

# Math at Home Plan 

Parents supporting K-4 Math Skills


# Bradford County School District 

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Will Hartley, Superintendent of Schools Karen Clarke Assistant Superintendent

Dear Families,

Are you wondering how you can help your child succeed at math? One of the ways you can assist your child at home is to help reinforce the learning that takes place at school. We have put together this Math Learning at Home Plan to help support you with activities and resources that you can use with your child. Using a few simple strategies from our Math Learning at Home Plan can make a positive impact on your child's success in school.

To see the Math Learning at Home Plan go to http://www.bradfordschools.org/parentresources
Included in this plan are math games, login information to your child's math textbook, fun activities to do at home, informational website links and grade level math expectations.

We are happy to provide you with this Math Learning at Home Plan, which includes strategies you can use to help your child become more proficient in math. I encourage you to speak with your child's teacher if you have any questions. As always, please feel free to contact your school or the Bradford County School District for more information.

Sincerely,

Karen Clarke
Assistant Superintendent

The table includes the minimum skill levels for each grade level, but not everything that is taught.

| Grade Level | Mathematics Competencies |
| :--- | :--- |
| Kindergarten | 1. developing an understanding of counting to represent the total number of objects in a set <br> and to order the objects within a set; <br> 2. developing an understanding of addition and subtraction and the relationship of these <br> operations to counting; and <br> 3. measuring, comparing, and categorizing objects according to various attributes, <br> including their two- and three-dimensional shapes. |
| First Grade | 1. understanding the place value of tens and ones within two-digit whole numbers; <br> 2. extending understanding of addition and subtraction and the relationship between <br> them; <br> 3. developing an understanding of measurement of physical objects, money and time and <br> 4. categorizing, composing and decomposing geometric figures. |
| Second Grade | 1. extending understanding of place value in three-digit numbers; <br> 2. building fluency and algebraic reasoning with addition and subtraction; <br> 3. extending understanding of measurement of objects, time and the perimeter of <br> geometric figures; and <br> 4. developing spatial reasoning with number representations and two-dimensional <br> figures. |
| Third Grade | 1. adding and subtracting multi-digit whole numbers, including using a standard <br> algorithm; <br> 2. building an understanding of multiplication and division, the relationship between them <br> and the connection to area of rectangles; <br> 3. developing an understanding of fractions; and |
| 4. extending geometric reasoning to lines and attributes of quadrilaterals. |  |$|$| Fourth Grade | 1. extending understanding of multi-digit multiplication and division; <br> 2. developing the relationship between fractions and decimals and beginning operations <br> with both; <br> 3. classifying and measuring angles; and <br> 4. developing an understanding for interpreting data to include mode, median and range. |
| :--- | :--- |

## School and Family Partnership

## How the Schools Help

Teachers monitor the progress of their students. Anytime a student continues to struggle with math or math skills the teacher will determine and implement the intervention or adjust the intervention as needed. This initiates Tier 2/3 Multi Tiered System of Support (MTSS). MTSS is a systemic, continuous improvement framework in which data based problem solving and decision making is practiced across all levels of the educational system for supporting student success. https://www.bradfordschools.org (Bradford County Public School Parent Guide to MTSS) http://www.florida-rti.org/parentResources/videos.htm

## How Parents can help

Explore math in your environment. Help your child to count things around them or identify the shapes they see. Have them cook with you using measuring cups. Practice adding and subtracting using objects around you.

Play games that include math. Dice make an excellent tool for practicing math. Here are a couple of resources to help with ideas.

- https://www.scholastic.com/parents/school-success/learning-toolkit-blog/math-games-using-dice-kids-aged-3-7.html
- w 3rd-5th Math Dice Games Handout.docx

You can access the Big Ideas Math Curriculum through the classlink or QR codes to review the work your child completes in class. For details on how to log in, please see the attached document.

