

Mathematics-at-Home Plan

Grades K-5



Motivate. Engage. Inspire. Grow.
Elementary Learning Department

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Dear Parents/Guardians,

Are you wondering how you can help your child succeed at math? You are your child's first and most important teacher, playing an integral role in your child's academic success. One way you can assist your child at home is to help reinforce the learning that takes place at school, to make a positive impact on your child's academic success.

Broward County Public Schools (BCPS) is dedicated to helping children reach their maximum potential as lifelong learners, becoming proficient, and confident in their ability to think and reason mathematically, to communicate and represent their mathematical thinking, and to become efficient problem solvers. To support fluency, computation, and problem-solving at home, BCPS has developed this Math-at-Home Plan. The purpose of the plan is to provide parents/guardians with guidance and resources needed to help ensure their child is successful in school. This Math-at-Home Plan includes activities and resources you can use with your child. Using a few simple resources and strategies from our Math-at-Home Plan can make a positive impact on your child's success.

Mathematics knowledge and skills contribute to a child's success- both at school and in everyday life. Understanding mathematics also builds confidence and opens doors to a range of jobs and careers. In our everyday lives, understanding mathematics enables us to:

- solve problems and make sound decisions
- explain how we solved a problem and why we made a particular decision
- use technology to help solve problems
- understand patterns and trends in the world around us to make predictions
- manage time and money
- handle everyday situations that involve numbers

We encourage you to speak with your child's teacher and visit the collection of resources at **BCPS Supporting Young Learners Canvas** page at for additional information and strategies. <https://browardschools.instructure.com/courses/627242>

Sincerely,
BCPS Office of Academics



Information from the Florida Department of Education (F.L.D.O.E.)

The Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards for Mathematics

The Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards for Mathematics constitute the foundational mathematical benchmarks for Florida students. They serve to ensure the delivery of a world-class education that prepares students for prosperous futures in college, military and other career opportunities. Parental involvement is an important part of a student's education. To foster a collaborative and supportive educational environment, the Florida Department of Education has implemented comprehensive measures to engage parents of students, including those who have been identified as having a deficiency in mathematics. Recognizing the importance of family engagement in a student's educational journey, dedicated Parent Guides have been crafted to provide families with insights into the B.E.S.T. Mathematics Standards. For more information, please visit

<https://www.fl DOE.org/academics/standards/subject-areas/math-science/mathematics/parent-resources.html>.

Mathematics Deficiency and Parental Notification

Any student in a VPK Education Program provided by a public school who exhibits a substantial deficiency in early mathematics skills and any student in kindergarten through grade 4 who exhibits a substantial deficiency in mathematics, or the characteristics of dyscalculia based upon screening, diagnostic, progress monitoring or assessment data; statewide assessments; or teacher observations must:

- Be provided systematic and explicit mathematics instruction through daily targeted small group mathematics intervention or supplemental, evidence-based mathematics interventions before or after school, or both. They must be delivered by a highly qualified teacher of mathematics or a trained tutor.
- The student's performance must be monitored and adjusted based on student's needs, until the student demonstrates grade level proficiency in a manner determined by the district.

Parents will immediately receive notification in writing:

- That his or her child has been identified as having a substantial deficiency in mathematics, including a description of the deficiency.
- An explanation of the exact nature of the student's difficulty in learning and lack of achievement in mathematics.
- Description of the current services that are provided.
- Description of the proposed intensive interventions and supports that will be provided to the child that are designed to remediate the identified area of mathematics deficiency and timely updates.
- Strategies through a home-based plan the parent can use in helping his or her child succeed in mathematics, including access to resources.

Division of Early Learning

Early education can be an important time during a student's educational career. In partnership with 30 early learning coalitions and the Redlands Christian Migrant Association, the Division of Early Learning oversees three programs: School Readiness, VPK, and Child Care Resources and Referrals. These programs collectively play a role in shaping the early educational experiences of students, laying a foundation for future academic success. Parents

can access resources that will help them choose the right provider for their child and family. For more information, please visit <https://www.fldoe.org/schools/early-learning/parents/>.

