

1ST

A FAMILY GUIDE FOR STUDENT SUCCESS

FIRST 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 first grade, your child will build important reading, writing, speaking, and listening skills. Your child will continue to learn the letters and sounds that make up words. Your child will think, talk, and write about what they reads in stories, articles, and other sources of information. In their writing, your child will work on putting together clear sentences on a range of topics using a growing vocabulary. Activities in these areas will include:

CONCEPTS OF PRINT

- Understanding that print includes words arranged in sentences that have a specific form and structure.

PHONOLOGICAL AND PHONEMIC AWARENESS

- Understanding that words are made up of individual phonemes (sounds) that can be blended, segmented, and manipulated.

PHONICS AND WORD RECOGNITION

- Reading (decode) and writing (encode) one and two syllable words containing a variety of spelling patterns and common prefixes and suffixes with increasing accuracy and automaticity.

FLUENCY

- Developing an understanding of fluent reading.
- Reading (decoding) words and/or text with accuracy, appropriate rate, and expression (prosody).



COMPREHENSION

- Learning to ask and answer questions about key details in stories and informational texts they read or hear.
- Developing the skill of recalling information directly from the text to show understanding, laying the groundwork for using text evidence in later grades.
- Retelling key ideas from a story or informational text, summarizing, making inferences, paraphrasing, and making connections to personal experiences.
- Asking and answering questions to figure out word meanings.
- Determining the meanings of words and phrases in texts related to familiar topics (like science or social studies).
- Identifying unfamiliar words and trying to understand them using what they already know.

WRITING

- With some prompting and support, your child can write an opinion, a short story, and information about a topic.

Your child can recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

- Know the difference between a capital letter and a lowercase letter.
- Understand that all sentences begin with a capital letter and end with correct punctuation.
- Understand that a series of words makes up a sentence.



HELP AT HOME

- ▶ Using your child's homework or class newsletter, ask your child to highlight the capital letters in the text.
- ▶ Write several simple sentences on a piece of paper. Read each sentence aloud with expression. Have your child decide which punctuation mark needs to be placed at the end of the sentence.
- ▶ Using any book, have your child "frame" a sentence using two fingers. Place one finger at the beginning of the sentence and one at the end of the sentence.



Your child can isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.

- Know the sounds of the letters of the alphabet.
- Understand that letters blend together to create words.
- Identify consonant blends (e.g., bl, st, gr).
- Decompose words into their basic sounds.

VOCABULARY

INITIAL SOUND: beginning sound

MEDIAL SOUND: middle sound

FINAL SOUND: ending sound

HELP AT HOME

- ▶ Give your child a simple C-V-C (consonant – vowel – consonant) word or other one syllable word (e.g., cat, hop, sip, stop, jump). Have your child unblend the word into its individual sounds.
- ▶ Try giving your child the sounds of a C-V-C word (pausing one second between each sound). Have your child blend the sounds together to produce a word.

Your child can segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

- Know the sounds of the letters of the alphabet.
- Understand that sounds/letters are placed in sequential order to produce readable words.
- Understand that syllables are parts that a word is broken into.
- Understand that words can be changed by changing the initial, medial, or final sound (e.g., cat to bat).



HELP AT HOME

- ▶ Have your child listen to a spoken word and produce each individual sound that makes up that word.
- ▶ Using counters (e.g., buttons, pennies, cubes), move a counter up to represent each sound in the word (e.g., c-a-t = 3 counters, j-u-m-p = 4 counters).

Your child can use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.

- Know the sounds of the letters of the alphabet.
- Distinguish between vowels and consonants.
- Understand that each syllable must have a vowel sound.
- Understand vowel patterns and vowel teams.

HELP AT HOME

- ▶ Call out any word to your child and have them clap the syllable pattern (e.g., hip-po-pot-a-mus = 5).

PHONICS AND WORD RECOGNITION

Your child can read words with inflectional endings.

- Read through the entire word.
- Understand suffixes -s, -es are added to nouns to mean more than one.
- Understand suffix -ing is added to a verb to mean it is happening now.
- Understand that -ed is added to a verb to mean that it has already happened.

