

4TH

A FAMILY GUIDE FOR STUDENT SUCCESS

FOURTH GRADE
Concepts of Literacy and Mathematics



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.

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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 fourth grade, your child will continue building their reading skills. In addition to reading literature, your child will read more texts that provide facts and information in areas including science and social studies. Your child will be expected to understand and summarize what they have learned by referring to details from the text. Activities in these areas may include:

PHONICS AND WORD RECOGNITION

- Read (decode) and write (encode) words containing a variety of spelling patterns, prefixes and suffixes with accuracy and automaticity.

FLUENCY

- Refine understanding of fluent reading.
- Read (decode) text with accuracy, appropriate rate, and expression (prosody) to support comprehension.

LANGUAGE

- Speaking and writing using standard English and grade level sentence structure.
- Using grade-appropriate capitalization, punctuation, and spelling.

COMPREHENSION

- Reading and understanding stories, poems, and plays to find the theme, or main message; summarizing what happened, and using details and clues in the text(s) to figure things out.



COMPREHENSION (CONTINUED)

- Learning to explain how characters, settings, and events affect the story's plot, compare different storytellers' views (like first-person vs. third-person) and understand the parts of the poems and plays (like verses and dialogue).
- Reading texts that give facts (like history, science, and technical articles) by finding the main idea, using key details to explain concepts and events, and recognizing how the information is organized.

SPEAKING AND LISTENING

- Expanding discussion skills, explaining ideas clearly, building on others' ideas, and using details from texts or topics during discussions.
- Building discussion skills by engaging in group discussions and summarizing points made by others.

WRITING

- Building foundational argumentative skills by writing organized opinion pieces with supporting reasons and evidence.
- Writing structured, well-developed informative writing using multiple paragraphs with logical flow.
- Writing structured, engaging narratives with well-developed characters and themes using narrative techniques such as pacing to shape meaning.
- Producing clear and coherent writing appropriate to the task, purpose, and audience.

Your child can apply grade level phonics and word analysis skills to read (decode) and write (encode) words.

- Read (decode) and write (encode) words with vowel teams, digraphs, and trigraphs.
- Understand every syllable must have a vowel.
- State the syllables and blend the syllables together to form the word.

HELP AT HOME

- ▶ Write several words with vowel teams on index cards. Have your child circle, highlight, or underline the vowels or vowel teams in each word, then have your child read aloud each word (rain, play, sea, pie, feet, meat, bee).
- ▶ Using word cards with vowel teams, have your child sort the cards by vowel teams (bee/feet, rain/train, etc.)
- ▶ Have your child write sentences using words with vowel teams, digraphs, or trigraphs.

RESOURCES

VOWEL TEAMS			
 ee	 ay	 oa	 le
 igh	 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**).

DIGRAPHS

- ai (rain), ay (day),
eigh (neighbor)
- oa (boat), oe (toe)
- ew (new)

TRIGRAPHS

- igh (high, nigh, tight)
- air (hair, chair, stair)
- are (dare, share, care)

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



Your child can read (decode) and write (encode) multi-syllable words.

- Your child can identify the base word after identifying the prefixes or suffixes of a multi-syllable word.

HELP AT HOME

- ▶ Write multi-syllable words from texts your child is reading at home or from school. Have your child circle the prefixes or suffixes of the word. Have your child underline the base, or main part of the word. Ask your child to read each part of the word, then blend each syllable together. Finally, ask your child to write a sentence with the word in it.
- ▶ ▲ Have your child read a sentence from a text that includes a multisyllable word. Then, have them write a new sentence using the multisyllable word. If needed, work with your child to determine the meaning of the word.

VOCABULARY

A **MULTISYLLABLE WORD** is a word that contains more than one syllable. Examples: coffee, pencil, elephant, unable, reconstruct, misinformation, etc.

Your child can read with sufficient accuracy and fluency to support comprehension.

- Understand grade level vocabulary.
- Determine how to read grade level words accurately and repeatedly.
- Read grade level text with accuracy, appropriate rate, and expression (prosody).
- Check for understanding of comprehension before, during, and after reading.

VOCABULARY

FLUENCY is the ability to read words in the text effortlessly and accurately with meaningful expression.

HELP AT HOME

- ▶ Have your child read a familiar poem or nursery rhyme to you. Encourage them to read accurately, at a rate that is not too fast or too slow, and with expression. You can model fluency and good expression for your child.
- ▶ Ask your child to read aloud a paragraph or more from a text they're reading at home or at school. Listen for accuracy, appropriate rate, and expression. If helpful, model reading the paragraph or section.



Use standard English capitalization, punctuation, and spelling when writing.

- Explain the rules for capitalization in sentences and with proper nouns.
- Use capital letters correctly in titles.
- Use commas and quotation marks for dialogue and quotations from a text.
- Apply learned spelling patterns to spell grade-appropriate words correctly.

HELP AT HOME

- ▶ For a familiar story, have your child create a new title, then write it out with correct capitalization.
- ▶ Read a wide variety of texts and have your child point out the punctuation in dialogue.
- ▶ After having a conversation, have your child write out the dialogue of your conversation using commas and quotations correctly.

Identify the meanings of unknown words and phrases based on grade 4 texts.

- Use context clues to identify the meaning of an unknown word.
- Build vocabulary by reading widely.

HELP AT HOME

- ▶ Provide your child with a wide variety of reading material (texts, magazines, etc.). Your school library or public library is a great resource for locating reading material.
- ▶ Create a family vocabulary jar. When a family member finds a new or interesting word, they write the word on the front of an index card or sticky note, and then draw or write a definition on the back. Take turns pulling a word out of the jar, read it aloud, and talk about its meaning.
- ▶ Think of a topic, such as weather, and think of as many words related to weather as you can. You could also use a topic that your child is studying at school.
- ▶ ● For a topic such as weather, compare how your child's home language has similarities or differences from English (wind/viento/vent; frost/frio/froid; tornado/tornado; etc.).