Military Families

Florida hosts the 5th largest population of active-duty service personnel spanning all five branches of the United States Military. A dependent child of an active member of the armed forces may be eligible for educational opportunities under either branch of the Family Empowerment Scholarship Program (see s. 1002.394, F.S.). Families may receive financial assistance for tutoring and access to added education options, such as transportation, private school or other customized learning services and materials for students as young as 3 years of age. For more information, please visit <https://www.fldoe.org/schools/school-choice/other-school-choice-options/military-families/>.

Identifying and Evaluating a Student for Exceptional Student Education

When a parent or caregiver is concerned about a student who is performing significantly below grade level expectations or suspects that a student may have a disability, consider the following information:

- A medical diagnosis alone is insufficient to determine eligibility for exceptional student education. It is additional information that can be considered when collecting and reviewing student-specific data (information).
- Based on federal regulations, after completing the administration of assessments and other evaluation measures, the school district and a group of qualified professionals consisting of the parent and school staff determine if the child meets eligibility criteria for a disability category (Title 34, s. 300.306, Code of Federal Regulations).
- If a parent submits documentation from a licensed psychologist or licensed school psychologist (Chapter 490, Florida Statutes) that demonstrates that a student has been diagnosed with dyscalculia and also identifies the student's specific areas of difficulty, then evidence-based interventions must be initiated upon receipt of that documentation (see [s. 1008.25\(6\), F.S.](#)).

The [Bureau of Exceptional Education and Student Services](#) provides resources to guide parents, teachers and caregivers through the process of identifying and evaluating a student who is suspected of being a student with a disability and in need of exceptional student education and related services.

Characteristics of Specific Learning Disabilities

A Specific Learning Disability is a term that describes an Exceptional Student Education eligibility category that refers to learning disorders that can affect a student's ability to read, write, listen, speak, reason and apply basic math skills. Rule 6A-6.03018, F.A.C., Exceptional Education Eligibility for Students with Specific Learning Disabilities, defines a specific learning disability as "a disorder in one or more of the basic learning processes involved in understanding or in using language, spoken or written, that may manifest in significant difficulties affecting the ability to listen, speak, read, write, spell or do mathematics." Dyscalculia is included among the "associated conditions" of a specific learning disability.

Dyscalculia is a specific learning disability in mathematics. It affects areas of the brain that deal with number related skills and understanding. The primary characteristics of dyscalculia could include the following: number sense, memorization of math facts, calculation and mathematical reasoning. When determining if a student exhibits characteristic(s) of dyscalculia, at least one of these characteristics should have persisted for at least six months despite interventions, and skills may be substantially below those expected for grade level. The chart below shows skills students with dyscalculia may exhibit based on their grade level.

Prekindergarten and Kindergarten	Grades 1-4
Building a solid foundation in mathematics involves many different skills. Young children/students with learning disabilities may have difficulty: ➤ Recognizing numbers and matching numbers with amounts (e.g., connecting the number 3 to that many objects in front of them). ➤ Sorting objects by shape, size or color. ➤ Recognizing groups and patterns. ➤ Comparing and contrasting using concepts like smaller/bigger or taller/shorter. ➤ Organizing numbers, such as largest to smallest or first to last.	As mathematics learning continues through the elementary grades, students with learning disabilities may have difficulty: ➤ Doing simple calculations from memory. ➤ Solving basic math problems using addition, subtraction, multiplication and division. ➤ Figuring out how to apply their knowledge and skills to solve math problems. ➤ Recognizing and using number lines. ➤ Learning to use money (i.e., coins or bills). ➤ Reading an analog clock. ➤ Retaining basic math facts (e.g., memorizing multiplication tables). ➤ Understanding place value, often putting numbers in the wrong column. ➤ Understanding word problems or more advanced symbols (i.e., > meaning “greater than” or < meaning “less than”). ➤ Organizing numbers by scale (10s, 100s, 1,000s) or decimal place (0.1, 0.01, 0.001). ➤ Understanding what is written on a board or in a textbook due to visual-spatial difficulties.

For more information, please visit <https://www.fldoe.org/academics/exceptional-student-edu/ese-eligibility/specific-learning-disabilities-sld/>.