HELP AT HOME

- ▶ Using a magazine, or newspaper article, have your child use a highlighter to locate words that contain a suffix.
- ▶ Write a simple base word on a card. Have your child add a suffix to the word to change the meaning of the word (e.g., plant + s = plants, plant + ed = planted, plant +ing = planting). To extend the learning have your child produce a sentence with the newly created words to help them understand when each is used and how they are different.

VOCABULARY

INFLECTIONAL ENDINGS are letters added to the end of a base word that changes the word's meaning (e.g., bats, wishes).



Your child can understand the spelling-sound correspondences for common consonant digraphs.

- Know the sounds of each letter of the alphabet.
- Understand that some letters can be joined together to make one sound.

INTERNET RESOURCES



A list of common digraphs can be located on the Internet.

HELP AT HOME

- ▶ Print a digraph chart or use one provided by your child’s teacher of the most common digraphs. This will help your child associate a key word and picture with each digraphs.
- ▶ Have your child practice unblending words that contain digraphs and writing them correctly.

Your child can understand final -e and common vowel team conventions for representing long vowel sounds.

- Understand vowel patterns and vowel teams in order to decode words.
- Apply word analysis skills to decode unfamiliar words.

RESOURCES

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

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

HELP AT HOME

- ▶ Give your child a word card with simple C-V-C (consonant-vowel-consonant) words that when an “e” is added to the end, the word changes (e.g., cap = cape, hat = hate, hop=hope, cut = cute). Have your child use a magnetic letter or cut out letter “e” and place at the end of the word card. Say the new word with the long vowel sound.

VOWEL TEAMS

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

Your child can distinguish long from short vowel sounds in spoken single-syllable words.

- Know the sounds of the letters of the alphabet.
- Differentiate between vowels and consonants.
- Understand that vowels can have more than one sound.
- Understand that vowels have different pattern rules.
- Understand the rules of language that make a vowel long or short.

HELP AT HOME

- ▶ Have your child associate a short vowel sound to a key word, such as:
i = igloo,
a = apple,
o = octopus,
u = umbrella,
e = elephant.
- ▶ Print a vowel pattern and vowel teams chart for your child. This will help them associate a key word to the long vowel patterns found in words.



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

- Understand that some words cannot be decoded (unblended) in order to read and do not follow predictable patterns.

HELP AT HOME

► Print UFLI’s Irregular “Heart” Words to create flashcards for unpredictable word pattern words. Starting with 5-10 cards, practice reading these cards until your child has reached mastery. When your child has reached mastery on a card, replace that card with a new word to learn. Review cards that have been achieved weekly.

UFLI’S HEART WORDS

Printable Cards for Irregular “Heart” Words

said



are



there



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.

- Understand that text needs to be read with accuracy in order to support comprehension.
- Reading a text multiple times helps the reader with accuracy, rate, expression, and understanding.

HELP AT HOME

- ▶ Read texts aloud.
- ▶ Have your child read a portion of a text multiple times to confirm understanding.

Your child can read grade level text with purpose, understanding, accuracy, appropriate rate, and expression on successive readings.

- Demonstrate an understanding of a text when it is read aloud.
- Understand that a reader has a purpose when reading.
- Read with fluency and expression.

HELP AT HOME

- ▶ When reading aloud to your child, demonstrate the different voices and emotions of each character through your tone of voice and expressions.
- ▶ ▲ Create a printed copy of a text for your child. Have them use crayons, markers or highlighters to highlight the sections of text that show someone is speaking (usually in quotations). Then have your child read the text paying close attention to the expression they use when they get to these sections.

