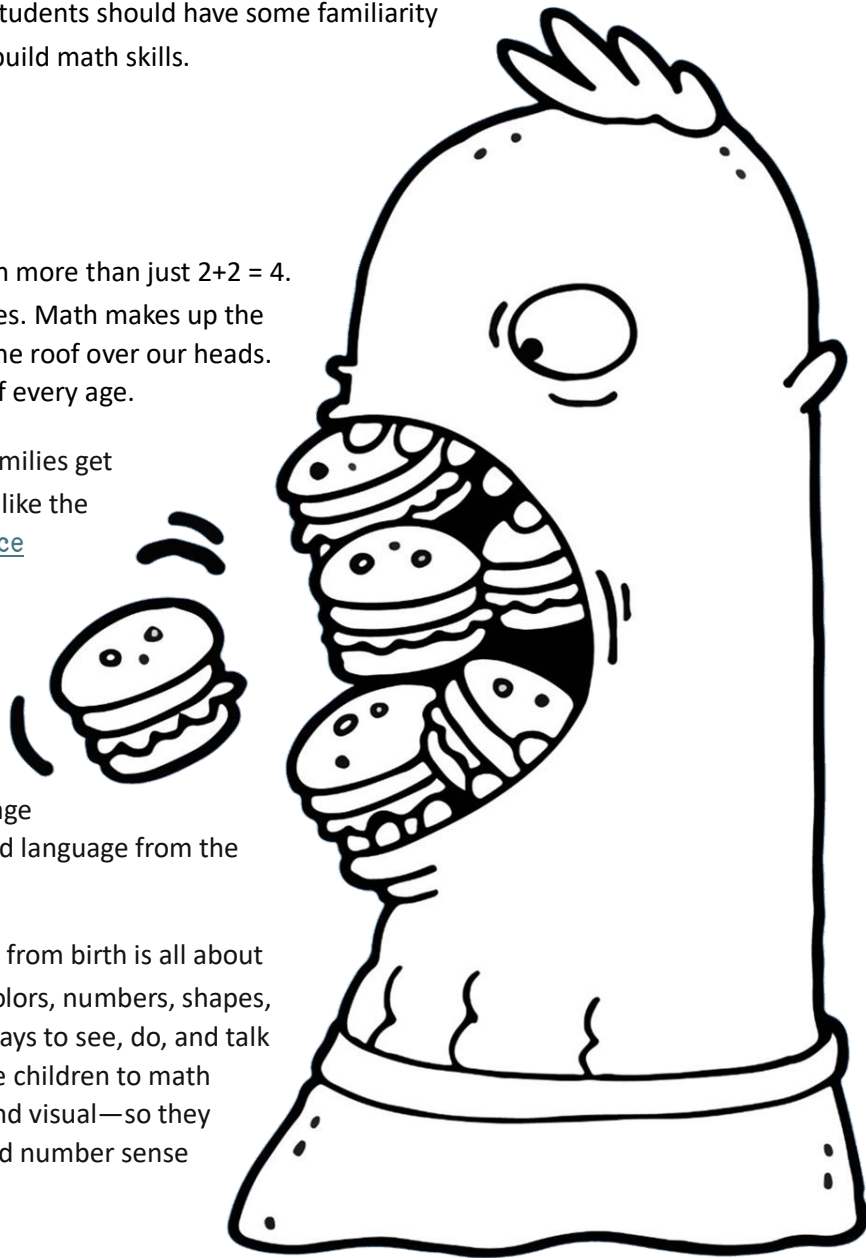
Translate from  
German

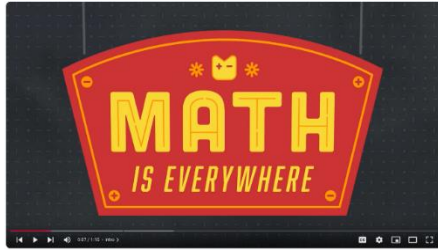
Translate to  
English

[Translate](#) [Cancel](#)

**Teacher Tip:** Show students (and their parents) how to translate a web page into their preferred language from the drop-down menu in the upper right corner.

**Younger Students:** Building math skills from birth is all about noticing what's already in our environment. Colors, numbers, shapes, and patterns surround us. There are endless ways to see, do, and talk math everywhere you go. The goal is to expose children to math concepts in various forms—spoken, written, and visual—so they build the foundations for spatial awareness and number sense as they grow.





**Math is Everywhere:** Interested in ways you can support your child's early math development? Watch this video series to learn more about making math a part of your daily routine! They're available in English and Spanish.

**Math Songs for Babies, Toddlers, and Pre-school:** Count with the Laurie Berkner Band! Learn numbers, time, money, months, and more! It's as easy as 1-2-3 when you blast off with Laurie!



**Khan Academy Kids:** This free app offers a variety of interactive math lessons for young children (ages 2-8), from counting and shapes to basic addition and subtraction. It's colorful, engaging, and easy to navigate. 100% free. No ads. No subscriptions. Fun, educational off-screen family activities are also available. These [free printable activities](#) offer an off-screen learning option for families to enjoy. Browse through the options at the link to find fun, interactive worksheets that parents or teachers can complete with the child.



These are available in English and [in Spanish](#).

