# Helpful Math Resources!

**New to QR Codes? Download the RedLaser App
to your phone to quickly navigate to these helpful sites!**

## Great Minds Parent Support

Create your own account with the Eureka's online platform! Download Homework Helpers and other resources. Also, get access to videos explaining strategies they're learning in class!

## Sign up for their newsletter!

Newsletter specifically for parents, directly from Great Minds.

## Website List

The following websites are used in the classroom for blended learning. They enrich and reinforce instruction, and can be accessed at home.

*Please check with your child's classroom teacher before accessing at home. Not all sites are used in all classrooms, and some have logins required.*

## Card Games

Games for every age from Eureka, geared towards important number sense and fluency practice - all you need is a deck of cards!

## Why Eureka?

News and data to support the curriculum. Also included is a timeline of the development of the program and the Eureka blog!
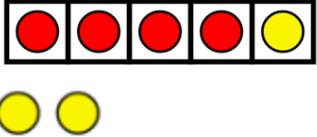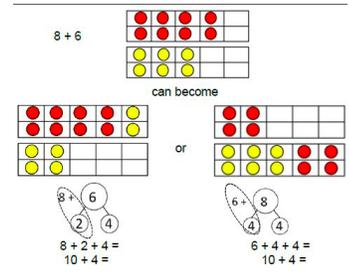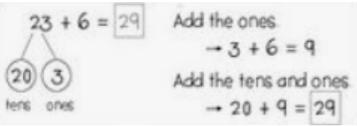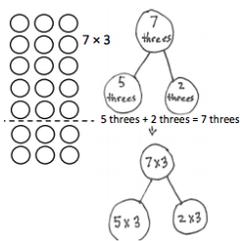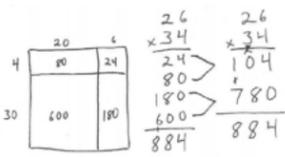
www.eureka.support
FOR ALL THINGS EUREKA

# "To Ten and Beyond!"

The Eureka curriculum gives students a deep understanding of the meaning and value of numbers. The foundation for addition, subtraction, multiplication and division is composing and decomposing numbers within (and beyond) TEN. Eureka trains our students to see patterns, reason through number sense, and break down numbers into its parts. This enables them to do complex mathematics mentally and with ease. Enjoy the journey we have designed for you!

*Questions can be written and placed in the question 'parking lot' located at the Curriculum & Technology table*

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| K | A 10 frame is a simple tool that allows the students to see numbers and understand that numbers are composed of 10s and 1s. It is a foundational skill that sets up work with larger numbers as the year progresses. We start by exploring numbers within a 5 frame and, when mastered, move on to adding numbers until we reach 10. |  |
| 1st | Children need to recognize and understand that each digit in a number has its own value. For Example, 11 is not 1 and 1 because that would make 2. 11 is 10 and 1 because when we join 10 and 1 we get a total of 11. We start by having them show us numbers using objects and/or a picture, and help them begin to conceptualize groups of 10 within numbers by ordering objects/picture into 5 groups. Children begin recognizing when they have a group of 10 by circling or boxing the 5 groups together until they make a group of 10. We use ten-frames and number bonds to help the children gain confidence. |  |
| 2nd | Students continue to recognize patterns that can be used to create 10s or multiples of 10. This helps children add and subtract more easily and also to determine if an answer is reasonable. One way we do this is by using the number bond to demonstrate how to decompose numbers into 10s and 1s to make addition and subtraction easier. This expanded form is the foundation for future grade levels to multiple and divide! |  |
| 3rd | Students begin to explore multiplication and division by building upon the foundations of addition and subtraction. We demonstrate this by using models, such as arrays, number bonds, and tape diagrams. A specific way we will demonstrate for the students is the Break Apart and Distribute Strategy. It states that a multiplication expression can be broken into parts that can then be added together. Since the concept of 5s and 10s are so familiar to the students, we decompose larger numbers into more manageable, or "friendly," numbers. |  |
| 4th | We begin to explore multiplication with larger numbers as the children become more confident and comfortable with the base-10 system. The area model encourages students to think about each part of a number as they multiply. Students use the Break Apart and Distribute Strategy taught in 3rd grade to decompose a number without drawing an array. For example, 34 x 26 becomes a series of partial products that help the children strengthen their knowledge of place value in addition to gaining a deep understanding of multiplication. |  |
| 5th | 5th graders begin to take all of their place value knowledge and computational skills and apply it to the tenths, hundredths, and thousandths. The focus on the "unit" up to this point will serve the students well as they manipulate these small numbers within the context of the place value chart, the area model, and real-life applications. Fractions, a major focus this year, are no longer parts of a number, but a number on its own. The idea that 1 + 2 = 3 is now applied to 1/4 + 2/4 = 3/4. |  |