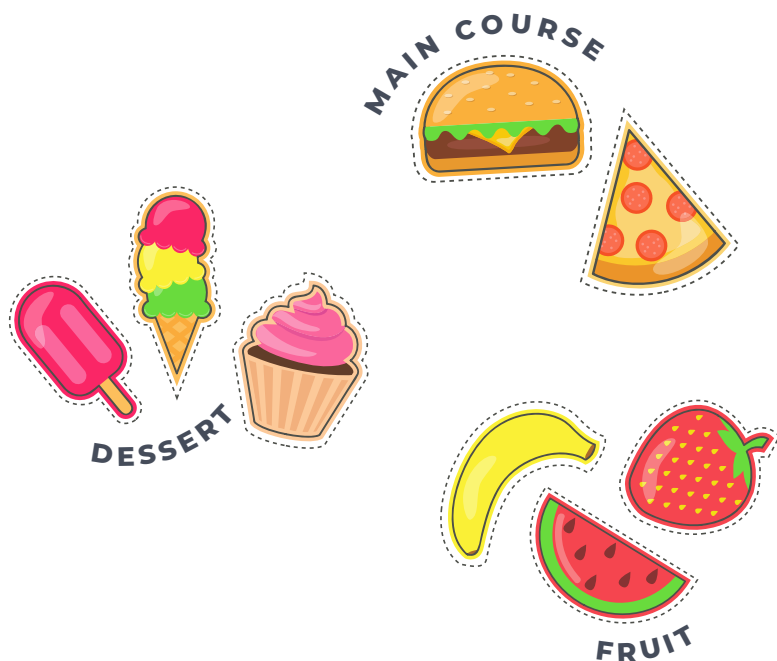


Your child can sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.

- Understand that words can be grouped together based on different attributes.

HELP AT HOME

- ▶ Write several words on index cards that fit into 2-3 categories (e.g., animals, food, colors). Have your child sort the cards into their correct categories.
- ▶ Use pictures cut from a magazine and have your child sort the pictures into different categories. Have your child discuss what their “rule” was when sorting the pictures.



Your child can ask and answer questions about key details in both fiction and nonfiction texts.

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

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.



HELP AT HOME

- ▶ Play “Question Toss.” Ask a question then toss a ball to your child. They will answer the question then asks a related follow-up question and tosses the ball back to you. Repeat.
- ▶ Encourage your child to ask questions about the text before, during, and after reading.
- ▶ Ask your child questions before, during and after reading a book. Ask questions such as:
 - What do you think will happen next?
 - Where is this story happening?
 - What do you think the problem was in the story and was the problem solved?



Your child can explain major differences between books that tell stories (fiction) and books that give information (nonfiction), drawing on a wide range of text types.

- Compare and contrast books that tell a story (fiction) and those that give information (nonfiction).
- Understand informational text features (e.g., table of contents, headings, captions, diagrams).
- Understand that books that tell stories include poems, fables, fantasy, etc.

HELP AT HOME

► Using a storybook and an informational book, flip through the pages. Notice the visual differences between the two books. Explain to your child what each book has that is similar and different.

VOCABULARY

COMPARE refers to how things are the same.
CONTRAST refers to how things are different.

Your child can retell stories, including key details, and demonstrate understanding of the central message or lesson.

- Identify the major character, setting, problem, and solution when retelling a story.
- Make connections to a text, based on prior knowledge.
- Demonstrate the ability to understand the main topic of a paragraph.

HELP AT HOME

- ▶ Use a story map to identify the characters, setting, problem, and solution.
- ▶ Show a picture to your child and ask them to tell you everything they can about the picture.
- ▶ After reading a book, have your child start at the beginning and tell the important details and events that happened. Then, retell the middle and end of the story in the same way.

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 characters, settings, and major events in a story, using key details.

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

VOCABULARY

CHARACTERS are the people or animals that are in the story. The **SETTING** is where the story takes place. The **MAIN EVENTS** are the important things that happen in the story.

HELP AT HOME

- ▶ Ask your child questions before, during and after reading a book. Ask questions such as:
 - “What do you think will happen next?”
 - “Where is this story happening?”
 - “What do you think the problem was in the story and was the problem solved?”
- ▶ Ask your child to list several possible outcomes for the story.
- ▶ ▲ Choose a character from a favorite book or movie and have your child describe their hair color, eye color, face shape, body shape, etc. Then have your child elaborate on the character’s personality, and behavior (e.g., shy, funny, angry, playful, honest, sincere).



Your child can identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

- Understand words that portray different feelings and emotions (e.g., happy, sad, joyful, angry).
- Interpret context by using picture clues to understand feelings or emotions.

