

2ND

A FAMILY GUIDE FOR STUDENT SUCCESS

SECOND GRADE
Concepts of Literacy and Mathematics



Maryland
STATE DEPARTMENT OF EDUCATION

The Maryland State Department of Education would like to thank the Mississippi Department of Education for allowing the adaptation and incorporation of this guide to support Maryland families and children.

MARYLAND STATE DEPARTMENT OF EDUCATION

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Deaf and Hard of Hearing Use Relay

Dear Families,

Parents and guardians are their child's first teachers, and your insight is essential to helping your child succeed. When families and educators work closely together, students benefit.

The Family Guide for Student Success outlines the key literacy and math skills your child will learn from pre-kindergarten through eighth grade. These guides show what students should know by the end of each grade and support your child in meeting Maryland's learning expectations.

Your partnership with your child's teacher makes the biggest difference. Stay in communication, ask questions, and reach out for ideas or activities to support learning at home. If you have questions about curriculum or school programs, please contact your child's school.

This guide is here to help us set clear expectations, strengthen skills, and support every child's growth, together.



Carey M. Wright, Ed.D.,
State Superintendent of Schools

HOW TO USE THE FAMILY GUIDES

In the guide that follows, you will notice that some tips have special symbols next to them. These symbols show which children might find that tip most helpful, since every child learns differently.

Use the key below to help you choose the tips that are most helpful for your child:



CIRCLE: For Children Learning English

Look for this symbol if your child is learning English as another language. These tips are great for building language skills while working on building reading and math skills. All of the activities can be completed in your child's home language as well as English.



SQUARE: For Children Who Need a Little Extra Help

This symbol means the tip might be especially helpful for children who need more time or practice to really understand a skill. These ideas can help make learning feel easier and less frustrating.



TRIANGLE: For Children Who Are Ready for a Challenge

If your child already understands a skill and is ready for something more, look for this symbol. These tips offer fun ways to go deeper and keep learning exciting.

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LITERACY

In second grade, your child will continue to build important reading, writing, speaking, and listening skills. Your child will think, talk, and write about what they read in a variety of texts, such as stories, books, articles, and other sources of information including the Internet. In their writing, your child will learn how to develop a topic and strengthen their skills by editing and revising. Activities in these areas will include:

PHONICS AND WORD RECOGNITION

- Knowing and applying phonics skills to read (decode) and write (encode).

FLUENCY

- Reading with accuracy, appropriate rate, and expression.

LANGUAGE

- Identifying and understanding common word parts, such as prefixes and root words, and by using context clues from the sentence or surrounding text.

COMPREHENSION

- Understanding, remembering, and making sense of what is read.

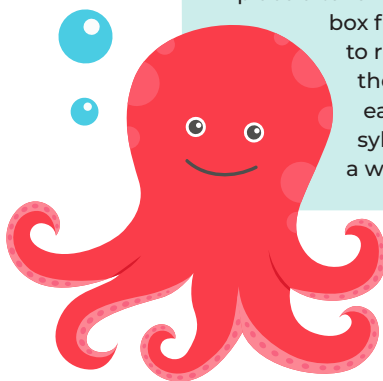


Your child knows and applies phonics skills to read (decode) and write (encode) one syllable words

- Understand vowels make special sounds.
- Understand that words are made of syllables.
- Understand that there are different syllable patterns.
- Understand that some letter combinations result in one sound.

HELP AT HOME

- ▶ Provide visual cues for your child with each vowel sound: l = igloo, a = apple, o = octopus, u = umbrella, e = elephant.
- ▶ Draw two or three horizontally connected boxes on a sheet of paper. Your child will place a token in each box from left to right as they hear each syllable in a word.



Your child can know spelling-sound correspondences for additional common vowel teams.

- Recognize certain vowel combinations, allowing for a short or long vowel sound.
- Understand each sound in a given word also represents a letter or a group of letters.
- Write the spelling representations for vowel sounds.

HELP AT HOME

- ▶ Provide your child with a vowel combination chart. This will give them a visual cue and they can practice how to spell the different vowel sounds (e.g., oe, oa, ai, er, oo).

RESOURCES

VOWEL TEAMS			
 ee	 ay	 oa	 ie
 eh	 ea	 ai	 ow
 y	 y	 ar	 er
 ur	 or	 ir	 oy
 ou	 ew	 oo	 ow
 ue	 aw	 oi	 oo

VOWEL TEAMS

- They come as a team.
- Two vowels next to each other.
- Two letters that come to together to make one sound.
- Some vowel teams can be spelled more than one way (e.g., ai-**rain**; ay-**hay**).

Image from <http://chaplinschool.org/academics/classrooms/grade-2-mrs-rossi/2nd-grade-resources-reading-foundational-skills/>

Your child can decode words with common prefixes and suffixes.

- Understand affixes are added to help add to a word's meaning.
- Identify a base word and then use the affix to help determine the meaning of the word.