Your child can refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the 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.
- Locate the answers to specific questions within the text.
- Reference the text when answering questions.

HELP AT HOME

- ▶ Play “Question Toss.” Ask a question then toss a ball to your child. Your child will refer to the text to give the answer to the question. Then, your child will ask a related follow-up question for you to answer and toss the ball back to you. Repeat this process.
- ▶ Encourage your child to use the 5Ws and a How (Who? What? When? Where? Why? How?) to ask questions about texts they are reading to ensure comprehension.
- ▶ ● Have your child discuss ideas or explain understandings about text in their home language before sharing in English.



VOCABULARY

An **INFERENCE** is made by using observations and background knowledge to determine a conclusion that makes sense. For example, John hears a smoke alarm and smells burnt bacon when he wakes up. John can infer that his mom burned the toast.

Your child can determine the theme of a story, drama, or poem using details in the text. Your child can summarize the text.

- Identify the main character, setting, problem, and solution in retelling a story.
- Locate key details in the text that the author used to support the theme, lesson, or moral of the story.
- Understand that the theme of a story is the lesson or message that the author wants you to learn from the story.

VOCABULARY

The **THEME** of a story is the central message or lesson the author wants you to take away from the story. Common themes include friendship, courage, honesty, family, jealousy.

HELP AT HOME

- ▶ Use a story map to identify character, setting, problem, and solution.
- ▶ ■ Read familiar fairy tales and discuss the themes.
- ▶ ▲ Provide your child with the possible theme of a story and let them create a short story to go with the provided theme.
- ▶ Encourage your child to create a story map of their written story.

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 in depth, a character, setting, or event in a story or drama, drawing on specific details in the text to explain their impact on the plot (e.g., a character's thoughts, words, or actions).

- Identify the characters in a story.
- Describe a character orally, including their thoughts, words, or actions).
- Identify basic story elements as well as major events or challenges within a story.
- Monitor thinking so that they understand when meaning is lost.

HELP AT HOME

- ▶ Choose a character from a favorite book or movie and have your child describe the character's hair color, eye color, face shape, body shape, age, temperament, personality, strengths, weaknesses, etc.
- ▶ Ask your child to explain how the character's decisions or choices changed the events or actions that occurred in the story.



Your child can determine the meaning of words and phrases as they are used in a text, including those that refer to significant characters found in mythology (e.g., Herculean).

- Know that phrases are sequences of words intended to have meaning.
- Know that context clues are the words or phrases surrounding an unknown word that can provide hints about the meaning of the word.
- Use prior knowledge, including knowledge of significant characters found in mythology, to determine the meaning of words and phrases as they are used in a text.

HELP AT HOME

- ▶ Expose your child to several characters and words from mythology. Look at the unknown words and discuss the origin and meanings of the words.
- ▶ ▲ Help your child complete a short research project on someone from mythology (e.g., Zeus, Hercules, Poseidon). Have your child write down any unknown words they encounter during their research and discuss the meaning of the words with them. Visit your school library or public library and check out resources on someone from mythology.

VOCABULARY

MYTHOLOGY is stories about gods, goddesses, heroes, monsters, and their interactions with humans. These stories are also used to explain natural phenomena (e.g., why there are stars, earthquakes, storms).



Your child can explain major differences between poems, drama, and prose, and can refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.

- Use the terms chapter, scene, and stanza when writing or speaking about a text.
- Describe how events in stories, dramas, and poems build upon each other.
- Discuss the differences between poems, drama, and prose.

HELP AT HOME

- ▶ Introduce poetry and drama vocabulary to your child (e.g., verse, rhythm, meter, dialogue, stage direction).
- ▶ Use a story map to identify the different parts of the story, drama, or poem. Ask your child to draw the key events in the chapters, scenes, or stanzas.

Your child can compare and contrast the point of view from which different stories are narrated, including the difference between first and third person narrations.

- Identify the point of view from which a story is being told.
- Compare and contrast stories that use the same point of view.
- Compare and contrast stories that use different points of view.
- Find similarities and differences in narration between a story written in first person and a story written in third person.



HELP AT HOME

- ▶ Read a familiar text and have you and your child read different parts aloud, using different voices and emotions for each character. Discuss the point of view of the characters you are playing and then have your child tell how the characters' point of view may or may not be different from their own.
- ▶ Have your child practice identifying third person point of view or first person point of view based on keywords.
- ▶ ● As you read texts in both English and your child's home language, have your child identify whether the story is told in first person or third person.

VOCABULARY

FIRST PERSON uses keywords such as: I, me, mine, myself, we, us, ours.

THIRD PERSON uses keywords such as: he, she, it, him, her, his, hers, himself, herself, itself, they, them, theirs.



Your child can make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

- Make connections between written, visual, and oral versions of a text to improve comprehension.
- Identify descriptions and directions in a written, visual, or oral presentation of a text.
- Compare different presentations of a text using concrete details, quotations, and other information from each presentation of the work.

HELP AT HOME

- ▶  Read a story aloud to your child while having them sketch a picture of what you are reading. After your child's picture is complete, have them explain the sketch and how it relates to specific parts of the story.
- ▶ After your child reads a book that has a movie or video version, watch the movie or video together, then
compare and contrast the two versions.



Your child can compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.

- Compare and contrast themes and topics in stories, myths, and traditional literature from a variety of different cultures.
- Compare and contrast patterns of events in stories, myths, and traditional literature from a variety of different cultures.
- Explain how themes and topics are revealed by characters, settings, and events in stories.
- Explain how stories, myths, and traditional literature reflect the values and beliefs of the culture from which they come.

