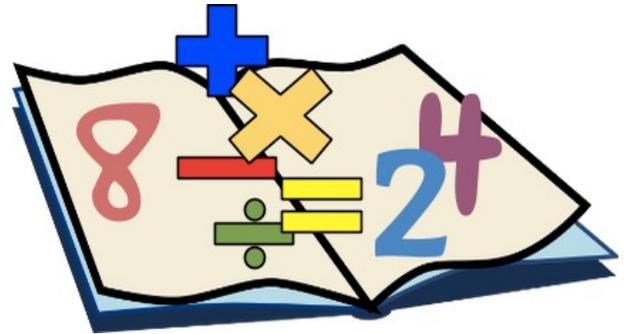


Math Parent Roadmap

Supporting your child in first grade



Did you like attending math classes as a student? Were you a confident math student? Often times when people are asked these questions, the most common response is that they were not so good at math or that they didn't like math class at all. Only a few people will actually say that they loved math or that they were good at it. We want to change that story!

Benton Elementary School is constantly working to improve math instruction for students.

Benton Elementary School (BES) is constantly working to improve mathematics instruction for students. Teachers intentionally plan lessons that engage students in problem solving, conceptual understanding, and mathematical applications. Using grade level math standards, BES teachers are able to identify exactly what each student knows, is ready to learn, and what comes next in the learning progression. The standards indicate the level of quality and achievement that is considered proficient or secure.

This document outlines the math curriculum at each grade level. While every grade level develops most math concepts, this document focuses on the most critical areas at each level. Math concepts are revisited and extended throughout your child's BES educational career.

*Math Practices
are what the
students are doing
as they learn the
content standards
and will be
embedded into
daily math
experiences.*

The Math Practices involve students:

1. Making sense of problems and persevering in solving them
2. Reasoning through problems
3. Constructing viable arguments and critiquing the reasoning of others
4. Modeling with mathematics
5. Using appropriate tools strategically
6. Attending to precision
7. Looking for and making use of structure
8. Looking for and expressing regularity in repeated reasoning



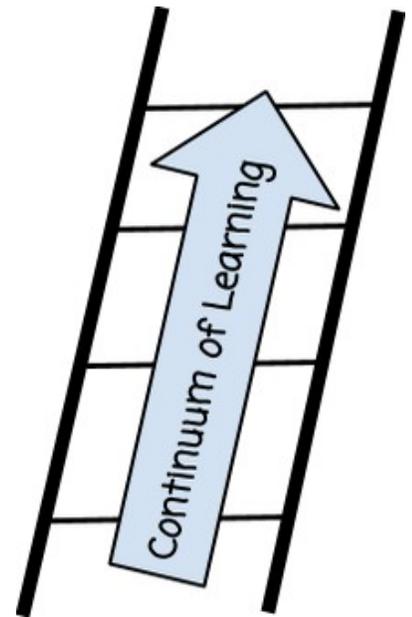
Academic standards are important because they help ensure that all students, no matter where they live, are prepared for success in college and the workforce. They help set clear and consistent expectations for students, parents, and teachers; build a child's knowledge and skills; and help set high goals for all students.

Of course, high standards are not the only thing needed for our children's success, but standards provide an important first step - a clear roadmap for learning for teachers, parents, and students. Having clearly defined goals helps families and teachers work together to ensure that students succeed. Standards help parents and teachers know when students need extra assistance or when they need to be challenged even more.

-The National PTA

In kindergarten math, students learned about numbers and what they represented, developed an understanding of addition and subtraction, and identified and worked with shapes. These skills helped to form a foundational base for math understanding.

In first grade, the focus for students is to continue to develop number sense by working with whole numbers and place value. Students will extend their understanding of addition and subtraction by improving their speed and accuracy in adding and subtracting within 20, exploring adding within a sum of 100, and solving problems involving the two operations. Also in first grade, students will develop an understanding of place value of tens and ones in two-digit numbers. While whole numbers and place value are two critical areas of focus, students will also spend time with linear measurement (measuring lengths) and reasoning about shapes.