- BCSD Parent Handout- Accessing Big Ideas via Classlink.pdf


## Suggestions to Help Build Your Child's Math Skills by Grade Level

## Kindergarten

- Count everything up to 20 objects.
- Put those objects in 2 groups, count each group, and add them together.
- Take objects away from the group, how many do you have left?
- Practice counting to 100.
- How many numbers can they write?
- Can they count to 100 when they start at another number other than zero?
- Put different objects in categories.
- What makes them the same or different?
- Which object is longer or shorter?
- Which object is heavier or lighter?
- Which object can hold more or takes up more space?
- Talk about the different shapes around them. Focus on circles, triangles, rectangles, squares, spheres, cubes, cones, and cylinders.
- The window is a rectangle or a square.
- The cup is a cylinder.
- The yield sign is a triangle.
- The ball is a sphere.
- The box is a cube.
- Big Ideas (the Math Curriculum we use) has provided links to several resources that you can use such as Counting Stories, online games, and a math skills trainer.
- Math Support at Home - K.pdf
- Play games that include counting forwards and backwards.
- Math Fact Fluency practice with sums 0 to 10 and the related subtraction facts: write the fact families or play games with flash cards. (example: $4+5=9 ; 5+4=9 ; 9-5=4 ; 9-4=5$ )


## First Grade

- Practice counting to 120.
- How many numbers can they write?
- Can they count to 100 when they start at another number other than zero?
- Can they count by 2's, 5's, and 10's?
- Can they read and write the number using words?
- Work on decomposing (breaking apart) numbers into groups of 10 and ones.
- $37=3$ tens and 7 ones $\quad 37=2$ tens and 17 ones $\quad 37=37$ ones
- Can they show you using objects?
- Can they draw pictures to show the groups of tens and ones?
- Practice adding numbers with sums (answers) to 100.
- They can use objects, drawings, or number lines to help them figure out the answer.
- Start with adding 2 numbers with sums up to 20.
- Example: $10+7=17$
- Add a two-digit number and a one-digit number with sums to 100.
- Example: $62+6=68$
- Work on combining the ones and making new tens from ones.

- Connect subtraction to addition.
- Finding 37-6 is the same as asking "What number added to 6 makes 37?"
- Help them tell time to the nearest half hour using an analog clock and a digital clock.
- Have them count money. They need to know pennies, nickels, dimes, and quarters.
- How many of each coin equals a dollar?
- What combination of coins equals a dollar?
- How many one, five, and ten dollar bills make up an amount up to 100 dollars?
- Find the following shapes and figures in everything around you.
- Circles, semi-circles, triangles, rectangles, squares, trapezoids, hexagons, spheres, cubes, rectangular prisms, cones, and cylinders.
- Can you form a figure using other figures? (A hexagon can be made of 6 triangles.)
- Big Ideas (the Math Curriculum we use) has provided links to several resources that you can use such as a Skills Handbook, online games, and a math skills trainer.
- Math Support at Home - 1..pdf
- Math Fact Fluency practice with sums 0 to 20 and the related subtraction facts: write the fact families or play games with flash cards. (example: $14+5=19 ; 5+14=19 ; 19-5=14$; $19-14=5$ )


## Second Grade

- Work with numbers up to 1,000 .
- Can they read and write the numbers in word form?
- Have them practice breaking the number into hundred, tens, and ones (expanded form)
- $413=400+10+3$
- Practice adding two whole numbers with sums up to 100 .
- They can use drawings or number lines to help them.
- Practice subtracting a whole number from a whole number, each not larger than 100.
- They can use drawings or number lines to help them.
- Divide objects or drawings into equal parts. Focus on dividing them into half, thirds, or fourths.
- You can divide a sandwich into half in 2 different ways. You can also divide it into fourths.
- You can divide a round cake into thirds.
- You can divide a square cake into four equal pieces in a couple of different ways.
- Help your child to measure things in the house to the nearest inch, foot, yard, centimeter, or meter.
- Using analog and digital clocks, work on telling time to the nearest 5 minutes.
- Continue working with money.