VOCABULARY

AFFIXES are anything placed at the beginning or end of a word.

PREFIX is a group of letters placed at the beginning of a root or base word that changes its meaning (e.g., **un**friendly, **mis**understood, **re**play).

SUFFIX is a group of letters placed at the end of a root word that changes its meaning (e.g., help**ful**, sad**ness**, jump**ing**).

HELP AT HOME

- ▶  Provide your child with a magazine and have them look for and highlight words with prefixes and suffixes. They can read the words to you and check for the word's meaning.
- ▶ Create cards with common prefixes and suffixes as well as cards with common base words. Have your child practice adding affixes to create new words.

Your child can identify words with inconsistent but common spelling-sound correspondences.

- Understand that letter-sound correspondence can help determine the spelling of words.
- Know grade level high frequency words.
- Apply spelling-sound rules to determine an unknown word.

HELP AT HOME

- ▶ Print the high frequency word list for your child's grade level and write them on index cards. You can play memory games with these words until your child has memorized them, focusing on five words at a time.

Your child can recognize and read grade appropriate irregularly spelled words.

- Identify irregularly spelled words.

HELP AT HOME

- ▶ Print UFLI’s Irregular “Heart” Word List. Use this list of words to practice identifying irregularly spelled words.
- ▶ Have your child practice writing and reading the newly taught words.

UFLI’S HEART WORDS

Printable Cards for Irregular “Heart” Words



Scan the QR code for a printable version of the “Heart” Words cards.

Your child can use context to confirm or self-correct word recognition and understanding, rereading as necessary.

- Use grade level word decoding strategies to decode unfamiliar words.
- Self-correct by rereading when needed.
- Self-monitor while reading.

HELP AT HOME

► While reading, have your child practice using decoding strategies when encountering unfamiliar words.

DECODING STRATEGIES

- Look at all of the letters.
 - Think of the sounds of all of the letters.
 - Try to stretch the sounds of the letters together into known words.
 - Once a word has been decoded, then use the context of the sentence/text to confirm that the word makes sense and is the correct word.
-

Your child can read with accuracy, appropriate rate, and expression.

- Determine how to read grade level words accurately and repeatedly.
- Read text with fluency and expression.

HELP AT HOME

- ▶ Have your child read a familiar text to you. Encourage them to read it fluently and with expression. You can model fluency and good expression for your child when reading aloud to them.

Your child can read grade level text with purpose and understanding.

- Understand grade level vocabulary.
- Predict what a text may be about before reading.
- Check their predictions of text during reading.
- Check for understanding of comprehension before, during, and after reading.

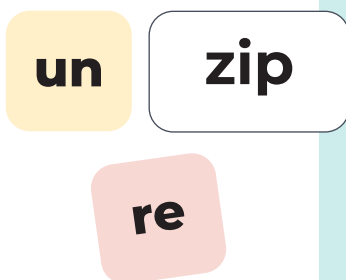
HELP AT HOME

- ▶ Create a bubble map for your child to use for their vocabulary words. Have them list synonyms, antonyms, and then draw a picture to increase understanding.
- ▶ Have your child create a story map of the text they have read using the characters, setting, problem, solution, etc.
- ▶ Ask your child comprehension questions before, during, and after reading.



Your child can determine the meaning of a new word formed after a known prefix is added.

- Understand some common prefixes (e.g., un-, re-).
- Tell the meaning of a new word after a prefix is added (e.g., happy/unhappy, tell/retell).



HELP AT HOME

- ▶ Create verb cards and place in a box. Then, create cards with un- and re-. Pull a verb out of the box and have your child identify its meaning, then have your child put un- or re- at the beginning of the verb card and tell the new meaning.
- ▶ Using a familiar text, have your child place a button on any word that has either the prefix un- or re-.

Your child can describe reasons to support specific points the author makes in a text.

- Identify key details in a text.
- Determine relevant details an author uses to support their point.

HELP AT HOME

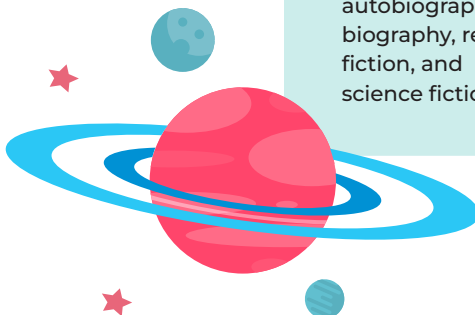
- Choose a familiar informational text and reread it with your child. Discuss why the author wrote the text and what details they used to support the main idea.

Your child can read and comprehend literature and informational texts, including stories, poetry, history, and science.

- Read text from a variety of fiction and nonfiction texts.

HELP AT HOME

- It is important to read to your child from a variety of genres. Choose from a variety of books when you are looking for read alouds. Possible fiction and nonfiction texts might include: historical fiction, mystery, fantasy, folklore, poetry, nonfiction, autobiography, biography, realistic fiction, and science fiction.



