Infer

- Predict content, events and outcomes by using chapter titles, section headers, illustrations and story topics, and support those predictions with examples from the text

- Make inferences regarding events and possible outcomes from information in text

- Draw conclusions from information in maps, charts, graphs and diagrams

What Students Need to Know:

- Predictions
- Conclusions
- Inferences
- Things to predict
  - content
  - events
  - outcomes
- Sources of evidence for predictions
  - chapter titles
  - section headers
  - illustrations
  - story topics
  - maps
  - chart
  - graphs
  - diagrams
- Textual examples that support predictions, conclusions and inferences

What Students Need to be Able to Do:

- Predict (content, events and outcomes)
  - Use (chapter titles, section headers, illustrations, story topics)
  - Support (predictions with examples)
- Make (inferences regarding events and outcomes)
- Draw (conclusions from information)

Important Vocabulary

inference—a general conclusion drawn from information that is given

Because inferencing requires active reading and a willingness to enter into partnership with an author, modeling the process many times through thinking aloud, guided practice and independent practice across the curriculum enables students to grow more skilled as readers.

From *Spotlight on Comprehension* by Linda Hoyt, Heinemann, 2005, p. 138.

Inferring

Next to summarizing, inferring is probably one of the most important of the power standards. Students often struggle with making inferences. Inferring is required to make predictions as well as to draw conclusions from information in a text or on charts, maps, diagrams, etc.

Even young children make inferences on a regular basis. When introducing the concept of making inferences, start with situations that are familiar to students, talk about the inferences they make naturally, then extend the skill to less familiar situations.

Dress up in a special outfit like a rain jacket and boots with an umbrella in your hand. Ask students to describe what you're wearing, then have them infer why you might be wearing the outfit. Or, have students infer your mood by reading your facial expressions.

After talking about the differences between literal and inferential statements, show students a picture of a familiar situation. Ask them to make statements about the picture, and list these on chart paper. Then go back through the list and classify each statement as literal or inferential.

Share brief scenarios with students from which they can draw a conclusion, one kind of inference. Let students form their own conclusions. Sample scenarios are listed below:

- Bill was reading about the sun, the moon, and Mars. It was a book about . . .
- At recess the students got their gloves, bats and balls. What were they likely to do?
- During a very severe storm, the electricity went off. Dad lit a match. What did he probably want to find.
- Maria had a day off school. She looked in the newspaper to find the best sales. Then she left the house. Where did she probably go?
- Jess and his father went walking on a warm spring day. There was a nice breeze in the air. What might Jesse and his father do to have fun? Rake leaves, fly a kit or watch TV?

Readers infer from the text during and after reading. Making an inference means to induce or hypothesize, to make conclusions based on information from the text. Inferring means going beyond the words of the text to make a judgment about what is not there but is implied. Readers make inferences about how characters feel even though the author may not have explicitly written about the characters' feelings. They make judgments about the significance of events and how those events reflect turning point in the plot without an explicit explanation from the author. They made judgments about the true or deeper meaning of the text-what it symbolized or what the underlying message might be. Skillful readers often reflect on what the author is really trying to say.
(Guiding Readers and Writers, pg.319)

The ability to infer requires several discrete concepts. As a teacher, you will need to help your students with the following:

- Construct theories that explain how characters behave or plot unfolds
- Have empathy for fictional or historical characters
- Use background knowledge and information from the text to form tentative theories as to the significance of the events
- Create sensory images related to character, plot, setting, theme, or topic
- Understand what is not stated but is implied in the text

When you model your own inferences, you help students learn how to engage in the process. You may also want to suggest that they look for meanings the author suggests but does not state precisely. Some examples of questions that can foster inferences are:

> What did _____make you think about?
> What do you think this character really meant by saying that?
> Why did this character (act, think, talk) that way?
> What's this story really about?
> What does this character want to do?
> What do you think this character might do?
> What is the author really trying to say?
> (Guiding Readers, pg. 361)

Harvey and Goudvis discuss inferring in their book *Strategies That Work.* They state inferring is the bedrock of comprehension, not only in reading. We infer in many realms. Our life clicks alone more smoothly if we can read the world as well as text.   If our boss looks grumpy in the morning, it might not be the best day to ask for a raise. If a kind's lips are quivering, it might be a sign to give him a hug. To help students understand the nature of inferential thinking, we might feign a terrified look and ask them what they can infer from our facial expression. If they mention scared or frightened, they've made an accurate inference. Inferring is about reading faces, reading body language, reading expressions, and reading tone as well as reading text.

TEACHING INFERRING

Using Inferring Before Reading	Using Inferring During Reading	Using Inferring After Reading
What can I infer from the cover of the book? How do I know? (Use your prior knowledge and the clues from the book) I think . . . I know . . . because . . . What questions do I have before reading? (Watch to see if you infer answers.) Can I infer what the theme might be? What clues do I have so far from the cover, back, first page, and illustrations?	What can I infer or figure out so far? What have I inferred using the text and illustrations? My questions that needed inferring are . . . **Fiction** I think that the main character is thinking or feeling . . . I know this because of • my experiences . . . • the text clues . . . I infer the character _____ because _____ My experiences Text clues I also infer that the theme is . . . because . . . My Experience Text Clues **Nonfiction** What have I inferred so far? What clues from the text and my experiences helped me? What kinds of comparisons can I make as I infer? _____ is like _____ because . . . What are the causes and effects of . . .?	What have I inferred using the text and illustrations and my own knowledge? My questions that needed inferring to answer are . . . Here's how I figured out the answers using clues from the text and my head . . . The author didn't say _____ but I knew _____ because _____. **Fiction** I think the main character is a _____ person because _____. My experiences . . . The text clues . . . I infer that the theme is _____ because _____. My experiences . . . Text Clues . . . **Nonfiction** What kinds of comparisons did I infer? _____ is like _____. the main causes of _____ are _____ . **Self-Assessment** What helped me infer? Which text clues were the most helpful for inferring? Which of my connections to my knowledge helped me most?