| Coin | Value | "Worth the Same As" |
| :---: | :---: | :---: |
|  | $\begin{gathered} 5 \\ \text { cents } \end{gathered}$ | 5 pennies are worth the same as 1 nickel. $\text { (1) (1) (1) (1) }=\text { (5) }$ |
| dime | $\begin{gathered} 10 \\ \text { cents } \end{gathered}$ | 10 pennies are worth the same as 1 dime. <br> 2 nickels are worth the same as 1 dime. <br> (5) 5 = 6 |
|  | $\begin{gathered} 25 \\ \text { cents } \end{gathered}$ | 5 nickels are worth the same as 1 quarter. |

- If your child has $\$ 10$ and wants to buy a pen for $\$ 2$, and a shirt for $\$ 5$, do they have enough money? Can they also buy a candy bar for $\$ 2$ ?
- Can they find or draw the following shapes and explain the number and length of the sides and how many vertices (corners) it has? Are the edges curved or straight?
- Triangles, rectangles, squares, pentagons, hexagons, and octagons
- Big Ideas (the Math Curriculum we use) has provided links to several resources that you can use such as a Skills Handbook, online games, and a math skills trainer.
- Math Support at Home - 2.pdf
- Math Fact Fluency practice with sums 0 to 20 and the related subtraction facts: write the fact families or play games with flash cards. (example: $14+5=19 ; 5+14=19 ; 19-5=14$; $19-14=5$ )


## Third Grade

- Practice adding and subtracting multi-digit whole numbers including regrouping.

- Work on learning the multiplication and division facts from 1's to 12 's.
- Begin with finding equal groups of objects.

For example, there are 3 tables in the library. There are 4 students sitting at each table. How many students are sitting at tables in the library?


- Move to using arrays and the area model

For example, a farmer is planting rows of sunflowers. He plants 6 rows with 5 sunflowers in each row. How many sunflowers does he plant?


- Divide objects into equal parts such as sandwiches, cakes, pizza, and drawings. Begin to write the fractional part colored or eaten.
- $1 / 4$ of the sandwich has been eaten
- There is $4 / 8$ or $1 / 2$ of the pizza eaten.
- Find examples of the different types of quadrilaterals in the world around them.
- Parallelograms, rhombi, rectangles, squares and trapezoids.
- Big Ideas (the Math Curriculum we use) has provided links to several resources that you can use such as a Skills Handbook, online games, and a math skills trainer.
- Math Support at Home - 3.pdf
- Math Fact Fluency practice with multiplication facts with factors up to 12 and the related division facts: write the fact families or play games with flash cards. (example: $8 \times 7=56$; $7 \times 8=56 ; 56 \div 7=8 ; 56 \div 8=7$ )


## Fourth Grade

- Math Fact Fluency practice with multiplication facts with factors up to 12 and the related division facts: write the fact families or play games with flash cards. (example: $8 \times 7=56$; $7 \times 8=56 ; 56 \div 7=8 ; 56 \div 8=7$ )
- Big Ideas (the Math Curriculum we use) has provided links to several resources that you can use such as a Skills Handbook, online games, and a math skills trainer.
- Math Support at Home - 4.pdf
- Add and subtract decimals.
- Rodney has $\$ \mathbf{5 5 . 7 2}$. He buys a lego set for $\$ 48.54$. How much does he have left?
- Hayden has $\$ 27.89$. She wants to buy a shirt for $\$ 15.99$ and a bag of candy for $\$ 9.89$. Does she have enough money?
- Multiply two whole numbers, up to three digits by up to two digits using models or equations or two digits by two digits.

For example, students determine $5 \times 137$ using an area model and place value understanding.


For example, students determine $41 \times 23$ using an area model and place value understanding.