Your child can recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.

- Identify the major characters, setting, problem, and solution in retelling a story.
- Make connections based on prior knowledge.
- Identify the main topic of a stories or fictional text.

HELP AT HOME

- ▶ Use a story map to identify character, setting, problem, and solution.
- ▶ Show a picture to your child and ask them to tell you everything they can about the picture.
- ▶ Use sequencing words (first, so, then, next, after that, finally) to describe the beginning of a story to the end.

RESOURCES

SAMPLE STORY MAP

Using a sheet of notebook paper or construction paper, make a simple story map for your child to complete as they read a story.

BOOK TITLE: _____ **AUTHOR:** _____

CHARACTERS	
SETTING	
PROBLEM	
SOLUTION	

Your child can describe how characters in a story respond to major events and challenges.

- Identify the characters in a story.
- Orally describe a character.
- Identify basic story elements as well as major events or challenges within a story.
- Identify the cause and effect or the problem and solution of the actions, events, or steps and how it relates to the topic.
- Use prior knowledge to predict what is coming next in the text.
- Monitor thinking so that they understand when meaning is lost.

HELP AT HOME

- ▶ Choose a character from a favorite book and have your child describe their hair color, eye color, face shape, body shape, etc.
- ▶ ▲ Show the front and back of a book and the table of contents. Ask your child to list as many possible outcomes for the story as they can think of.

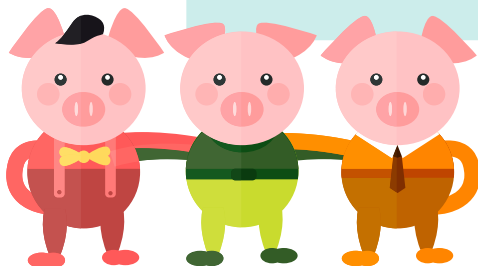


Your child can acknowledge differences in the points of view of characters, including speaking in a different voice for each character when reading dialogue aloud.

- Know that dialogue is when characters are speaking to each other in a story.
- Understand that speakers often change in a story.
- Identify who is telling a story at various points throughout the text.
- Identify character's feelings and emotions in the story.
- Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

HELP AT HOME

- ▶ When your child is reading, have them use different voices that represent the characters in the text.
- ▶ Using a printed copy of the text, have your child highlight the sections where a specific character is speaking (usually in quotations). Then read the text again.
- ▶ Have your child highlight each character's dialogue in a different color.
- ▶ Read a familiar text such as "The Three Little Pigs." Then read the story "The TRUE Story of the Three Little Pigs." This story is told from the wolf's point of view. Ask your child which character's retelling they believe and why.



Your child can compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.

- Identify basic story elements (e.g., characters, setting, plot).
- Describe character traits (e.g., feelings, actions, looks).
- Understand the central theme or lesson in multiple texts.
- Recognize similarities and differences between two versions of the same text.

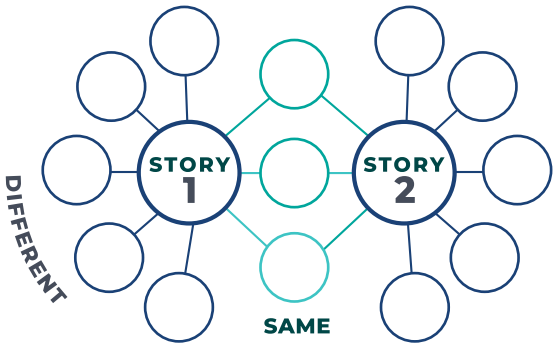
HELP AT HOME

- ▶ Have your child compare and contrast two versions of the same story (e.g., “The Gingerbread Boy” and “The Gingerbread Girl”).
- ▶ Use graphic organizers to gather thoughts and organize information in order to clearly understand the similarities and differences between the two texts.

RESOURCES

SAMPLE DOUBLE BUBBLE MAP

Using a sheet of notebook paper or construction paper, make a simple double bubble map for your child to complete after they read two stories.



Your child can ask and answer who, what, where, when, why, and how questions to demonstrate understanding of key details in text.

- Ask questions to clarify meaning.
- Visualize key elements within the text.
- Ask and answer questions before, during, and after reading.
- Take notes based on reading with a question in mind.

5 W'S AND AN H QUESTIONING

WHO	Who was there?
WHAT	What happened?
WHEN	When did it happen?
WHERE	Where did it happen?
WHY	Why did it happen?
HOW	How did it happen?

HELP AT HOME

- ▶ Play “Question Toss.” Ask a question then toss a ball to your child. They answer the question then asks a related follow-up question and tosses the ball back to you. Repeat.
- ▶ Encourage your child to ask questions before, during, and after reading.



Your child can use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, and plot.