RESOURCES

Feelings



HELP AT HOME

- ▶ Read stories that show different feelings, such as Aliko's *Feelings*. Discuss the different feelings each drawing represents.
- ▶ Read poems appropriate for first grade. Discuss with your child how the poem makes them feel and what words suggest those feelings.
- ▶ After reading a book, ask your child how that book made them feel and what part of the book made them feel that way.



Your child can identify who is telling the story at various points in a text.

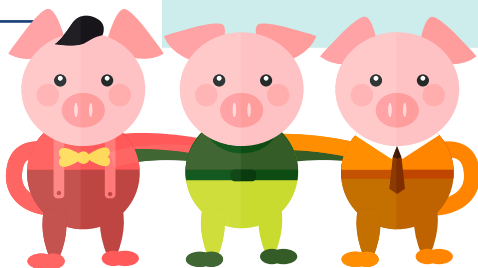
- Identify the characters that are in the story.
- Identify the narrator.
- Understand the points at which the characters are having conversations.
- Understand that the author's purpose can be to entertain, share information, or persuade someone to do something.

VOCABULARY

A **NARRATOR** or **SPEAKER** is the person who is telling the story.

HELP AT HOME

- ▶ Read several stories where characters are having conversations between each other. Stop while reading and discuss who is talking at different points.
- ▶ Read fractured fairy tales, such as "The True Story of the Big Bad Wolf," as well as the original version of the fairy tale, "The Three Little Pigs." Discuss the different points of view and who is telling their side of the story.



Your child can use illustrations and details in a story to describe its characters, setting, or events.

- Understand that illustrations and drawings give information that supports the written text.
- Use visual cues found in the illustrations and drawings to infer, predict, and draw conclusions about the text.

HELP AT HOME

- ▶ Before reading, do a “picture walk” through a book with your child. Look at each illustration and discuss what might be happening. Then read the book to see if your predictions were correct. Compare your predictions to what actually happened.
- ▶ Show your child an illustration (picture) in a book. Have your child describe what is happening in the picture.
- ▶ Using illustrations from a book, have your child predict what different things could happen next.

VOCABULARY

To **PREDICT** is to guess at what you think will happen next, based on the information that you already know.

INFERRING means to “read between the lines” rather than just think about what information is given to you directly within the text.



Your child can compare and contrast the adventures and experiences of characters in stories.

- Identify the characters in the story.
- Compare (tell what they have in common).
- Contrast (tell how they are different).



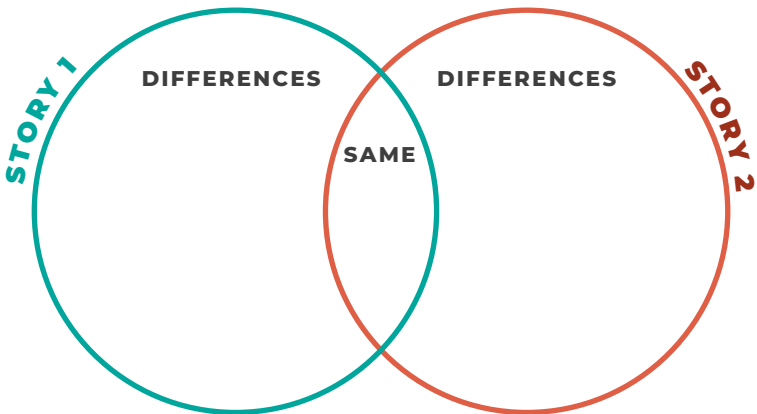
RESOURCES

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.

HELP AT HOME

- ▶ Read two stories that have the same character. For example, read two different versions of “The Gingerbread Man.” Have your child compare and contrast the adventures that “The Gingerbread Man” has in both stories. How are they the same and different?
- ▶ Use a Venn diagram to compare and contrast the two versions of the story.
- ▶ After reading, have your child compare and contrast two characters from the same story. For example, after reading “The Three Billy Goats Gruff,” have your child compare and contrast the billy goats and the troll.



Your child can identify the main topic and retell key details of a text.

- Understand the difference between main idea and key details.
- Use text features and/or illustrations to determine main idea and details.