New Worlds Scholarship Account

The New Worlds Scholarship Account provide \$1,200 scholarships to eligible VPK-5 students who:

- show a substantial deficiency in early literacy or early mathematics skills,
- show a substantial deficiency in reading or mathematics,
- exhibit characteristics of dyslexia or dyscalculia, or
- score below a level 3 on the most recent statewide, standardized English Language Arts (ELA) or mathematics assessment.

The program offers parents/guardians access to education savings accounts to pay for tuition and fees related to part-time tutoring, summer and after-school literacy or mathematics programs, and instructional materials. Your child may be eligible for a New Worlds Scholarship Account. For more information, please visit <https://www.fldoe.org/schools/school-choice/k-12-scholarship-programs/reading/>.

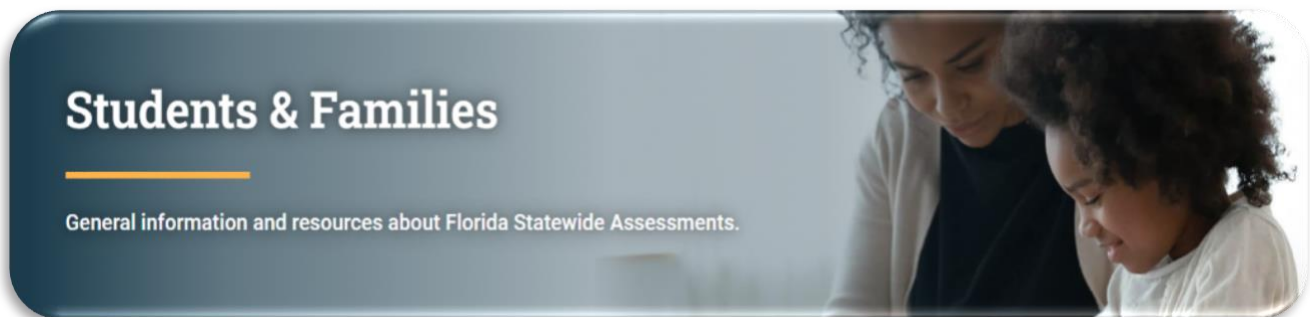
English Language Learners

English Language Learners (ELLs) have a wide variety of support available to increase essential performance in mathematics. Recognizing the unique needs of ELLs, each LEA has crafted an individualized English Language Learner Plan, which serves as a strategic blueprint outlining targeted strategies and valuable resources aimed at fostering the academic success of ELLs. More information may be found at <https://www.fldoe.org/academics/eng-language-learners/index.shtml>.

Statewide Mathematics Assessments All Florida students participate in the state's assessment and accountability system. The primary goal of these assessments is to provide information about student learning in Florida, as required by Florida law (see [s. 1008.22, F.S.](#)).

- Florida's coordinated Screening and Progress Monitoring System, also known as the Florida Assessment of Student Thinking (FAST), provide information on students' progress with regard to student understanding of the skills and concepts for their grade level to parents, teachers and school and program administrators. FAST assessments are administered during three Progress Monitoring (PM) windows: beginning of the school year (PM1), middle of the school year (PM2) and end of the school year (PM3). For grades 3-8 FAST, Mathematics PM3, in accordance with s. 1008.22(3)(a), F.S., will be considered the statewide, standardized assessment in mathematics and will be used for accountability purposes.

To learn more about the FAST assessments click on the pictures below.



- The Florida Alternate Assessment (FAA) is aligned with Access Points - Alternate Academic Achievement Standards (AP-AAAS). The AP-AAAS is administered to students with a significant cognitive disability who meet the criteria in the [Rule 6A-1.0943, F.A.C., Statewide Assessment for Students with Disabilities](#). Students may participate in the FAA if their individual educational plan team determines it is the most appropriate assessment option.

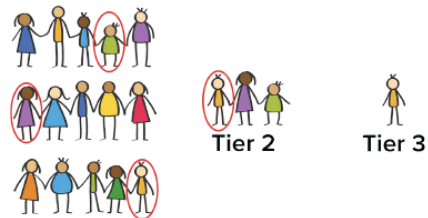
A Family Guide to a Multi-Tiered System of Supports

The purpose of this brochure is to give you a clear understanding of what a Multi-Tiered System of Supports or "MTSS" is, how it can help your child and how you, as families, can actively support your child's learning.

What is MTSS?