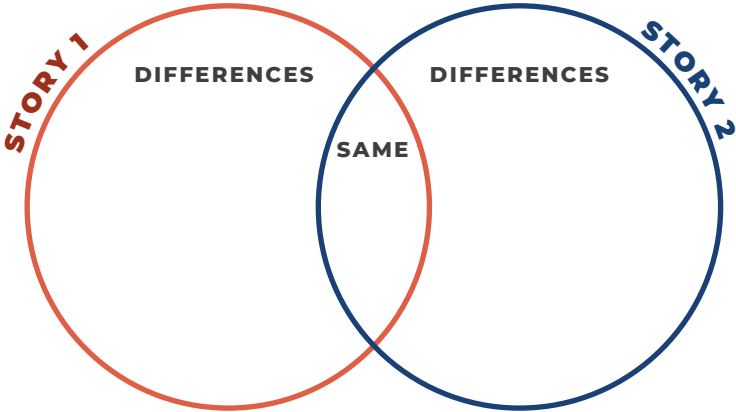
HELP AT HOME

- ▶ Read with your child the original tale of “The Three Little Pigs” and the fractured tale “The True Story of the Three Little Pigs” and have your child create a Venn diagram comparing and contrasting the similarities and differences between the two versions of the story. Discuss the differences between the good characters (the pigs) and the evil characters (the wolf).
- ▶ Read books about different cultures. Visit your school library or public library and check out books on different cultures.

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.



By the end of the year, your child will read and comprehend literature, including stories, dramas, and poetry, at the Grade 4 complexity level proficiently.

- Comprehend grade level text proficiently.
- Read grade level text independently.

HELP AT HOME

- ▶ Make sure your child is being exposed to quality literature and nonfiction text on their grade level.
- ▶ It is important to read aloud and have your child read aloud from different genres. Choose from a variety of books, on grade level and beyond, when you are looking for something to read aloud. If you need help finding engaging options, ask your school librarian or your local public librarian.”



Different genres include, but are not limited to:

- | | |
|--------------------------|-------------------|
| • fantasy | • science fiction |
| • realistic fiction | • informational |
| • mystery | • biography |
| • traditional literature | • autobiography |
| • historical fiction | • poetry |

Your child can determine the main idea of an informational text and can explain how it is supported by key details. Your child can summarize the text.

- Know that the main idea of an informational text is the topic or opinion the author is sharing about.
- Understand that the main idea of a text is often stated in a topic sentence.
- Understand a summary contains only the most important details of the text.
- Identify key details from the text and explain how they support the main idea.
- Use details and the main idea to summarize the text.



HELP AT HOME

- Provide your child with informational magazine or newspaper articles. Visit the Maryland State Library Resource Center Sailor database collection to access free copies of National Geographic Kids. (Scan the QR code to visit the site.) Have your child read an article and complete a graphic organizer to determine the main idea and supporting details.
- After determining the main idea, have your child write a paragraph summary of only the most important points on the article they just read.



VOCABULARY

An **INFORMATIONAL TEXT** is nonfiction writing, written with the intention of informing/teaching the reader about a topic.

INTERNET RESOURCES



A graphic organizer helps the reader visually sort out their ideas and information from the text. Many useful graphic organizers can be found by scanning this QR code.



Your child can explain events, procedures, ideas, or concepts in an historical, scientific, or technical text, including what happened and why, based on specific information in the text.

- Understand that an author’s organizational techniques affect the overall meaning of the text.
- Know that what happens in an informational text is as important as why it happens.
- Explain the events by describing what happened, why it happened, and how it happened.

TEXT FEATURES

Examples of text features of informational text include:

- | | | |
|------------|------------|---------------------|
| • title | • pictures | • table of contents |
| • sidebar | • captions | • index |
| • glossary | | |

HELP AT HOME

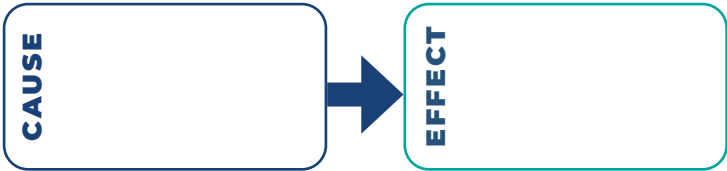
► Provide magazines or texts on topics your child is interested in. If you need help finding engaging options, ask your school librarian or a local public librarian. Maryland families can also access a collection of free research databases through the Maryland State Library Resource Center. (Scan the QR code to visit the site.)



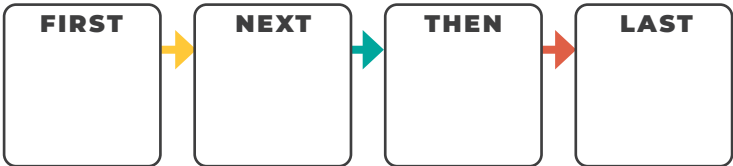
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Resource
Center.
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RESOURCES

CAUSE AND EFFECT



SEQUENCING



Your child can determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.

- Identify common prefixes, suffixes, and roots and their meanings.
- Use context such as definitions, examples, and restatements found in text to determine the meaning of a word.
- Use common Greek and Latin affixes and roots to determine the meaning of a word.
- Use a glossary, dictionary, or thesaurus to determine the meaning of a word.
- Know a thesaurus is a book of synonyms and antonyms alphabetically arranged.



HELP AT HOME

- ▶ Choose nonfiction books to read aloud with your child (e.g., biographies, autobiographies, books on specific events in history, science experiments, and technical texts). Explore unfamiliar words and phrases together. Write down questions your child has about the topics and help them complete extended research to answer the questions. Visit your school library or local public library and check out books on these topics.
- ▶ ● Read biographies in your home language as well as in English. Visit your school library or local public library to locate bilingual books or audiobooks.

VOCABULARY

A **BIOGRAPHY** is a text written to inform a reader about a real person's life. The author is someone other than the person featured in the text.

An **AUTOBIOGRAPHY** is a text written by the author of the text to inform you about his life.



Your child can describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

- Determine the overall text structure by using signal or sequence words that show how events or ideas relate to one another.
- Evaluate how the text structure connects the events, ideas, concepts, and information presented in the text.
- Determine why an author chose a particular text structure.
- Describe the order of events when they are written chronologically.
- Describe a cause and explain why it led to a specific effect.
- Describe the problem and possible solution(s) to the problem from a text.