- Identify key details.
- Describe story elements (e.g., character, setting, problem, solution).
- Use illustrations to make predictions before and during reading.
- Use captions to gain understanding when reading.
- Explain how specific images contribute to a text.

HELP AT HOME

- ▶ Have your child predict what the text will be about by describing the pictures in an unfamiliar text. Then, go back and read the story to see if the predictions were right.
- ▶ After reading, have your child retell the story using the book as a reference. Have them describe the plot, characters, setting, problem, solution, etc.



Your child can describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.

- Use taught strategies to determine unknown words.
- Explain how rhythmic words and phrases assist the reader in gaining deeper meaning in stories, poems, or songs.

HELP AT HOME

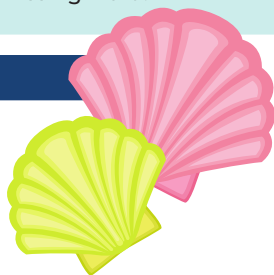
- ▶ If you know that the text your child is reading is going to have unfamiliar words, write them down on a piece of paper and decode them together before they read the text.
- ▶ Read a rhyming book to your child, beginning to end, without stopping. Go back and read it again and this time leave out the second rhyming word of each rhyming pair. Challenge your child to fill in the correct missing word.

VOCABULARY

ALLITERATION is when the same letter or sound appears at the beginning of words in a sentence or story (e.g., Sally sells seashells down by the seashore).

ANTONYMS are words that are opposites (e.g., hot – cold; up – down; stop – go).

SYNONYMS are words that are alike or the same (e.g., large – huge; tiny – small; dirty – messy).



Your child can recount or describe key ideas or details from a text read aloud or information presented orally or through diverse media.

- Understand that key ideas help in understanding.
- Understand how to describe key ideas or details from a text or presented through diverse media.

HELP AT HOME

- ▶ Read a story to your child or have them listen to a story read aloud and orally retell the key details and events of the story.
- ▶ After watching a movie or other video, have your child orally describe key details or events.
- ▶ Using a science or social studies text, or other nonfiction text, analyze different illustrations, graphs, captions, etc. to gain a better understanding of the text.

Your child can ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

- Utilize text features to determine and differentiate important and unimportant information in text.
- Make predictions before reading the text.

NOTES

HELP AT HOME

- ▶ Have your child take notes on the side of the page based on the reading and with a question in mind.
- ▶ Encourage your child to ask questions while reading to aid in comprehension.
- ▶ Read multiple informational books on a topic and encourage your child to ask questions using who, what, where, when, why, and how."



Your child can identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text.

- Understand difference between main topic and key details.

HELP AT HOME

- ▶ Have your child summarize each section or paragraph in the text, writing down important information.
- ▶ Use graphic organizers to organize thoughts while reading in order to gain understanding.

Your child can know and use various text features to locate key facts or information in a text efficiently.

- Know and identify the basic types of text features.
- Use text features to answer questions about the main topic.
- Recognize that text features assist readers in locating information quickly.
- Utilize all parts of an informational text.

HELP AT HOME

- ▶ Have your child explain how certain text features can help them learn new information.
- ▶ Have your child read a variety of texts in order to be exposed to various text features.
- ▶ Use your child's science or social studies text to locate different text features and discuss the information communicated by each one.

TEXT FEATURES

Common text features include:

- | | |
|-----------------|---------------------|
| • Photographs | • Indexes |
| • Captions | • Glossary |
| • Labels | • Diagrams |
| • Illustrations | • Table of Contents |
| • Maps | |

- Charts and graphs
- Icons



COMPREHENSION

Your child can identify the main purpose of a nonfiction text, including what the author wants to answer, explain, or describe.

- Identify the intended audience for the text.
- Understand information can be obtained from the words of the text as well as text features such as illustrations, captions, headings, etc.

HELP AT HOME

- ▶ Have your child identify the reasons for writing and reading different types of text (e.g., journals, newspaper articles, brochures).
- ▶ After reading a nonfiction text, have your child identify the reason the author may have written the text and what their purpose for writing may have been.

VOCABULARY

FICTION is a story that is make-believe; includes characters, a setting, a problem, and a solution.

NONFICTION is a text that gives true information or facts; includes things such as photographs, charts, or maps.

Your child can compare and contrast the most important points presented by two texts on the same topic.

- Identify the main topic of a text.
- Use prior knowledge to understand and connect to new learning.
- Understand how to determine similarities and differences between two objects.

HELP AT HOME

► Have your child use graphic organizers to compare and contrast two different texts.