An MTSS is first and foremost about helping students. More specifically, an MTSS is a way that districts and schools organize and provide education to ensure that students receive the instruction they need to be successful. By operating as an MTSS, schools acknowledge that students' needs vary and so the best way to help them achieve is to provide instruction that is matched to those needs. Within an MTSS, educators carefully monitor student progress, work to ensure that all students receive effective instruction and provide more targeted or individualized support when needed.

MTSS for All Students

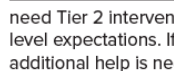


What is tiered instruction and how can it help my child?

Tiered instruction can be described simply as layers of support available to every student. For many students, the regular daily classroom instruction is sufficient for them to successfully meet grade level expectations. However, just like anyone learning a new skill or concept, some students may need more support to be successful. Because of this, schools plan for and are ready to provide additional supports, based on what students need, when they need it.



The term **Tier 1** refers to what is provided to all students, and is what every student in a classroom, grade level, or course is taught during the school day. For example, the instruction that is taught to all 4th graders, or the instruction that is taught to all students in Algebra 1, is considered "Tier 1". Schools design and plan high-quality Tier 1, with the expectation that it will be what all students need in order to demonstrate mastery of grade-level expectations.



Even when provided effective Tier 1 instruction, some students will need additional support to master grade level standards. This additional support is known as "Tier 2" and "Tier 3" intervention. Ideally, when Tier 1 instruction meets the needs of most students, only some students will need Tier 2 intervention, and even fewer will need Tier 3 intervention in order to meet grade-level expectations. If your child is currently receiving tiered interventions, it simply means that additional help is needed for them to gain the knowledge or skills being taught.



Tier 3 interventions are the most intensive level of tiered supports and in most cases are provided when effective Tier 1 and Tier 2 aren't enough for a student to master grade-level expectations. These supports are designed for individual students and are often based on results of additional assessments that identify specific skill strengths and weaknesses.

While the intent of tiered supports is to enable students to be successful, school teams may determine that a child needs the additional support of Exceptional Student Education (ESE) to meet grade-level expectations. Students eligible for ESE receive their specially designed instruction through, and as a part of, this same tiered instructional system. ESE services are not

How does the school decide what my child needs?

Schools engage in data-based problem solving to ensure that instruction and intervention support are matched to student need. This involves school or teacher teams using data to identify problem areas, determine why those problems exist, develop and implement an instruction or intervention plan, and then monitor student progress to see if students are improving or if additional adjustments are needed. Data used for problem solving come from a variety of sources (e.g., FAST, attendance, office discipline referrals, diagnostic assessments). Data-based problem solving is used to identify needed supports for large groups (Tier 1), small groups (Tier 2), and individual students (Tier 3).

What is my role?

Families play a critical role in a child's education. When schools and families collaborate to support student learning, student outcomes are improved. Whether your child is meeting grade-level expectations, working on an accelerated curriculum, or receiving additional support, understanding MTSS in your child's school is beneficial.

What does MTSS look like for me and my child?

Although MTSS will look different from school to school, there are common elements that you will likely see across all schools. They include:

- Regular communication about your child's progress in school
- Information about how you can help support your child's learning at home
- Notification if your child needs additional supports, including why those supports are needed and what supports are being provided
- If your child is receiving additional supports, frequent communication about how your child's performance is improving, and what steps will be taken next

What questions can I ask my child's school to learn more?

Whether talking with your child's teacher, principal or other school support personnel, a great way to learn more about MTSS in your child's school is to ask questions. Here are some potential questions to get you started:

- Is my child meeting academic and behavioral expectations? How do we know?
- If additional instruction or intervention is needed, what supports will be given to my child?
- How often will I be updated on my child's progress?
- What can I do to support my child at home?

Resources/Additional Information

Florida Problem Solving/Response to Intervention Project (<https://floridarti.usf.edu>)

A Parent's Guide to RtI – National Center for Learning Disabilities (<https://www.advocacyinstitute.org/resources/ParentRTIGuide.pdf>)

RtI Action Network – Resources for Parents and Families (<http://www.rtinetwork.org/parents-a-families>)

Florida Positive Behavioral Interventions & Supports Project (<https://flpbis.cbcs.usf.edu>)



Mathematical Thinking and Reasoning Standards (MTRs)

Florida students are encouraged to interact with mathematics using the Mathematical Thinking and Reasoning Standards (MTRs), which help them use language as a self-monitoring tool in the classroom. This approach fosters deeper understanding and learning of mathematical concepts. The MTRs serve as a framework for planning student learning and instruction in alignment with the B.E.S.T. Standards for Mathematics. The MTRs are listed and clarified below.