HELP AT HOME

- ▶ Provide your child with different informational texts written in a variety of different text structures. Make note cards with different text structures on them (e.g., description, cause and effect, sequence, compare/contrast). Provide examples of each text structure on the back of the note card.
- ▶ As your child reads articles and other informational texts, have them match the texts with the different structures on the note cards.

COMMON TEXT STRUCTURES

Text structures are the way in which a text is arranged. Common text structures include:

DESCRIPTION Tells or describes a specific thing. Signal words: for example or such as.

PROBLEM/SOLUTION States a problem and provides a solution. Signal words: challenge, solution.

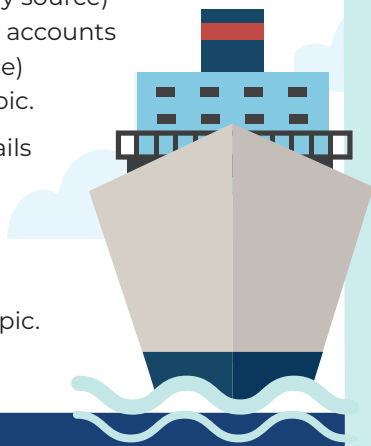
CAUSE/EFFECT Shows why something happened and the result from it. Signal words: Because, since, as a result.

CHRONOLOGICAL/SEQUENTIAL Shows events or procedures in time order. Signal words: First, Second, before, after.

COMPARE/CONTRAST Shows how two or more things are alike and different. Signal words: However, but, alike, yet.

Your child can compare and contrast a firsthand and secondhand account of the same event or topic. Your child can describe the differences in the accounts and focus on the information provided.

- Identify important details from the text that reveal the author's purpose.
- Identify the focus of both firsthand and secondhand accounts of an event or topic.
- Describe the similarities and differences between the information provided in different accounts of the same event or topic.
- Identify the focus of both firsthand (primary source) and secondhand accounts (secondary source) of an event or topic.
- Contrast the details and information provided in different accounts of the same event or topic.



VOCABULARY

A **FIRSTHAND ACCOUNT** of an event or topic is based on an author's personal experience.

The author uses pronouns such as I, me, and we to describe the event or topic. Diaries, autobiographies, and letters are considered to be firsthand accounts.

A **SECONDHAND ACCOUNT** of an event or topic is based on an author's research, rather than personal experience. The author uses pronouns such as he, she, and they to describe the event or topic. Encyclopedia entries, biographies, and textbooks are considered to be secondhand accounts.

HELP AT HOME

- ▶ Have your child read a primary source (firsthand account) such as an old family recipe, diary entry, or other historical document. Discuss what you learn about people who lived or cooked during that time period. If you need help finding age-appropriate or engaging primary sources, consider asking your school librarian or your local public librarian for help.
- ▶ ▲ Provide your child with texts written on the same topic by different people (e.g., The Oregon Trail, The Civil War, The Titanic). Have your child compare and contrast the differences in the way the articles are written and how people view the same events in different ways.



Your child can interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, interactive elements on web pages) and explain how the information contributes to an understanding of the text in which it appears.

- Identify informational text features such as: charts, graphs, diagrams, time lines, animations, or interactive elements on web pages.
- Know the purpose of each text feature (e.g., charts, graphs, diagrams, time lines, animations, interactive elements on web pages).
- Read and interpret charts, graphs, diagrams, timelines, legends, etc.



HELP AT HOME

- Send your child on a text feature scavenger hunt. (For a list of common text features, see page 21.) Provide your child with a list of text features to locate. Provide your child with magazines and newspapers.
- Using a science or social studies article or school textbooks, locate a chart or graph and discuss what information it provides.

Your child can explain how an author uses reasons and evidence to support particular points in an informational text.

- Identify reasons and evidence used to support particular points in a text.
- Know that reasons and evidence are pieces of information that support particular points within a text.

HELP AT HOME

- ▶ Provide your child with an informational text. Ask them to identify and summarize the author's main point and supporting points.
- ▶ Ask your child to tell you "what the text is mostly about."

Your child can integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

- Know that information from two texts can be combined to create a more complete understanding of a topic.
- Identify key and relevant details on a single topic from two texts.
- Categorize key details from the two texts.
- Combine information from two texts on a single topic.



HELP AT HOME

- ▶ Have your child pretend to be a reporter and interview two people about a specific topic or major event (e.g., Hurricane Katrina, the events of 9/11).
- ▶ Then have your child write a newspaper article on the topic summarizing both points of view of the people they interviewed.
- ▶ Have your child read additional articles and texts on a topic they're interested in or a topic they've studied at school. Ask them to share what they learned either through writing or through an audio or video.

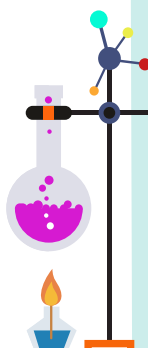


By the end of the year, your child can read and comprehend informational texts, including history/social studies, science, and technical texts, at the grade 4 text complexity level.

- Read a variety of informational texts.

HELP AT HOME

- ▶ Choose nonfiction books to read aloud with your child (e.g., biographies, autobiographies, books on specific events in history, science experiments, and technical texts). Check out nonfiction books from your school library or local public library.
- ▶ Explore unfamiliar words and phrases together. Write down questions your child has about the topics to help them complete extended research to answer the questions.



Your child can express themselves clearly, building on others' ideas, and using details from texts during discussions.

- Follow agreed-upon rules for discussions (taking turns respectfully, listening to others with care).
- Use sentence frames to respectfully and clearly express their ideas.
- Listen to others' ideas and build on those ideas.

HELP AT HOME

- ▶ Decide on simple rules for family discussions (taking turns, taking a turn respectfully, listening to understand), then use those rules when in conversation with your child.
- ▶ Use talking stems to have discussions (I think ____ because; I agree with you and ____; Can you say more about ____?, etc.)
- ▶ ● Encourage your child to have conversations with adults, siblings, and peers in your home language to strengthen their speaking, listening, and critical thinking skills.