VOCABULARY

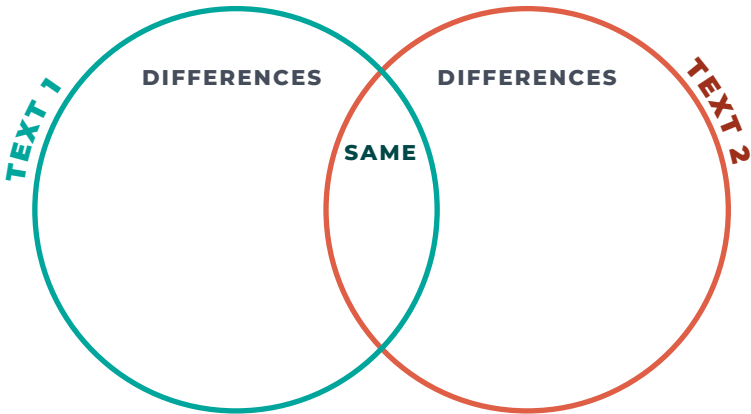
COMPARE refers to how things are the same.

CONTRAST refers to how things are different.

RESOURCES

SAMPLE VENN DIAGRAM

Using a sheet of notebook paper or construction paper, make a simple Venn diagram for your child to complete after they read two stories.



Your child can write opinions, narratives (stories), and information on a topic.

- Introduce a topic, tell information about the topic, and tell why it's important.
- Write a narrative (story) that includes one or more characters, a sequence of events, and a satisfying ending.
- Write an opinion in which your child introduces their topic, states their opinion, and supplies reasons to support their opinion.



HELP AT HOME

- ▶ After reading several books on a topic (at home or school), ask your child to tell you about it. Then, have them write about the topic.
- ▶ Ask your child to describe a character for a narrative they will write, either one they imagine or a familiar character from a story), then take turns telling what happens to the character building on each other's ideas. Finally, ask your child to write the story.
- ▶ After reading a text, share an opinion you have about the story, and ask your child for their opinion. Explain your reasons, and ask your child for their reasons. Finally, have your child write their opinion and reasons in several sentences.





MATHEMATICS

In second grade, your child will deepen their understanding of place value up to 1,000 and use this knowledge to solve word problems, including those involving measurement. Grade 2 students will continue building fluency with addition and subtraction within 20 and solve addition and subtraction problems with numbers up to 100. Your child will also begin exploring fractions and geometry through hands-on activities with shapes. Activities in these areas include:

NUMBER AND OPERATION SENSE

- Counting and skip counting.
- Understanding what the different digits mean in a three-digit number.
- Comparing numbers by reasoning about values of digits and location on the number line.
- Estimate quantities using benchmark numbers and number lines.
- Recalling or quickly deriving addition and subtraction facts within 20.
- Adding and subtracting two-digit numbers.
- Partitioning circles and rectangles into halves, thirds, or fourths.

ALGEBRAIC THINKING

- Solving one- or two-step word problems by adding or subtracting numbers up to 100.

GEOMETRIC REASONING & MEASUREMENT

- Estimating and measuring lengths of objects in standard units such as inches and centimeters.
- Identifying lines of symmetry.

REASONING WITH DATA, STATISTICS, AND PROBABILITY

- Collecting and representing data using picture graphs, bar graphs, and line plots.
- Summarizing data presented in graphs.

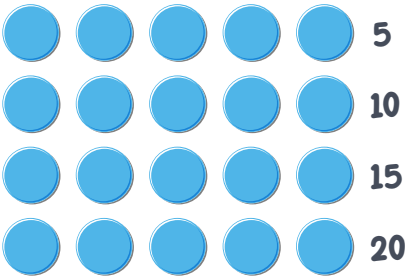
Your child can count within 1,000 and skip-count by 5's, 10's, and 100's.

- Understand that numbers represent quantities
- Count forward and backward by ones starting at any number.
- Understand that skip counting is a repeated, predictable pattern.
- Use skip counting to find total number of objects arranged in rectangular array.

RESOURCES

SAMPLE RECTANGULAR ARRAY

Using objects, arrange the objects in an array (e.g., 4 rows and 5 columns). Have your child use skip counting to determine the number of objects (e.g., 5, 10, 15, 20). Repeat with several different combinations up to 5 by 5.



INTERNET RESOURCES



Search the Internet for free, printable 1,000 charts.

HELP AT HOME

- ▶ ● Lead your child in counting during daily routines such as playing hide and seek, picking up toys, brushing teeth, washing hands, or walking up/down stairs.
- ▶ ■ Use movement when counting e.g., count each clap as you skip count.
- ▶ Have your child draw a card and begin counting forward from that number until you call stop. Then have your child draw another number and continue counting either forward or backward to reach the second number.
- ▶ Using a 100s or 1,000 chart, have your child color the numbers said when counting by 2s in yellow. Then while counting, have your touch the number and say it aloud. Repeat for counting by 5s, 10s, or 100s.
- ▶ ● To support multilingual second graders, count in your home language first then in English to help your child make connections.



Your child can use understanding of 100 as a bundle of ten tens, called a “hundred” to represent amounts of hundreds, tens, and ones, and to compose and decompose three-digit numbers.