(See next page for more information)

- Divide a whole number up to four digits by a one-digit whole number. The remainder is a fraction. They can use models or equations.
- Base-Ten Blocks

- Long Division Algorithm
108

4 | 432 |
| ---: |
| $-4!$ |
| 03 |
| -0 |
| 32 |
| -32 |
| 0 |

- Area Model


Partial Quotient Division


```
248\div4
248+4=(120+4)+(120+4)+(8+4)
    =30+30+2
    = 62
```

- Divide objects into equal parts such as sandwiches, cakes, pizza, and drawings. Have them begin adding, subtracting, or multiplying the fractional parts. Include more than 1 whole.
- Sam buys 2 pizzas each cut into 8 pieces. Kinsley eats 5 pieces. Sam eats 7 pieces. How much pizza is left? $5 / 8+7 / 8=12 / 8 \quad 12 / 8=1$ whole pizza and 4 pieces There are 4 pieces of pizza left.


## Helpful Math Websites

- Cpalms - Access to all of the math standards and additional activities
- https://www.cpalms.org/
- 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/
- The Math Learning Center - Free Math apps
- https://www.mathlearningcenter.org/apps
- Figure This! - Math Challenges for Families
- https://figurethis.nctm.org/index.html
- Hand Made Manipulatives
- http://mason.gmu.edu/~mmankus/Handson/manipulatives.htm
- Addition and Subtraction Fact Family Flash Cards
- https://www.math-aids.com/Flash Cards/Addition Subtraction Fact Family.ht $\underline{\mathrm{ml}}$
- Fact Family Cards
- http://www.mathcats.com/explore/factfamilies/printaddcards.html


# Meeting the Needs of All Learners 

## English for Speakers of Other Languages (ESOL)

The ESOL (English for Speakers of Other Languages) program offers support for English instruction to students whose native language is not English. ELLs require much more oral language development with a focus on listening and speaking. ELLs require instruction that provides ample opportunities for them to hear and discriminate the words and sounds of English, to increase their vocabulary, and to practice their oral English skills. The district ESOL Facilitator, or school's Curriculum Resource Teacher (CRT) or Literacy/Reading Coach will be glad to meet with you.

## Other links for more information on how to support your child:

https://www.colorincolorado.org
https://wida.wisc.edu/resources

## Exceptional Student Education (ESE)

The Exceptional Student Education Department in Bradford County enhances the instructional program of every school by helping students with diverse needs succeed in school. Mastering the ability to read, spell, and write is fundamental to achieving academic success. Students with a variety of learning disabilities, including dyslexia, dysgraphia, language processing problems, and auditory processing problems may struggle with reading skills despite receiving the same classroom instruction as other students. The education of students with special needs takes into account their individual differences, and might require individually planned and systematically monitored teaching and learning strategies; adaptive equipment and materials; accessible school and program settings; and other accommodations, as outlined in the IEP, to help achieve a higher level of self-sufficiency and success in school and in the community.

## Other links for more information on how to support your child:

Florida Department of Education - Exceptional Student Education Parent Information http://www.fldoe.org/academics/exceptional-student-edu/parent-info/
Florida Diagnostic \& Learning Resources System
https://www.fdlrs.org/parent-services
Florida Inclusion Network
https://www.floridainclusionnetwork.com/family-services-and-resources/

## Attendance

Student attendance has a tremendous impact on a child's education. The image below is from Broward County School District:

Students that attend school regularly beginning in kindergarten can be 5 times more likely to have grade level proficiency in $3^{\text {rd }}$ grade than students that miss just 2 days per month in the first two years of school.

Chronic Absenteeism: Missing 10\% of school days in a school year. This can be as little as 1 or 2 days per month.


```
| - 64%
of kids with good attendance in K and 1st
(missed 9 or fewer days both years)
\square
of kids with at-risk attendance
(mlssed more than 9 days both years)
    - 41%
of kids chronically absent in K or 1st
(mlssed 18 or more days one year)
    \square-17%
    of kids chronically absent in K}\mathrm{ and 1st
    (missed 18 or more days both years)
```


## Strategies for Good Attendance

- Set a regular bed time and morning routine.
- Lay out clothes and pack backpacks the night before school.
- Don't let your child stay home unless they are truly sick. (Temperature higher than 100.4 ㅇF, throwing up or having diarrhea, eyes are pink and crusty)
- If your child seems anxious about school, talk to teachers, school counselors, school social workers, or other parents for advice on how to make them feel comfortable and excited about learning.