HELP AT HOME

- ▶ After reading a book, have your child sum up the book in one or two sentences. Have them decide what the entire story was about. Then have your child give details that support the main idea of the story.
- ▶ For longer books, have your child tell the main idea and key details in each chapter, rather than the entire book.



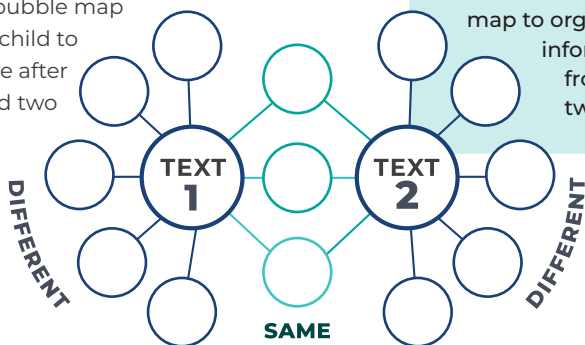
Your child can describe the connection between two individuals, events, ideas, or pieces of information in a text.

- Use background knowledge and experiences to understand the text.
- Understand authors write about real people, events, and ideas in an informational text.

RESOURCES

SAMPLE DOUBLE BUBBLE

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.



HELP AT HOME

- ▶ Read a variety of different types of stories involving multiple characters with interactions between other characters.
- ▶ Read two informational texts that have similar themes. Discuss the connection between the two texts.
- ▶ Use a double bubble map to organize your information from the two texts.

Your child can ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

- Use background knowledge and experiences to convey meaning of unfamiliar words in a text.
- Understand that questions often begin with who, what, when, where, why, and how.
- Make notes, while reading, when your child has questions about the meaning of a word that needs to be clarified.

HELP AT HOME

- ▶ Have your child re-read text and/or read ahead, to clarify the meaning of an unfamiliar word found in texts.

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

- Understand the difference between informational or nonfiction text and fictional text.
- Understand text features assist readers in locating information quickly.
- Understand text features are used to share additional information in a text.
- Use text features in order to gain full understanding of informational text, readers must use text features.

TEXT FEATURES

Common text features include:

- | | |
|-----------------|---------------------|
| • Photographs | • Glossary |
| • Captions | • Diagrams |
| • Labels | • Table of Contents |
| • Illustrations | • Charts and graphs |
| • Maps | • Icons |
| • Indexes | |



Your child can distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

- Understand the difference between pictures and words.
- Identify important details contained in pictures or other illustrations.
- Understand that words and pictures work together to provide information.

HELP AT HOME

- ▶ Explore different forms of nonfiction text (e.g., newspaper/magazine articles, biographies, informational/historical text). Identify the different text features that the author uses.
- ▶ Discuss with your child the important information that each text structure adds to the text.
- ▶ Write down information learned from text features to clarify understanding.

HELP AT HOME

- ▶ While reading, divide a sheet of paper into two columns. Use one column for information found within the text and the other column to record information learned through the text features.



Your child can identify the reasons an author gives to support points in a text.

- Recall details from a text.
- Determine what are considered relevant and irrelevant details.

HELP AT HOME

- ▶ Use a graphic organizer to help organize and summarize a text and organize the supporting details.

Your child can identify basic similarities in, and differences between, two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

- Identify similarities (compare) and differences (contrast) between objects, characters, texts, etc.

HELP AT HOME

- ▶ Using two nonfiction books that have a similar topic (e.g., “How to” books that describe the process of how something is made), have your child compare the two texts, point out similarities in procedures, illustrations, or processes.
- ▶ Use graphic organizers to record and organize information in comparing and contrasting the two texts.

MATHEMATICS



In first grade, your child will work with whole numbers and place value, including grouping numbers into tens and ones as they learn to add and subtract up through 20. Your child will also use charts, tables, and diagrams to solve problems. Activities in these areas will include:

NUMBER AND OPERATION SENSE

- Counting forward and backward within 120.
- Understanding what the different digits mean in two-digit numbers (place value).
- Comparing two-digit numbers using the symbols $>$ (greater than), $=$ (equal to) and $<$ (less than).
- Understanding the rules of addition and subtraction (e.g., $5 + 2 = 2 + 5$).
- Recalling addition and subtraction facts or using strategies to find unknown facts.
- Adding one and two-digit numbers together.
- Partitioning circles and rectangles into halves and quarters.