- Understand that 10 can be thought of as a bundle of ten ones – called a “ten.”
- Understand that 100 can be thought of as a bundle of ten tens – called a “hundred.”
- Recognize the value of a digit.
- Use place value models to represent a number.
- Understand a three-digit number can be decomposed in hundreds, tens, and ones (place value).
- Understand that a number can be decompose in multiple ways. For example, $246 = 200 + 40 + 6$, $246 = 221 + 25$, or $246 = 123 + 123$.

HELP AT HOME

- ▶  Have your child draw place value models to represent a given number then, write the given number in standard form (e.g., 423) and expanded form (e.g., $423 = 400 + 20 + 3$).
- ▶ Given a three-digit number, ask your child to identify the value of the digits in the number (e.g., the 2 in 423 represents 2 tens or 20).
- ▶  Have your child write numbers in word form (e.g. four hundred twenty-three).
- ▶ Give your child a three-digit number. Ask your child to find multiple ways to decompose the number.

RESOURCES

PLACE VALUE

4

2

9

hundreds

tens

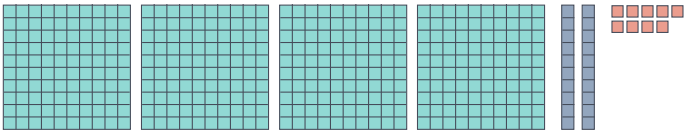
ones

PLACE VALUE CHART

Hundreds	Tens	Ones
4	2	9

Using a place value chart have your child place the number into the chart to see the place value breakdown.

PLACE VALUE MODELS



Compare two numbers within 1,000 by reasoning about the values of the hundreds, tens, and ones digits and/or the location of the numbers on a number line.

- A number represents a quantity and a place on the number line.
- Identify if groups of objects are greater than, less than, or equal to another group.
- Reason about the values of hundreds, tens, and ones digits and the location of the numbers on a number line to compare.
- Understand the symbols for comparison, greater than ($>$), less than ($<$), and equal to ($=$). Use these symbols to record comparisons.



HELP AT HOME

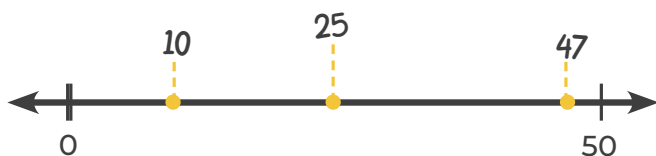
- ▶ Write down two numbers between 0 – 1,000 (such as 546 and 564). On a number line, ask your child to locate the estimated location of each number. Then, ask your child to analyze the relationship between the two numbers on the number line. You may ask your child which is closer to 0? Which is closer to a benchmark number like 1,000?
- ▶ Play “Greater or Less Than.” Make three cards, one with the less than ($<$) sign, one with the greater than ($>$) sign, and one with an equal ($=$) sign. Then play a game in which you put down two numbers written on index cards. Ask your child to put the correct sign between the numbers and do this as fast as possible.
- ▶ ▲ Use rulers, scales, or other measuring tools to compare different quantities.

Your child can estimate quantities using benchmark numbers and number lines.

- Understand that estimating quantities mean to think of a number that is close to the actual amount.
- Benchmark numbers are familiar numbers that are easy to work with. Benchmark numbers are often multiples of 10 (e.g., 10, 20, 30, 40, 50...) but can also be other familiar numbers such as 25.
- Number lines can be used to estimate quantities
- Understand that estimating can help in solving problem.

HELP AT HOME

- ▶ Give your child a number line with markings for 0 and 50. Ask your child to estimate where different numbers would be located.
- ▶ Ask your child questions that require estimation. For example, while driving or walking, ask questions like: “Do you think we’ve gone more or less than 50 steps?” or “How many cars do you think are in that parking lot—closer to 25 or 100?”
- ▶ Play the game, “Closer to” with your child. Say a number and ask your child if it is closer to given benchmark numbers. For example, ask “Is 38 closer to 25 or 50?” Encourage your child to explain.



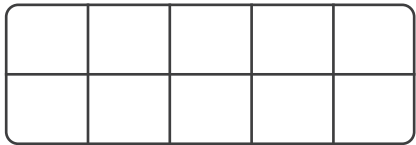
Your child can recall or quickly determine addition and subtraction facts within 20.

- Flexibly use strategies for adding and subtracting to efficiently determine an unknown fact.
- Understand part-part-whole relationships.
- Apply understanding of place value to add and subtract.

RESOURCES

TEN FRAME

On a sheet of notebook paper or construction paper, draw a ten frame. Use small objects such as buttons, stones, or bottle caps as counters.



HELP AT HOME

- ▶ Practice addition or subtraction facts in small, related groups. For example, focus on all the 2s and 4s facts. This will help your child notice patterns and build confidence without feeling overwhelmed.
- ▶ Practice using addition and subtraction strategies that have been learned (e.g., doubles, doubles +1, counting on, counting back, making 10).
- ▶ Ask your child to share their strategies for determining an unknown fact. For example, a student may explain that to solve $5 + 6$, the student thought of $5 + 5 = 10$ and added 1 more. So, $5 + 6 = 11$.
- ▶ ■ Use a ten frame to help students visualize the math fact.

