

Math Parent

Roadmap

Supporting your child
in Kindergarten



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
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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

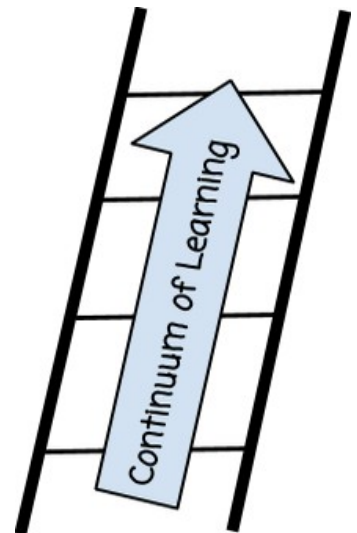


Academic standards are important because they help ensure that all students, no matter where they live, are prepared for success in college and the workforce. They help set clear and consistent expectations for students, parents, and teachers; build a child's knowledge and skills; and help set high goals 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 the main focus for students is to develop an understanding of number and be able to use this understanding flexibly. Students will learn to represent numbers in a variety of ways, quickly recognize quantities to 20, count to 100, explore adding and subtracting within 10, and compare two written numbers. Some other ways students will flexibly work with numbers includes putting together and breaking apart numbers less than 10 (example: 3 and 2 make 5) and finding the missing number to make ten for any number 0-9. Along with numbers, another main skill focus in kindergarten is shapes. Students will study both 2D and 3D shapes. Students will examine attributes of shapes as well as composing (putting together) and decomposing (taking apart) to make new shapes.



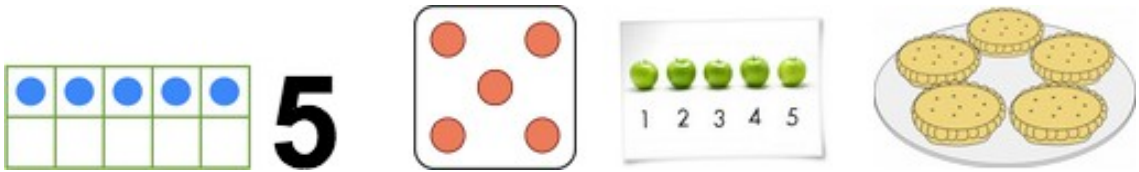
Here are just a few examples of how your child will develop math skills across grade levels.

Represent and Compare Whole Numbers		
Foundational Math <ul style="list-style-type: none"> • Verbal counting • Counting small quantities of objects • Number recognition • Creating patterns 	Kindergarten Math <ul style="list-style-type: none"> • Count out 1-20 objects • Identify the number of objects in a group as greater than, less than, or equal • Count to 100 by ones and tens • Write numbers 0-20 	Grade One Math <ul style="list-style-type: none"> • Count to 120 by ones and tens • Compare two-digit numbers based on the meaning of tens and ones • Compare numbers using the $<$, $>$, and $=$ symbols • Add and subtract within 100 by using strategies based on place value

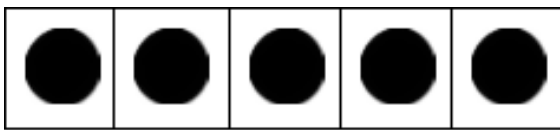
Examples of Kindergarten Word Problems	
Addition +	Ramon has 3 red crayons and 2 blue crayons. How many crayons does Ramon have altogether?
Subtraction -	Samuel had 9 flowers. He gives 5 to his friend. How many flowers does Samuel have left?
Compose/ Decompose	A farmer has a box of 10 apples. Some apples are red and some are green. In the box, how many apples are red and how many are green?



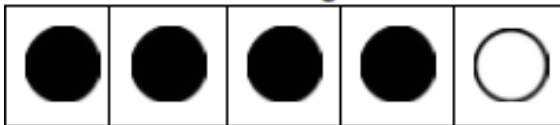
Examples of Representing Number in Kindergarten



Students will discover that numbers can be represented in a variety of ways.



5 black dots and 0 white dots makes 5 dots altogether.



4 black dots and 1 white dots makes 5 dots altogether.



3 black dots and 2 white dots makes 5 dots altogether.



2 black dots and 3 white dots makes 5 dots altogether.



1 black dots and 4 white dots makes 5 dots altogether.



0 black dots and 5 white dots makes 5 dots altogether.

Students will discover many combinations for a given number.

Understand Addition and Subtraction

Foundational Math

- Count groups of objects
- Make sets of objects and describe the sets (which group has more or less, how many altogether)
- Solve word problems with numbers 3 and less using concrete strategies (acting it out, using objects, etc.)

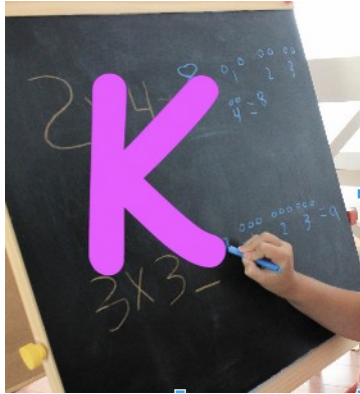
Kindergarten Math

- 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 and drawings

Next Steps

- 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

Kindergarten Math Experiences Include:



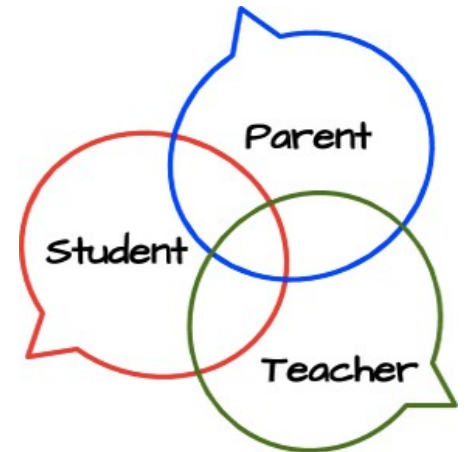
- students participating in lessons in small and whole group situations daily
- students modeling mathematics using a variety of tools such as ten frames, bead racks, counters, base ten blocks, tape diagrams, etc.
- students using technology to investigate and apply mathematics
- students discussing 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.
- Count objects found in real life (For example, have your child count how many eggs are in the carton, encourage your child to count the number of stop lights you pass on the way home, etc)
- Encourage your child to compare sets of objects. (Example: “Let’s look at our plates of food. Who do you think has more rice?” or “Let’s count how many books are in this pile and how many are in that pile. Which group has less?”)
- Play board games that include dice, dominoes, or number cards.
- 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.)