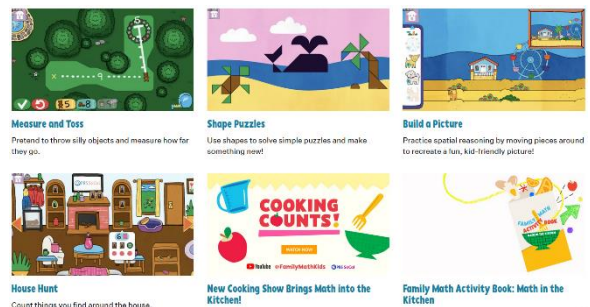
**Learn Colors, Numbers, Shapes, a Counting with Ms. Rachel:** In this video, Miss Rachel teaches numbers, counting, colors and shapes. Get ready for tons of fun and learning as your toddler and Miss Rachel find treasure boxes with surprises and coins inside! She also includes fun kids songs and nursery rhymes with movement and gestures, which are

great for a toddler's language development and motor skills!



**PBS Kids Resources for Parents** (and teachers): PBS Parents offers resources for parents and caregivers, featuring educational activities, games, and expert advice for children of all ages. It covers topics like literacy, math, social skills, and emotional development, along with parenting tips and health information, all designed to support learning and family life.

**PBS SoCal Family Math** is a website offering fun, interactive math resources for families. It provides activities, videos (cooking, music, and more), and games designed to make math enjoyable and accessible for young children. The site focuses on building foundational math skills through engaging content that families can explore together, helping to reinforce learning at home in a supportive, hands-on way. Available in English and Spanish.



**Kids getting a little older?** These resources offer a mix of games, interactive challenges, and problem-solving exercises to keep math engaging and fun!



**ABCya:** This site offers a variety of fun, interactive math games for kids, covering topics like counting, addition, subtraction, multiplication, and geometry. The games are designed for different grade levels, making math practice engaging and accessible for young learners.

**Math In Real Life by TED-Ed:** Mathematics is all around us. We can see mathematics in every aspect of our daily lives, from technology to art, engineering, finance, and even sports. This series explains mathematics, from its origins to its surprising modern uses. Even the math-averse will have their interest piqued. Then check out other lessons in their [vast library of math videos](#).

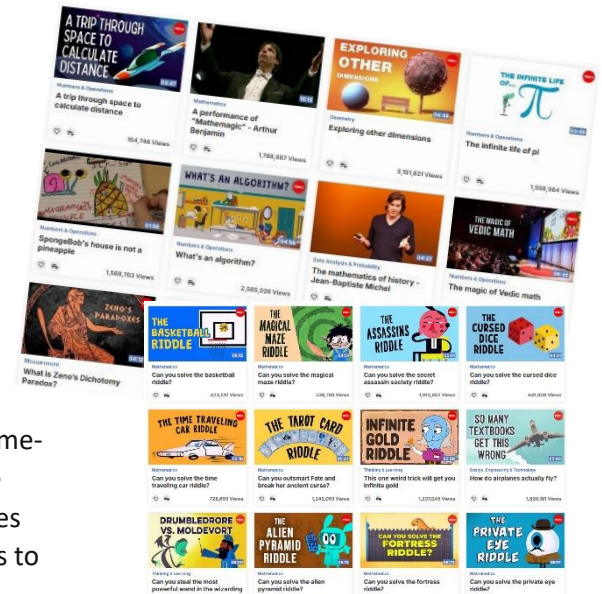


**Funbrain:** Play games and learn math at the same time! Funbrain Math offers interactive, game-based math activities for kids, covering skills like addition, subtraction, and multiplication. It makes learning math fun and engaging for preschoolers to middle schoolers.



**BrainPOP Math & BrainPop Jr. Math** provide animated videos, quizzes, and interactive activities to teach math concepts. They cover topics from basic arithmetic to more advanced skills, making math fun and engaging for students.

**Get the Math:** Get the Math from THIRTEEN is a website designed to engage middle and high school students with real-world math applications. It features videos and challenges that show how math is used in careers like design, music, and sports, helping students understand the practical uses of math in everyday life.



**Numberock:** Number Rock is an educational YouTube channel and website that offers fun, animated songs and videos to teach kids basic math concepts. The channel covers topics like counting, addition, subtraction, rounding, 3D shapes, angles, place value, multiplication, and number recognition through catchy tunes and vibrant visuals, making math engaging and easy to understand.

**Wolfram Alpha:** Though not a game in itself, Wolfram Alpha can be a fun and interactive way for students to explore math problems, learn new techniques, and get detailed step-by-step solutions.

**XtraMath** is a free program that helps students build fluency in addition, subtraction, multiplication, and division facts.



**Keep it going!** Expand on this lesson with additional Achievery lessons like:

[Food: Making Choices](#) (Gr 4): Learn about making food choices and the impact those choices have to the health of our body and planet. Use the health value ratings for different foods to find the sum of multi-digit math problems.

[Exploring 3D Geometry](#) (Gr 6–12): Learn with Scooby-Doo and Craig of the Creek. Students consider the attributes of three-dimensional figures, make connections, and use this information to calculate area and volume.

[Multi-step word problems](#) (Gr 4):  
Want to solve word problems that have more than one math operation and more than one step? Boddle is here to help you do just that! Word problems can seem a little scary at first, but the key is to figure out what the problem is trying to ask you to find. Once you figure that out, it's easier to decide which math operations to use to help you arrive at the answer. In this example, we will use addition to find the total tickets, and the subtraction to find how many tickets are still needed.

[Critically Engaging with Math and Science News](#) (Gr 9–12): In this activity, students learn the difference between correlation and causation and how news articles about science topics can sometimes be misleading as a result.

[The LEGO Movie Geometry Unit](#) (Grade 6): In this lesson, students will be inspired by clips from The LEGO Movie to develop a greater understanding of geometry.