Your child can write organized opinions, real or imagined narratives, and clearly share information about a topic using text structures for each type of writing.

- Write organized opinion pieces on topics or texts, supporting their point of view with reasons.
- Write clear informational texts that examine a topic and share ideas and information clearly.
- Write narratives (stories) to develop real or imagined experiences or events using descriptive details and clear event sequences.

HELP AT HOME

- ▶ Set up a dedicated writing area with paper, pencils, and colored pencils or markers to encourage writing as a fun activity.
- ▶ Have students use a story map or “beginning, middle, and end” charts to help them sequence events in their story. If helpful, have your child act out their story before writing.
- ▶ Use conversations to share opinions on various topics with supporting reasons (what to have for dinner, what shows to watch, bedtime, etc.).
- ▶ Have your child orally share information about a topic they are studying at school or are interested in. Ask them how they could introduce the topic, share some information, and provide a concluding sentence that tells why this topic is important.
- ▶ Have your child read their writing from school to you. This will help them edit and revise their writing pieces.



MATHEMATICS

In fourth grade, your child will extend their understanding and fluency with multi-digit multiplication and develop understanding of division with multi-digit dividends. Your child will also focus on developing an understanding of fraction equivalence and apply understanding of operations to work with fractions. Decimals are also introduced in Grade 4. Your child will extend their understanding of area and perimeter, begin working with angles, and use this learning to classify two-dimensional shapes. Some activities will include:

NUMBER AND OPERATION SENSE

- Apply and extend place value understanding to whole numbers within 1,000,000.
- Add and subtract within 1,000,000.
- Use a variety of strategies to solve multiplication and division problems.
- Recall or quickly derive multiplication and division facts within 100.
- Explain equivalent fractions.
- Add and subtract fractions with like denominators.

ALGEBRAIC THINKING

- Represent and interpret multiplicative comparison situations.
- Solve multi-step problems involving the four operations.



GEOMETRIC REASONING & MEASUREMENT

- Apply area and perimeter formulas to solve problems.
- Explore the relationship between area of rectangles and area of triangles.
- Estimate and measure angles.
- Classify two-dimensional shapes.

REASONING WITH DATA, STATISTICS, AND PROBABILITY

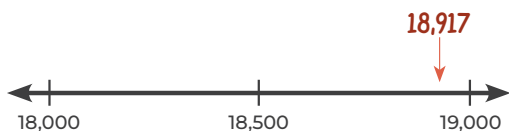
- Collect, represent, and summarize data.

Your child can read, write, compose, and decompose multi-digit numbers through 1,000,000. Your child can also use reasoning, number lines, and benchmarks to round and compare multi-digit numbers.

- Understand place value positions to the millions place.
- Recognize the value of a digit.
- Numbers can be composed and decomposed (broken down) in a variety of ways.
- Understand that rounding involves changing a number to a more friendly number to estimate or make computation easier. Numbers can be rounded to any place value.
- Place value can be used to compare and order numbers.
- Understand the symbols for comparison greater than ($>$), less than ($<$), and equal to ($=$).

ADDITIONAL HELP AT HOME

Select a multi-digit number and ask your child to round the number to a given place value (e.g., tens, hundreds, thousands, etc.). Encourage your child to explain how they rounded. For example, when rounding 18,917 to the nearest thousand, 18,917 rounds to 19,000 because it is closer to 19,000 than 18,000.



HELP AT HOME

- ▶ ■ Your child may begin working with 5-digit numbers but should extend work to greater numbers up to 1,000,000.
- ▶ Have your child write the given number in expanded form (e.g., $675,423 = 600,000 + 70,000 + 5,000 + 400 + 20 + 3$), then write the same number in words (e.g., six hundred seventy-five thousand, four hundred twenty-three).
- ▶ Given a multi-digit number, ask your child to identify the value of the digits in the number (e.g., the 4 in 675,423 represents 4 hundreds or 400).
- ▶ Given a multi-digit number, ask your child to find multiple ways to decompose the number.
- ▶ Write down two multi-digit numbers. Ask your child to use benchmark numbers or a number line to compare. You may ask your child “which is closer to 0?” or “Which is closer to a benchmark number like 50,000 or 1,500?”



Your child can fluently add and subtract multi-digit whole numbers. Your child can explain when a strategy or algorithm is most efficient.

- Apply estimation strategies to estimate sums and differences.
- Understand that when adding multi-digit numbers, you add ones to ones, tens to tens, hundreds to hundreds, and so on.
- Recognize when regrouping is needed.
- Use a variety of strategies to add and subtract multi-digit numbers (e.g., decomposition, partial sums, algorithms).
- Recognize that the numbers within the problem may make particular strategies or algorithms more efficient for solving.

RESOURCES

PARTIAL SUMS STRATEGY

($417 + 268 = 685$)

$$\begin{array}{r} 417 \\ + 268 \\ \hline 600 \\ 70 \\ 15 \\ \hline 685 \end{array}$$

HELP AT HOME

- ▶ Give your child an addition or subtraction problem and ask them to estimate the sum or difference, without solving. After estimating, ask your child to use a calculator to determine if their estimate was reasonable. They can make adjustments if needed.
- ▶ ■ Your child may begin by adding and subtracting three- and four-digit numbers. As your child becomes more confident, encourage your child to extend to solving problems within 1,000,000.
- ▶ Ask your child to share their strategy for solving. Your child can share their strategy verbally or in writing.

Your child can multiply multi-digit whole numbers (up to 4-digit by 1-digit and 2-digit by 2-digit) using a variety of strategies. Your child can explain the computation using arrays, area models, or equations.

- Apply estimation strategies to estimate products.
- Apply understanding of multiplication and multiplication strategies to multiply greater numbers.
- Use a variety of strategies to multiply (e.g., area models, partial products, doubling, halving, etc.).
- Recognize that the numbers within the problem may make particular strategies more efficient for solving.