MA.K12.MTR.1.1: Actively participate in effortful learning both individually and collectively.

Mathematicians who participate in effortful learning both individually and with others:

- Analyze the problem in a way that makes sense given the task.
- Ask questions that will help with solving the task.
- Build perseverance by modifying methods as needed while solving a challenging task.
- Stay engaged and maintain a positive mindset when working to solve tasks.
- Help and support each other when attempting a new method or approach.

MA.K12.MTR.2.1: Demonstrate understanding by representing problems in multiple ways.

Mathematicians who demonstrate understanding by representing problems in multiple ways:

- Build understanding through modeling and using manipulatives.
- Represent solutions to problems in multiple ways using objects, drawings, and equations.
- Progress from modeling problems with objects and drawings to using algorithms and equations.
- Express connections between concepts and representations.
- Choose a representation based on the given context or purpose.

MA.K12.MTR.3.1: Complete tasks with mathematical fluency.

Mathematicians who complete tasks with mathematical fluency:

- Select efficient and appropriate methods for solving problems within the given context.
- Maintain flexibility and accuracy while performing procedures and mental calculations.
- Complete tasks accurately and with confidence.
- Adapt procedures to apply them to a new context.
- Use feedback to improve efficiency when performing calculations.

MA.K12.MTR.4.1: Engage in discussions that reflect on the mathematical thinking of self and others.

Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others:

- Communicate mathematical ideas, vocabulary and methods effectively.
- Analyze the mathematical thinking of others.
- Compare the efficiency of a method to those expressed by others.
- Recognize errors and suggest how to correctly solve the task.
- Justify results by explaining methods and processes.
- Construct possible arguments based on evidence.

MA.K12.MTR.5.1: Use patterns and structure to help understand and connect mathematical concepts.

Mathematicians who use patterns and structure to help understand and connect mathematical concepts:

- Focus on relevant details within a problem.
- Create plans and procedures to logically order events, steps or ideas to solve problems.
- Decompose a complex problem into manageable parts.

- Relate previously learned concepts to new concepts.
- Look for similarities among problems.
- Connect solutions of problems to more complicated large-scale situations.

MA.K12.MTR.6.1: Assess the reasonableness of solutions.

Mathematicians who assess the reasonableness of solutions:

- Estimate to discover possible solutions.
- Use benchmark quantities to determine if a solution makes sense.
- Check calculations when solving problems.
- Verify possible solutions by explaining the methods used.
- Evaluate results based on the given context

MA.K12.MTR.7.1: Apply mathematics to real-world contexts.

Mathematicians who apply mathematics to real-world contexts:

- Connect mathematical concepts to everyday experiences.
- Use models and methods to understand, represent and solve problems.
- Perform investigations to gather data or determine if a method is appropriate.
- Redesign models and methods to improve accuracy or efficiency.

Use of Manipulatives

Using manipulatives in mathematics is essential for helping students develop a deep, conceptual understanding of mathematical concepts. These hands-on tools allow learners to visually and physically engage with abstract ideas, making math more concrete and accessible. Manipulatives foster active learning, enhance problem-solving skills, and encourage exploration, allowing students to discover patterns and relationships on their own. By connecting the physical experience with abstract thinking, manipulatives support a stronger grasp of mathematical principles, building a foundation for future learning.

The websites below provide access for students to virtual manipulatives that can be used at home to help students if they do not have access to the hands-on manipulatives

Virtual Manipulatives - <https://www.didax.com/math/virtual-manipulatives.html>

Toy Theater - Online math games (includes other subjects too)

<https://toytheater.com/category/math-games/>

<https://toytheater.com/category/teacher-tools/virtual-manipulatives/>



Florida Math Areas of Focus Per Grade Level

The charts below outline the areas of math focus for each grade level.