ALGEBRAIC THINKING

- Understanding the meaning of the equal sign ($=$) and determining if statements involving addition and subtraction are true or false (e.g., Which of the following statements are true? $3 + 3 = 6$, $4 + 1 = 5 + 2$).
- Solving word problems that involve adding or subtracting numbers up through 20.

GEOMETRIC REASONING AND MEASUREMENT

- Measuring the lengths of objects using a shorter object as a unit of length.
- Putting objects in order from longest to shortest or shortest to longest.

REASONING WITH DATA, STATISTICS, AND PROBABILITY

- Collecting and organizing data using tally charts and picture graph.
- Summarizing data presented in tally charts.



Your child can count forward and backwards within 120. Your child can also read and write numerals and represent a number of objects with a written numeral.

- Count forward and backward by ones starting at any number.
- Skip count forward and backward by tens (e.g., 10, 20, 30, 40... or 120, 110, 100, 90...).
- Write numbers from 0 – 20.
- Understand that numbers represent quantities.

RESOURCES

HUNDRED CHART

Print a hundred chart or create your own on a sheet of notebook paper or construction paper.

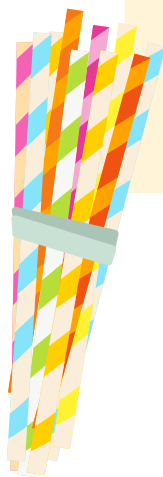
HUNDRED CHART									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

HELP AT HOME

- ▶ Create a set of number cards 0 - 100. 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 hundred chart, have your child locate a number on the chart. Then give them a second number in which to stop counting. Have your child begin counting, while pointing to the number that they are saying until they reach the second number.
- ▶ Practice counting forward and backward when doing routine tasks (e.g., washing hands, brushing teeth).
- ▶  Count in your home language and in English.

Your child can understand that the two digits of a two-digit number represent amounts of tens and ones.

- Understand that 10 can be thought of as a bundle of ten ones – called a “ten.”
- Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
- Understand a two-digit number can be decomposed into tens and ones (place value).
- Understand that a number can be composed and decomposed in multiple ways. For example, $46 = 41 + 5$ and $46 = 23 + 23$.

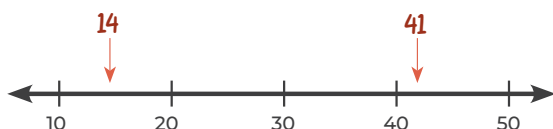


HELP AT HOME

- Using straws, create a number 0 - 100 by counting out that many straws. Using a rubber band, bundle each group of ten. Practice counting the bundles by 10's then counting the remaining straws ($60 + 8 = 68$).
- Hand your child bundles of 10 straws and some individual straws. Have your child count out the number by counting by tens and then adding on the rest.

Your child can compare two two-digit numbers and record the results of comparisons with the symbols $>$, $=$, and $<$.

- Understand that a number represents a quantity and a place on the number line.
- Understand place value within two or three digit numbers.
- Identify if a group of objects are greater, less, or equal to another group of objects.
- Reason about the values of the tens and ones digits and the location of the numbers on a number line to help you compare.
- Understand comparison symbols $>$ (greater than), $<$ (less than), $=$ (equal to).



HELP AT HOME

- ▶ Write down two numbers between 0 - 100. Have your child use a yellow crayon to highlight the number in the tens place. This will help them see the numbers clearly in order to compare. Have your child highlight the ones place in a different color.
- ▶ 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 number line to compare two numbers (e.g., I put 14 and 41 on the number line. 14 is closer to 0 on the number line so 14 is less than 41).

Your child can apply properties of operations as strategies to add and subtract.

- Understand that when adding, numbers can be added in any order, and the answer will always be the same, like $3 + 2$ is the same as $2 + 3$ (Commutative Property of Addition).
- Understand that when adding, you can group numbers in different ways when you add, and the answer stays the same, like $(2 + 3) + 4$ is the same as $2 + (3 + 4)$ (Associative Property of Addition).
- Understand the symbols for addition (+) and subtraction (-).
- Use strategies for adding and subtracting to solve problems.
- Understand that math problems can be solved in more than one way.