RESOURCES

AREA MODEL (7 x 326 = 2282)

	300	20	6
7	2100	140	42

2100
140
+ 42
2282

PARTIAL PRODUCTS

(53 x 27 = 1431)

53	
x 27	
21	(7 x 3)
350	(7 x 50)
60	(20 x 3)
+ 1000	(20 x 50)
1431	

DOUBLING/
HALVING

(4 x 312 = 1248)

Think of 4 x 312 as
2 x 624.

2 x 624 = 1248

HELP AT HOME

- ▶ Give your child a multiplication problem and ask them to estimate the product, without solving. After estimating, ask your child to use a calculator to determine if their estimate was reasonable. They can adjust if needed.
- ▶ ■ Your child may begin by multiplying two-digit by 1 digit numbers. As your child becomes more confident, encourage your child to extend to solving problems up to 4-digit by 1-digit and 2-digit by 2-digit.
- ▶ Use a deck of cards or dice to create multi-digit numbers for your child to multiply. Before solving, ask your child to tell you what strategy they will use and why. Then ask your child to solve it.
- ▶ Ask your child to share their strategy for solving. Your child can share their strategy verbally or in writing.
- ▶ ▲ Ask your child to solve the problem in two different strategies and compare and contrast the strategies.

Your child can divide whole numbers (up to 4-digit by 1-digit) with and without remainders using a variety of strategies. Your child can explain the computation using arrays, area models, or equations.

- Understand division as sharing an amount into known number of groups or as sharing an amount into groups of known size.
- Apply estimation strategies to estimate quotients.
- Apply understanding of division and division strategies to divide greater numbers.
- Use a variety of strategies to divide (e.g., rectangular arrays, area models, and partial quotients).
- Understand the inverse relationship between multiplication and division and use it to divide.
- Understand remainders and interpret what they mean in the context of a problem.
- Recognize that the numbers within the problem may make particular strategies more efficient for solving.

ADDITIONAL HELP AT HOME

- Use a deck of cards or dice to create multi-digit numbers for your child to divide. Before solving, ask your child to tell you what strategy they will use and why. Then ask your child to solve it.
- Ask your child to share their strategy for solving. Your child can share their strategy verbally or in writing.

HELP AT HOME

- ▶ Give your child a division problem and ask them to estimate the quotient, without solving. After estimating, ask your child to use a calculator to determine if their estimate was reasonable. They can adjust if needed.
- ▶ ■ Provide your child with a jar of pennies or counters and a division problem (e.g., $65 \div 5$). Have your child create an array of 65 pennies in rows of 5. Ask, "If you have 65 pennies arranged in groups of 5, how many groups of pennies do you have?" Your child may also draw arrays to represent and solve. Repeat with other equations.
- ▶ ■ Your child may begin by dividing two-digit by 1 digit numbers without remainders. As your child becomes more confident, encourage your child to extend to solving problems up to 4-digit by 1-digit with remainders.
- ▶ ▲ Ask your child to solve the problem in two different strategies and compare and contrast the strategies.

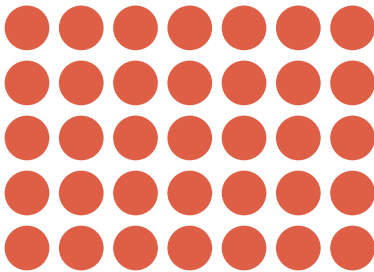
Your child can recall or quickly determine multiplication and division facts within 100.

- Multiplication facts include those with factors less than or equal to 10. Division facts include those with quotients less than or equal to 10.
- Flexibly use strategies for multiplying and dividing to efficiently determine an unknown fact.

$$2 \times 7 = 14$$



$$5 \times 7 = 35$$



$$7 \times 7 = 49$$

HELP AT HOME

- ▶ Practice skip counting.
- ▶ Practice multiplication and division 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.
- ▶ Encourage your child to use known facts to determine unknown facts. For example, if your child knows 2×7 and 5×7 , your child can solve 7×7 .

Your child can identify, generate, and explain equivalent fractions.

- Understand that two fractions are equivalent if they are the same size, or they represent the same point on the number line.
- Understand that when a denominator increases, the number of pieces that the whole is divided into increases and the size of each piece decreases.
- Use visual models and the Identity Property of Multiplication appropriately.
- Know two fractions can be equivalent even though the numerators and denominators are different numerals.
- Grade 4 students work with denominators of 2, 3, 4, 5, 6, 8, 10, 12 and 100.

HELP AT HOME

- ▶ Draw visual representations of fractions on index cards and then draw a matching equivalent fraction on another index card. Scatter the index cards on the floor in front of your child and have them sort the cards, matching up the equivalent fractions. For example, $\frac{1}{2}$ would match up with $\frac{2}{4}$.
- ▶  Give your child a fraction and ask them to use a visual model (e.g., number line or drawing) to find at least one equivalent fraction. Ask your student to explain their strategy.

VOCABULARY

IDENTITY PROPERTY OF MULTIPLICATION

explains that the product of any number and 1 is that number. For example, $\frac{3}{4}$ can be multiplied by $\frac{2}{2}$ (which is equivalent to 1) to generate a fraction equivalent to $\frac{3}{4}$.

$$\frac{3}{4} \times \frac{2}{2} = \frac{6}{8}$$

Your child can add and subtract fractions with like denominators.

- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- Decompose (break down) a fraction into a sum of fractions with the same denominator in more than one way. Record each decomposition with an equation
- Estimate sums and differences to assess reasonableness.
For example, $\frac{3}{4} + \frac{3}{4}$ will be greater than 1 because both fractions are greater than $\frac{1}{2}$.
- Use visual fraction models (e.g., fraction bars, number lines, drawings, etc.) and equations to represent and solve problems.
- Add and subtract mixed numbers with like denominators.
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators.
- Grade 4 students work with denominators of 2, 3, 4, 5, 6, 8, 10, 12 and 100.