Here are just a few examples of how your child will develop math skills across grade levels:

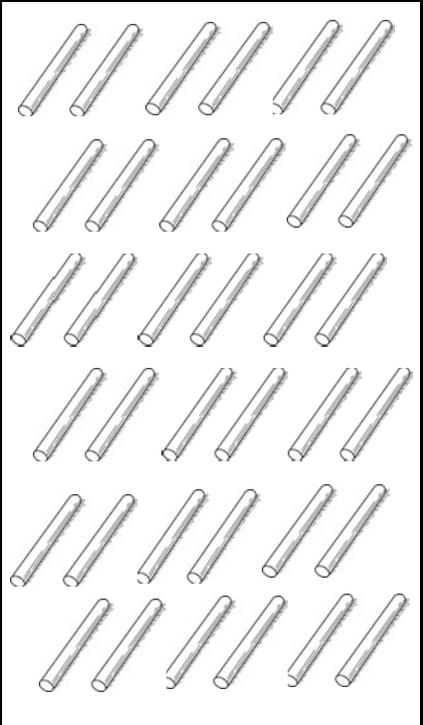
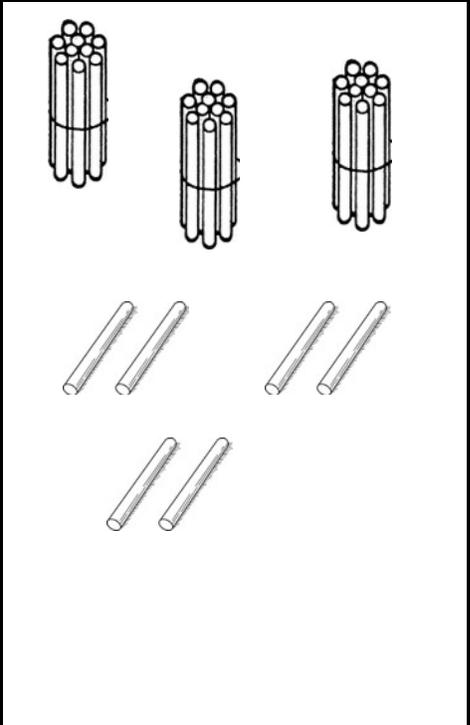
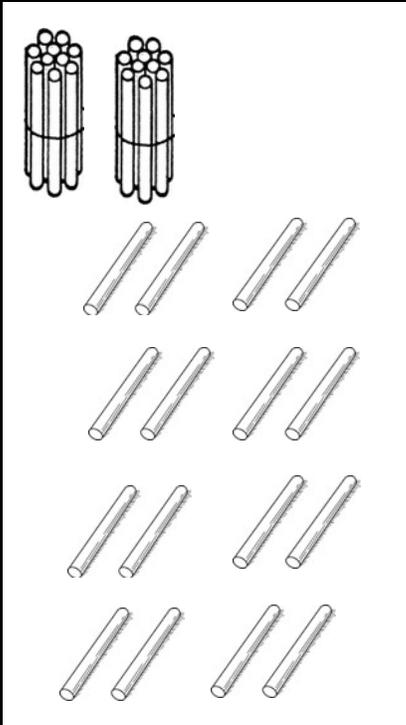
Addition/Subtraction and Problem Solving		
<p>Earlier Learning</p> <ul style="list-style-type: none"> • Add and subtract fluently within 5 using various strategies • Add and subtract numbers to 10 by using concrete objects • Solve addition and subtraction word problems within 10 using objects 	<p>Grade One Math</p> <ul style="list-style-type: none"> • Add and subtract within 10 fluently using various strategies • Add and subtract within 100 by using strategies based on place value • Solve addition and subtraction word problems with numbers within 20 	<p>Next Steps</p> <ul style="list-style-type: none"> • Add and subtract within 100 fluently using various strategies • Add and subtract within 1000 using strategies based on place value • Solve one- and two-step addition and subtraction word problems within 100