ADDITION & SUBTRACTION STRATEGIES

COUNTING ON

Start with the largest number & count forward.

DOUBLES

A number is doubled (e.g., $3 + 3$, $7 + 7$).

COUNTING BACK

Start with the largest number & count backward.

DOUBLES PLUS 1

The doubled fact, $8 + 8$, then add 1 (e.g., $8 + 9 = 17$).

MAKING 10

Use two numbers to make ten (e.g., $6 + 4$, $8 + 2$).

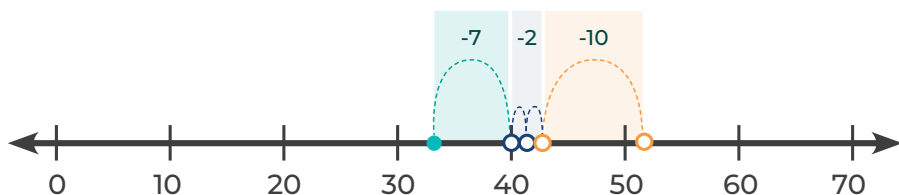


Your child can represent whole number sums and differences within 100 on a number line.

- Understand that sums and differences can be represented as lengths on a number line.
- Understand that number lines can be used flexibly.

HELP AT HOME

- ▶ ■ Increase the numbers over time. Your child may begin by adding and subtracting numbers within 30. Encourage your child to extend to solving problems within 50 and then 100.
- ▶ Give your child an addition or subtraction problem within 100 (e.g., $52-19$). Have your child draw and use a number line to solve the problem.
- ▶ Encourage your child to explain how the number line can be used to solve the problem.
- ▶ ▲ After solving the problem using the number line, encourage your student to solve it another way and make connections between strategies.



$$52 - 19 = 33$$

Your child can fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

- Understand the part-part-whole relationship.
- Understand that when adding three-digit numbers, you add hundreds to hundreds, tens to tens, and ones to ones.
- Use strategies based on counting (e.g., counting on, counting back).
- Use strategies based on place value (e.g. partial sums, making tens, etc.)
- Understand that math problems can be solved in more than one way.

USING PARTIAL SUMS

$$\begin{array}{r} 416 \\ + 205 \\ \hline \end{array}$$

$$400 + 200 = 600$$

$$10 + 0 = 10$$

$$6 + 5 = 11$$

$$621$$

HELP AT HOME

- ▶ Help your child remember different strategies that they have learned (e.g., counting on, counting back, making a ten, doubles facts, doubles +1).
- ▶ ■ Your child may begin by adding and subtracting numbers within 30. Encourage your child to extend to solving problems within 50 and then 100.
- ▶ Ask your child to share their strategy for solving. Your child can share their strategy verbally or in writing.
- ▶ ■ When working with subtraction problems, begin with problems with friendly numbers (e.g., 50 + 25) or numbers that do not require regrouping (e.g., 41 + 52).
- ▶ ▲ If ready, challenge your child to solve addition and subtraction problems within 1,000 using similar strategies.



Partition circles and rectangles into equal shares (halves, thirds, and fourths) recognizing that equal shares do not need to have the same shape. Your child can determine how many equal shares are needed to make a whole (e.g., three thirds).

- Understand that a whole can be partitioned or divided into equal parts which can be represented by fractions.
- Understand that when partitioning a whole into equal shares you are creating smaller shares.

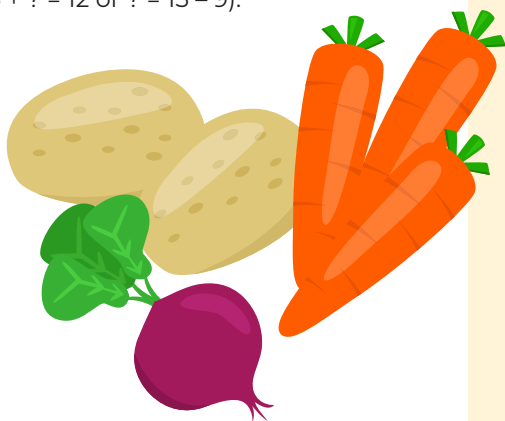


HELP AT HOME

- ▶ Cut several rectangles out of paper. Have your child fold each one into equal parts. Label each piece (e.g., if folding a rectangle in thirds, label each piece as $\frac{1}{3}$). Repeat this activity with other shapes.
- ▶ ● Use food to show fractional parts. Use things like cookies, pizzas, sandwiches, etc. Cut them into different fractions. Discuss with your child the number of parts that make up the whole.

Your child can use addition and subtraction within 100 to solve one- and two-step problems in context involving the unknown in any situation or position.