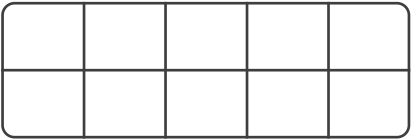
HELP AT HOME

- ▶ Using different objects, have your child create two sets and find the total (e.g., 4 forks and 5 spoons is 9 utensils). Then, have your child switch the order of the sets and find the total (e.g., 5 spoons and 4 forks is 9 utensils).
- ▶ Use dominoes to create addition problems. Turn the dominoes around to show that the order of the numbers doesn't change the sum.

RESOURCES

TEN FRAME AND COUNTERS

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.



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

- Understand that numbers can be broken into two parts to create a number sentence.
- Count on and count back as a strategy to add and subtract.
- Known facts can be used to find unknown facts.
- Use efficient strategies (e.g., ten more/ten less, doubles, doubles + 1, making 10).

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.
- ▶ Help your child remember different strategies that they have learned. By using these strategies, your child will become more fluent in learning math facts.
- ▶ Use a ten frame to visually see the math fact. (See page 27 for an example of a ten frame.)

Your child can mentally find 10 more or 10 less than the number, without having to count and can explain the reasoning used.

- Count by tens up to 100.
- Understand place value and recognize the tens and ones digits within a number.
- Understand when adding (counting on) the total will be larger than what you started with and when subtracting (counting back) the total will be less than what you started with.
- Understand that counting mentally means without pencil/ paper or other manipulatives.

HUNDRED CHART									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43		45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

HELP AT HOME

- ▶  Begin by using a 100 chart. Place a counter or coin on a number. Have your child count up or count back 10. Help your child understand that ten more than a number is the number directly beneath the number they started with and that ten less will be the number directly above the number they started with.
- ▶ Show your child that when adding or subtracting 10 from a given number, only the tens place will change. The ones place will remain the same.

Your child can add within 100 using concrete models, drawings, and strategies. Your child can also show and explain their strategy.

- Add a two-digit number and a one-digit number or add a two-digit number and a multiple of a 10.
- Understand the part-part-whole relationship.
- Understand that when adding two-digit numbers, you add the tens with the tens and the ones with the ones.
- Use strategies for adding and subtracting to solve problems (e.g., counting on, partial sums, etc).
- Understand that math problems can be solved in more than one way.

HELP AT HOME

- ▶ Have your child practice using problem solving 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 by drawing or writing.
- ▶  Encourage your child to solve a problem in more than one way and make connections between strategies.

Your child can understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

- Understand that the equal sign (=) means “the same.”
- Understand the concept of true and false.
- Understand that equations can be written in different orders (e.g., $5 = 3 + 2$, $2 + 3 = 5$, $3 + 2 = 5$).



HELP AT HOME

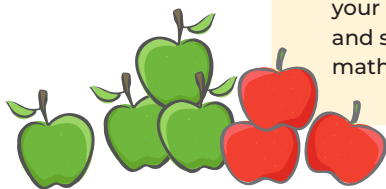
- ▶ Place a number card on one side of an equal sign. Have your child count out that many counters. Then have them count out the same amount of counters for the other side of the equal sign. Discuss how these are now equal or the same. Do this with several different numbers.
- ▶ ▲ To enhance this game, place two addition or subtraction sentences on both sides of the equal sign then have your child determine if they are equal.

Your child can use addition and subtraction within 20 to solve word problems using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

- Know that addition (+) means to add to, put together, or compare.
- Know that subtraction (-) means to take away, take apart, or compare.
- Use strategies for adding and subtracting and understand that a problems can be solved in more than one way.

HELP AT HOME

- ▶ Use everyday life situations to create story problems for your child. For example, while buying groceries, have your child get 3 red apples and 4 green apples. Have them create a math problem to solve. While at a restaurant, have your child determine how many more chairs are needed to seat everyone. Practice these types of real-world problems often.
- ▶ Create storytelling opportunities. Ask your child to create and solve their own math problems.



ADDITION AND SUBTRACTION STRATEGIES

COUNTING ON

Start with the largest number and count forward.