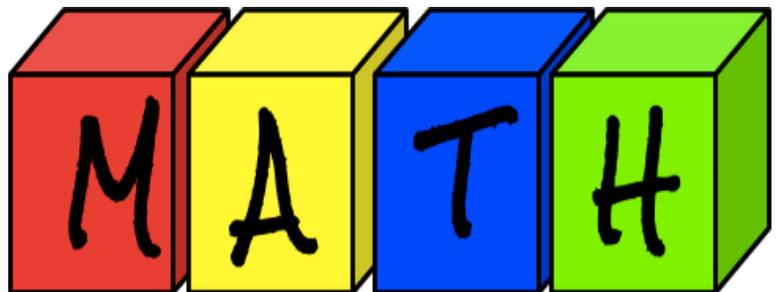


Examples of Grade One Word Problems	
<p>Addition +</p>	5 frogs sat on the grass. Some more frogs hopped over. Then there were 13 frogs. How many frogs hopped over?
<p>Subtraction -</p>	16 frogs were on the grass. Some frogs hopped away. Then there were 9 frogs. How many frogs hopped away?
<p>Comparison</p>	Edwardo has 13 pencils. Amelia has 8 pencils. How many more pencils does Edwardo have than Amelia?

Place Value		
Earlier Learning <ul style="list-style-type: none"> Model numbers 11 to 20 into ten ones and some further ones 	Grade One Math <ul style="list-style-type: none"> Investigate and model two digit numbers using multiples of tens and ones 	Next Steps <ul style="list-style-type: none"> Investigate and model three digit numbers using multiples of hundreds, tens, and ones

Examples of Grade One Place Value
 Students use models and pictures to show that 36 is the same as 36 ones, 3 tens and 6 ones, or 2 tens and 16 ones.

		
36 Ones	3 Tens and 6 Ones	2 Tens and 16 Ones



First Grade Math Experiences Include:



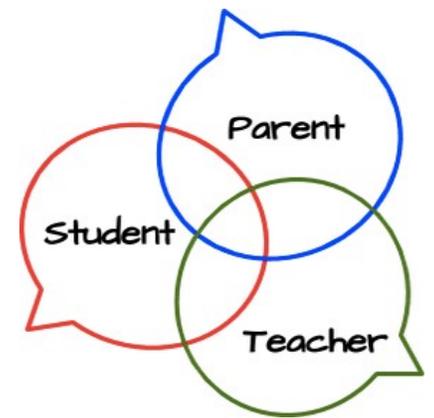
- students participating in lessons in small and whole group situations daily
- students modeling mathematics using a variety of tools such as ten frames, bead racks, counters, base ten blocks, tape diagrams, etc.
- students using technology to investigate and apply mathematics
- students discussing their mathematical thinking with others
- students completing work within varying formats: whole group, small group, partner, and individual
- students working on mathematical tasks that connect math to real world situations

Partnering to reflect on your child's learning:

Please check in with your child and your child's teacher whenever you have questions. Working together is the best way to ensure success for your child.

Possible conversation starters could be:

- What is the best thing that happened in math class today?
- What would you be interested in learning more about in math?
- What is something that was challenging for you in math class? Why do you think it is challenging?
- What websites, apps or other technology are you using to support your math learning?
- In what ways do you prefer to practice your math skills? (examples: using technology, paper/pencil, math tools, working on your own, working with others, etc.)



Possible questions to ask your child's teacher include:

- What are my child's strengths?
- Is my child at the level where he/she should be at this point of the school year?
- In what areas is my child most successful in math?
- What challenges my child?
- How can I help my child in math?

Helping your child learn outside of school:

There are many ways you can help your child at home. Try some of the following ideas:



- Praise your child for his/her effort in solving problems and for sticking with a problem that seems difficult.
- Look for math problems in real life. (For example, if you open a new carton of a dozen eggs, and you use two eggs while making cookies, how many are left in the carton?)
- Play board games where your child needs to count, add, and use strategies. (Yahtzee, Candy Land, Cribbage, Chess, etc.)
- Play the “I’m thinking of a number” game. (“I’m thinking of a number that makes 18 when added to 9. What is my number?”)
- Play the “What’s the questions?” game. (“The answer is 7. What’s the question?”)
- Encourage your child to notice numbers all around you and to read and write numbers in different ways. (Find numbers as you are driving from one place to the next, grocery store, sports games, etc.)