HELP AT HOME

- ▶  Give your child a fraction and ask your child to compose (build) and decompose (break down) the fraction in multiple ways.
- ▶ Give your child a problem that involves adding or subtracting fractions with like denominator. Ask your child to use any strategy (e.g., number line, draw a picture, equation) to find the sum or difference. Ask your student to explain their strategy.

RESOURCES

COMPOSING FRACTIONS

$$\frac{1}{5} + \frac{2}{5} = \boxed{\frac{3}{5}}$$

DECOMPOSING FRACTIONS

$$\boxed{\frac{7}{10}} \rightarrow \frac{4}{10} + \frac{3}{10}$$



Your child can read, write, and compare decimals to the hundredths place.

- Fractions can be written as decimals and decimals can be written as fractions (e.g., $\frac{4}{10} = 0.4$ or $\frac{62}{100} = 0.62$).
- Fractions with denominators of 10 or 100 are called decimal fractions.
- Properly name fractions and decimals (e.g., $\frac{7}{10}$ and 0.7 are read as “seven tenths” and $\frac{24}{100}$ and 0.24 are read as “twenty-four hundredths”).
- Decimal fractions can be represented using a variety of visual models (e.g., number line, base-ten models).
- Decimals that refer to the same whole can be compared by reasoning about their size.

HELP AT HOME

- ▶ Play a matching game. Have fractions written on note cards and have the matching decimal written on another note card. Place them all face down and have your child flip two over. If they match, your child collects the cards. If they don't match, flip them back over and continue. Repeat until all matches have been made.
- ▶ ▲ Create a number line using string and clothespins. Write different decimals (up to the hundredths place) on index cards. Have your child practice comparing decimals by placing the cards on the number line in order from least to greatest.

RESOURCES

DECIMAL PLACE VALUE CHART

Ones	.	Tenths	Hundredths
4	.	2	9

Your child can interpret and represent multiplicative comparison situations.

- Multiplicative comparison shows how many times one quantity is compared to another (e.g., the giraffe is 4 times as tall as the lion).
- A multiplication equation can be interpreted as a comparison (e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5).
- Verbal statements of multiplicative comparison can be represented as equations.
- Use models, drawings, and equations to represent multiplicative comparison situations.

HELP AT HOME

- ● Use objects or snacks to create multiplicative comparison situations. For example, "A friend has 5 crackers, and your child has 3 times as many crackers. How many crackers does your child have?" or "Your child has 15 grapes. That is 3 times as many grapes as the friend has. How many crackers does the friend have?"

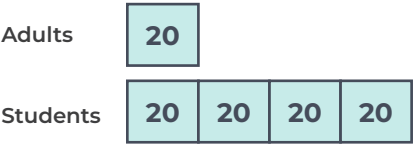


Your child can multiply or divide to solve multiplicative comparison problems in context. Your child can distinguish between multiplicative comparison and additive comparison.

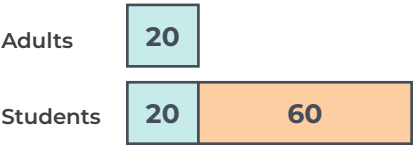
- Multiplicative comparison shows how many times one quantity is compared to another (e.g., the giraffe is 4 times as tall as the lion).
- Drawings and equations with symbols for the unknown can be used to represent and solve multiplicative comparison problems.
- Additive comparison compares the difference between two quantities. Multiplicative comparison compares how much larger or smaller one quantity is compared to another.

RESOURCES

MULTIPLICATIVE There are 4 times as many students as adults on the field trip.



ADDITIVE There are 60 more students than adults on the field trip.



HELP AT HOME

- ▶ Use everyday situations to create multiplicative comparison problems for your child. For example, while grocery shopping you will purchase 5 bananas and 2 times as many apples. Ask your child to determine how many apples you will purchase. Practice these types of problems often.
- ▶ Give your child examples of additive and multiplicative situations and ask students to identify whether the relationship in the situation is additive or multiplicative.
- ▶ Ask your child to create their own examples of additive and multiplicative situations.

Your child can solve multistep problems in context involving whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted. Your child can assess the reasonableness of answers by using estimation.

- A symbol or letter can be used to represent an unknown number in an equation.
- A variety of representations (e.g., concrete materials, drawings, and/or equations) can be used to model and solve problems.
- Estimation is a way to quickly find an answer that is close to the exact amount, helping students check if their answers make sense in everyday situations.
- Context must be considered when interpreting remainders.

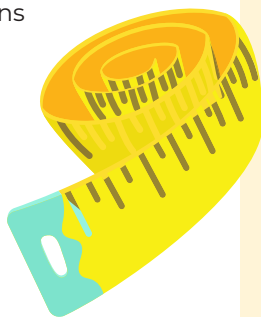
HELP AT HOME

- ▶ After reading a word problem, have your child mentally estimate what the answer should be. Have them write down the estimate. After solving the problem, look back at the estimation and discuss if the estimate was close to the answer or determine why the estimate was wrong.
- ▶ Have your child practice solving multistep word problems, one step at a time. Encourage your child to organize their solution path so others can understand it.
- ▶  Talk about the importance of reading the question carefully and marking out unimportant information. Ask questions such as, “What is the problem really asking?” and “What do I already know before I start working?”



Your child can apply the area and perimeter formulas for rectangles to solve problems in context.

- Area is the measure of space inside a figure or region and is measured in square units.
- The area of a rectangle can be found using multiplication, multiplying the length by the width (area = length x width).
- Perimeter is the measure around a figure or region and is measured in units.
- The perimeter of a rectangle can be found by using addition to add the lengths of each side (perimeter = side length + side length + side length + side length).
- Missing dimensions can be found by writing equations with unknowns.
- Grade 4 students work rectangles with whole number side lengths.