DOUBLES

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

COUNTING BACK

Start with the largest number and 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 determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

- Understand symbols used in an equation (+, -, =).
- Understand that addition and subtraction are inverse operations.

HELP AT HOME

- ▶ Write several math equations on index cards. Cover one of the numbers with a sticky note (e.g., $8 + \underline{\quad} = 11$ or $5 = \underline{\quad} + 2$). Have your child determine the missing number to make the equation true.

GEOMETRIC REASONING AND MEASUREMENT

Your child can order three objects by length and compare the lengths of two objects indirectly by using a third object.

- Understand length is used to determine how long an object is.
- Describe the length of an object using terms such as longer, smaller, shorter, etc.
- Understand that when comparing the length of objects, the objects must be lined up at the same point (starting point).

HELP AT HOME

- ▶ Choose two similar objects that have different lengths. Have your child line them up evenly at a starting point. Using a third object, have your child use it to compare the measurements of the other two objects. For example, use a baby spoon to compare and contrast the lengths of a teaspoon and serving spoon.

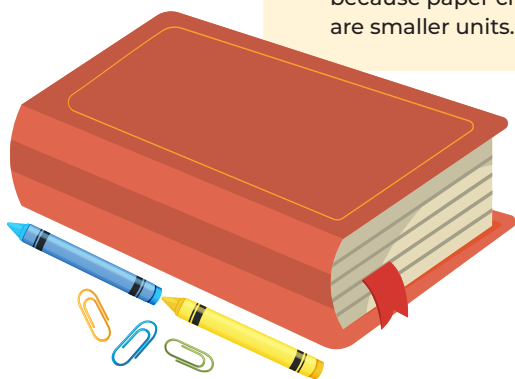


Your child can express the length of an object as a whole number of units, by laying multiple copies of a shorter object (the length unit) end to end.

- Understand length is used to determine how long an object is.
- When measuring, understand that the length of an object is the number of same size units that span the object with no gaps or overlaps.
- Describe the length of an object using terms such as longer, smaller, shorter, etc.
- Understand that when comparing the length of objects, the objects must be lined up at the same point (starting point).

HELP AT HOME

- ▶ Using objects as units (e.g., paperclips, blocks, straws, coins), have your child measure items found around the house.
- ▶ ▲ Provide different objects to be used as measuring units. Use different units to measure the same household item. Discuss with your child how the length changes based on what unit is used to measure (e.g., it takes more paper clips than sticky notes to measure the book because paper clips are smaller units).



Your child can identify defining attributes (e.g., triangles have 3 sides) and non-defining attributes (e.g., the triangle is red).

- Defining attribute are features that make the shape what it is, like number of sides or corners.
- Non-defining attributes are features that can change without changing the shape, like color, size, or which way the shape is turned.
- Identify basic shapes and identify their defining attributes.

HELP AT HOME

- ▶ Cut out several different shapes (e.g., circles, squares, triangles, etc.) in several different sizes and colors. Have your child sort the shapes based on different attributes. Have them discuss what defining attribute was used to sort the shapes.
- ▶ Name a defining attribute (e.g., four corners) and ask your child to draw and name shapes that have that particular attribute.

RESOURCES

TWO-DIMENSIONAL SHAPES are flat shapes that you can draw on paper. They have length and width.



circle



triangle



square



rectangle



hexagon

TWO-DIMENSIONAL SHAPES are flat shapes that you can draw on paper. They have length and width.



cube



cone



sphere



cylinder



Your child can organize, represent, and interpret data with up to three categories. Your child can ask and answer questions about the data.

- Understand that data can be organized in categories and that each category represents a separate set of data
- Understand that data can be displayed in many ways (e.g., tally marks, picture graphs) which makes it easier to interpret the data.
- When interpreting the data, you can use terms such as “more than,” “less than,” and “equal to.”

HELP AT HOME

► Help your child create a graph. This graph could be any information (e.g., favorite food, season, activity). Have your child answer questions based on the graph they created (e.g., How many people like summer best? How many more people like summer versus fall?).

FAVORITE FRUIT



KEY  = 1 student



NOTES



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