- Know that addition (+) means to add to, put together, or compare.
- Know that subtraction (-) means to take away, take apart, or compare.
- One-step word problems can be solved with a single operation (like addition or subtraction), while two-step word problems require solving one part of the problem first, then using that answer to complete a second calculation.
- Use strategies for adding and subtracting and understand that a problem can be solved in more than one way.
- When writing equations, use a symbol for the unknown number (e.g., $5 + ? = 12$ or $? = 15 - 9$).



HELP AT HOME

- ▶ ■ Begin with one-step problems and as your child becomes more confident, encourage your child to represent and solve two-steps problems.
- ▶ ● Use everyday situations to create math problems for your child. For example, while buying groceries, ask your child to determine how many onions you would need to buy to have the same amount as potatoes and create a math sentence to represent the situation. While at a restaurant, have your child decide how many chairs are at each table and then determine how many chairs are in the room. Practice these types of one- and two-step real world problems often.
- ▶ ▲ Provide math problems that involve adding or subtracting in contexts of measurements, money, and time.
- ▶ Create storytelling opportunities. Ask your child to create and solve their own math problems.

Your child can estimate and measure the length of an object using includes, feet, centimeters, and meters.

- Grade 2 students will measure in whole units (e.g., 3 inches, 10 centimeters, etc.)
- Choose the appropriate unit and tool for measurement.
- Understand that when measuring items, it is important that each item is aligned to the same starting point of measuring tool.
- Understand that items can be measured using different units.
- Understand that “estimate” means “to think of a number that is close to the actual amount or measurement.”



HELP AT HOME

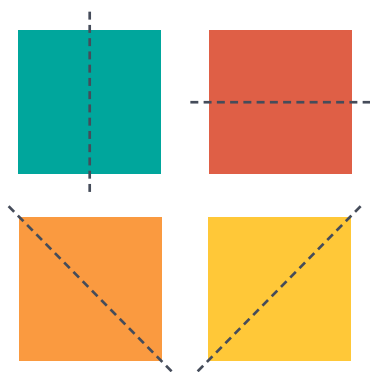
- ▶ Choose several items at home for your child to measure. Discuss how certain tools do a better job of measuring than others. For example, have your child use a ruler to measure the dining room table, then use a yardstick or measuring tape. Both tools do the job, but one is more effective.
- ▶ Choose an object in the room and show the unit to use for estimation and measurement (e.g., centimeter, inches, feet, meter, yard). Have your child estimate how many inches, feet, or meters that object could be. Then, check the estimate by measuring.
- ▶ ▲ Measure objects at home. Have your child find the sum or the difference in the lengths of the two objects.

Your child identify and draw lines of symmetry. Your child can explain why a figure or shape is symmetrical.

- Understand that line symmetry is when a shape or figured can be folded along a line so that both halves match exactly.

RESOURCES

LINE SYMMETRY



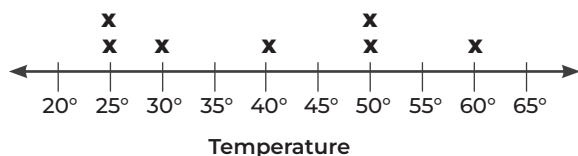
HELP AT HOME

- ▶ Give your child paper shapes (e.g., hearts, rectangles, or butterflies etc.) and have them fold the shape to see if both sides match. Sort the shape into groups of shapes with lines of symmetry and shapes without lines of symmetry.
- ▶ Give your child various images (e.g., letters, shapes, pictures) and ask your child to look for lines of symmetry. Your child should draw all lines of symmetry that they are able to find on the figure or image.
- ▶ Have your child go on a Symmetry Hunt around the house or outside. Your child will look for objects that are symmetrical (e.g., doors, windows, faces).

Your child can collect and represent data using picture graphs, bar graphs, and line plots. Your child can summarize data presented in the graphs.

- Data can be collected through survey, observation, or measurement.
- Categorical data refers to data that can be sorted into group or categories (e.g., transportation to school or favorite recess activity). Categorical data can be displayed using picture graphs and bar graphs.
- Numerical data refers to data that can be counted or measured (e.g., height of plants, temperature). Numerical data can be displayed using line plots.
- Graphs are used to display data and make interpretation easier.

**High Temperature in a Week
Line Plot**



HELP AT HOME

- ▶ **●** Ask your child to collect data to answer a question they are interested in or to help the family make a decision. For example, if you are planning a meal for a family gathering, your child may survey family members to identify their favorite meal or dish.
- ▶ Create real-world situations for your child to graph (e.g., favorite movie genre, daily temperatures, amount of minutes spent reading, etc.).
- ▶ **▲** Measure different objects (e.g., heights of family members, height of plants) around the house and plot their lengths using a line plot.
- ▶ After creating graphs or line plots, ask your child questions about the data. For example, you may ask “what is the most popular movie genre?” or “how many days was the temperature above freezing (32°F)?”



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