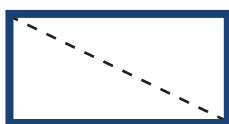
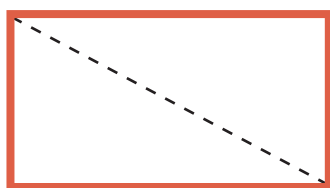
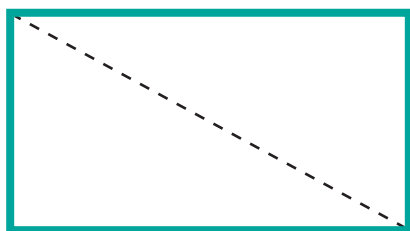


HELP AT HOME

- ▶ ■ Draw rectangles with whole number side lengths. Have your child use a ruler or tape measure to measure the dimensions of the rectangles. After collecting the measurements, have your child use formulas to determine the area and perimeter of each rectangle.
- ▶ Create problems involving area and perimeter for your child to solve. When creating problems, provide unknowns in all places (e.g., missing area, missing perimeter, missing dimensions).
- ▶ ● Use home language to discuss vocabulary (e.g., area, square units, perimeter, units, etc.) first then in English to help your child make connections.

Your child can use visual models and decomposition to explain the relationship between the area of rectangles and area of triangles. Your child can apply understanding of area of triangles to solve problems in context.

- A rectangle can be decomposed into 2 equal triangles. Therefore, the area of the triangle is half of the area of the rectangle.

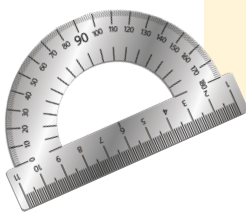


HELP AT HOME

- Cut a piece of paper to create a 4 x 2 rectangle and ask your child to determine the area of the rectangle. Then cut the paper to create two equal triangles. Ask your child what they notice about the relationship between the rectangle and the triangles. Discuss that a triangle is half of a rectangle, so the area is half of the rectangle area. Repeat with varying sized rectangles.

Your child can estimate angle measures and measure angles in whole number degrees with a protractor.

- Angles are geometric shapes that are formed wherever two rays share a common endpoint.
- Angles are measured by identifying how much of a circle the angle covers. A full circle has 360 equal parts. If an angle turns through 1 of those parts, it measures 1 degree.
- Protractors are used to measure and draw angles of a given size.



HELP AT HOME

- ▶ Have your child go on an “Angle Walk,” sketching the different angles your child sees. After sketching the angles, ask your child to estimate the angle measure then measure each angle using a protractor.
- ▶ ● Use home language to discuss vocabulary (e.g., angle, degree, etc.) first then in English to help your child make connections.

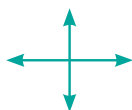
Your child can classify two-dimensional figures based on the presence or absence of parallel lines, perpendicular lines, and angles of specified size.

- Two-dimensional figures can be categorized based on attributes (e.g., lines, angles).
- Angles are classified as right angles (90° angle), acute angles (angles that measure less than 90°), or obtuse angles (angles that measure more than 90°).
- Analyze two-dimensional figures to determine the presence or absence of certain characteristics. **NOTE:** A trapezoid is a quadrilateral with at least one pair of parallel sides.

VOCABULARY



PARALLEL LINES are lines that run side by side but never touch.



PERPENDICULAR LINES are lines that intersect to form four right angles.



A **RIGHT ANGLE** has two rays that meet to form a 90° angle.



An **ACUTE ANGLE** has two rays that meet to form an angle that measures less than 90° .



An **OBTUSE ANGLE** has two rays that meet to form an angle that measures greater than 90° .

HELP AT HOME

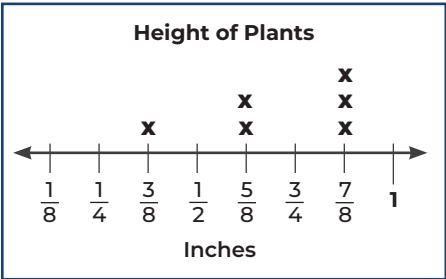
- ▶ Take your child on a “Geometry Walk.” Locate and identify parallel and perpendicular lines and different degree angles (e.g., right angles, acute angles, and obtuse angles).
- ▶ Given a shape or figure, ask your child to describe the figure using what they know about the lines and angles within the figure.
- ▶ Give your child several figures and ask your child to classify the figures by attributes (e.g., quadrilaterals with parallel sides, right triangles).
- ▶ Use home language to discuss vocabulary (e.g., parallel, perpendicular, acute, etc.) first then in English to help your child make connections.

Your child can collect, organize, and summarize data using bar graphs and line plots. Your child can analyze data recognizing the importance of context.

- Categorical data refers to data that can be sorted into groups or categories (e.g., transportation to school or favorite recess activity). Categorical data can be displayed using bar graphs. Grade 4 students will use a variety of scales when creating 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. Grade 4 students will use line plots with fractional units of halves, fourths, and eighths.
- Graphs are used to organize data and to make interpretation easier.
- It is important to consider the context of the data when analyzing the data.
- Adjusting the attributes (e.g., scale, order of bars) can impact how the data is interpreted.

RESOURCES

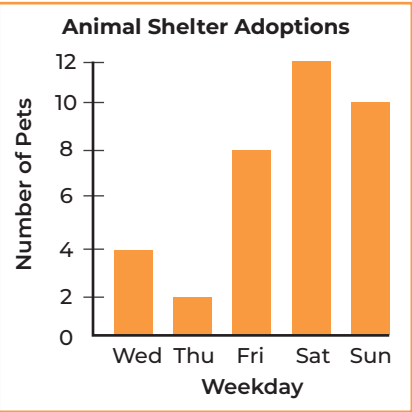
SAMPLE LINE PLOT



HELP AT HOME

- ▶ 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 bar graphs or line plots, ask your child questions about the data. For example, you may ask “How would you summarize the data?” or “What would happen if the scale on the bar graph was changed?”

SAMPLE BAR GRAPH





NOTES



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