Grade Level	Math Areas of Focus
Kindergarten	❖ Developing an understanding of counting: Students learn to represent the total number of objects in a set and practice ordering objects, building the foundation for number sense and numerical relationships. ❖ Understanding addition and subtraction: This includes recognizing how these operations are connected to counting, helping students grasp basic arithmetic as a way to combine and separate quantities. Measuring, comparing, and categorizing objects: Students explore attributes like length, size, and shape, learning to classify objects by their two-dimensional and three-dimensional features, which is key for developing spatial awareness and early geometry skills.
First Grade	❖ Understanding place value: Students learn to recognize the value of digits in the tens and ones places within two-digit whole numbers, which is fundamental for understanding larger numbers and performing operations. ❖ Extending understanding of addition and subtraction: This involves deepening knowledge of how these operations are related, fostering a more intuitive grasp of how numbers interact. ❖ Understanding measurement: Students develop skills to measure physical objects, money, and time, building practical math skills applicable to everyday situations. ❖ Categorizing, composing, and decomposing geometric figures: Students explore how to classify shapes, combine them to form new figures, and break them down into simpler parts, which strengthens spatial reasoning and geometry skills.
Second Grade	❖ Extending understanding of place value in three-digit numbers: Students deepen their knowledge of place value, understanding the hundreds, tens, and ones places, which is essential for working with larger numbers. ❖ Building fluency and algebraic reasoning with addition and subtraction: This involves not only performing these operations with accuracy but also developing the ability to think algebraically about how numbers relate through addition and subtraction. ❖ Extending understanding of measurement: Students continue to refine their measurement skills with objects, time, and perimeter calculations of geometric figures, enhancing their ability to solve practical and geometric problems. ❖ Developing spatial reasoning: By working with number representations and two-dimensional figures, students strengthen their ability to visualize and manipulate shapes, which is key for success in geometry and higher-level math.

Grade Level	Math Areas of Focus
Third Grade	❖ Adding and subtracting multi-digit whole numbers: Students refine their ability to perform these operations, including using a standard algorithm for efficiency and accuracy. ❖ Building an understanding of multiplication and division: This includes grasping the relationship between the two operations and connecting them to the concept of area, particularly in the context of rectangles. ❖ Developing an understanding of fractions: Students are introduced to fractions, learning how to represent and interpret parts of a whole, which is a foundational skill for more advanced arithmetic. ❖ Extending geometric reasoning: Students explore lines and the attributes of quadrilaterals, deepening their understanding of shapes and their properties, which is essential for geometric problem-solving.
Fourth Grade	❖ Extending understanding of multi-digit multiplication and division: Students work on refining their skills in performing these operations with greater complexity and fluency. ❖ Developing the relationship between fractions and decimals: This includes understanding how fractions and decimals are interconnected and beginning to perform operations with both. ❖ Classifying and measuring angles: Students learn to identify different types of angles and accurately measure them, which is important for geometry and spatial reasoning. ❖ Developing an understanding for interpreting data: This involves learning how to analyze data sets by calculating mode, median, and range, which are essential for summarizing and interpreting information.
Fifth Grade	❖ Multiplying and dividing multi-digit whole numbers: This includes mastering the use of a standard algorithm to efficiently perform these operations. ❖ Adding and subtracting fractions and decimals: Students should build procedural fluency while also developing an understanding of how to multiply and divide fractions and decimals. ❖ Understanding the coordinate plane: This involves learning to plot pairs of numbers accurately in the first quadrant, laying the foundation for graphing and spatial reasoning. ❖ Extending geometric reasoning to volume: Students learn to calculate the volume of geometric shapes, building on their understanding of area and perimeter. ❖ Extending understanding of data: Students are introduced to the concept of the mean, an important measure of central tendency, enhancing their data analysis skills.

Instructional Materials

At the elementary level, the district currently utilizes Savvas enVision for its core curriculum for instruction.

The links below to SavvasRealize.com contains many family resources, such as benchmark explanations, topic support, and math help pages. These resources are designed to support both students and families. They also offer tools such as sample problems, home activities, and interactive games and videos to help reinforce learning at home.

Click on your child's grade level to access these grade family engagement resources.

K

1

2

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4

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The School Board of Broward County Florida

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For additional information, please contact the Elementary Learning Department at 754-321-1850.