CROSS-CURRICULAR CONNECTIONS

READERS
- Use their schema and textual information to draw conclusions and form unique interpretations from text.
- Make predictions about text, confirm their predictions, and test their developing meaning as they read on.
- Know when and how to use text in combination with their own background knowledge to seek answers to questions.
- Create interpretations to enrich and deepend their experience in a text.

WRITERS
- Make decisions about content inclusions/exclusions and genre/text structure that permit or encourage inference on the part of the reader.
- Carefully consider their audience in making decisions about what to describe explicitly and what to leave to the reader's interpretation.
- Particularly fiction and poetry writers, are aware of far more detail than they reveal in the texts they compose. This encourages infernces such as drawing conclusions, making critical judgments, making predictions, and making connections to other texts and experiences possible for their readers.

MATHEMATICIANS
- Predict, generalize, and estimate.
- As mathematicians read a problem, they make problem-solving decisions based on their conceptual understanding of math concepts (i.e. operations, fractions, etc.)
- Compose (like a writer) by drawing pictures, using charts, and creating equations.
- Solve problems in different ways and support their methods through proof, number sentences, pictures, charts, and graphs.
- Use reasoning and make connections throughout the problem-solving process.
- Conjecture (infer based on evidence).
- Use patterns (consistencies) and relationships to generalize and infer what comes next in the problem-solving process.

RESEARCHERS
- Think about the value and reliability of their sources.
- Consider what is important to a reader or audience.

MINI-LESSONS FOR TEACHING INFERRING

Predicting Outcomes
- Use what you know about the past to guess what will happen in the future
- Use what has happened so far in the story to make a guess.
- The answer is not written in the text.
- Adjust or confirm your prediction

Making Inferences
- Author and You Questions — assemble a reasonable answer
- On your Own Questions—the answer is not in the book. <u>Example:</u> How would you . . . What do you think . . .
- Figure them out in your head. Answers not given in story
- Use what you already know about the topic and world.
- Use clues from the story

Transferring comprehension from listening to reading
- Set the purpose for listening: "On the board, I have listed five possible outcomes for the story I will read to you. As I read, try to think how the story might come out. I will stop and we will choose one of these outcomes, then I will finish the story and see if we were right."
- Read the story, stop and ask children to predict which will be the real outcome, have children support their predictions with actual events from the story.
- Finish the story.
- Give the students part of a story to read and a sheet with five possible outcomes. Remind them that they will do the same thing in reading as they did in listening.
- Students read the passage and choose the most likely outcome.
- Give the students the rest of the story to read; they explain which events int he story led them to choose a particular outcome.

BIBLIOGRAPHY—INFERRING

Creatures of Earth, Sea, and Sky by Georgia Heard
Fireflies by Julie Brinkloe
Fly Away Home by Eve Bunting
For the Good of the Earth and Sun by Georgia Heard
Grandfather Twilight by Barbara Berger
How Many Days to America? By Eve Bunting
If You Listen by Charlotte Zolotow
Miss Maggie by Cynthia Rylant
Mother Earth, Father Sky selected by Jane Yolen
Oliver Button is a Sissy by Tomie de Paola
The Royal Bee by Frances Park and Ginger Park
Something Beautiful by Sharon Dennis Wyeth
Where Are You Going, Manyoni? By Catherine Stock
Winter Fox by Catherine Stock
Bull Run by Paul Fleischman
> In this collection of vignettes about different characters connected to the first battle of the Civil War, the reader must infer who they are, where they are, what they are doing and why.

Dateline:Troy by Paul Fleischman
> Contemporary newspaper articles are lined with ancient historical events, and the reader needs to infer the connection between the two.

Dandelion by Eve Bunting
> Because the woman and her daughter in the pioneer family are so stoic, the reader must infer how the characters really fell about their increasing isolation.

Encounter by Jan Yolen
> The fictionalized account of Columbus's arrival in the New World, from a Taino boy's perspective, nudges readers to try to understand his culture's plight.

Fables by Arnold Lobel
> Twenty original tongue-in-cheek animal fables that poke a little subtle fun at the human condition. Great for inferring the moral.

June 29, 1999 by David Wiesner
> A wordless picture book that requires the reader to infer the meaning behind the pictures. Free Fall, another wordless book by Wiesner, also requires readers to use inferential thinking skills.

The Rag Coat by Lauren Mills
> This book about a young girl who loses her father at an early age prompts readers to draw inferences about her feelings as well as about the outcome of the story

Rose Blanche by Roberto Innocenti
> This story of a young German girl who passes a concentration on the way to school each day leaves lots of gaps that the redder must fill in, particularly in regard to the ambiguous ending.

See the Ocean by Estelle Condra
> Clues abound that something is wrong with Nellie, but what could it be?
> The Table Where Rich People Sit by Byrd Baylor
> A young girl asks her parents why they say they are rich when they obviously have very little money. Readers have to infer another meaning of the word rich to fully understand this story.

Teammates by Peter Golenbock
> This moving story of teammates Pee Wee Reese and Jackie Robinson brings up multiple themes, from racism to friendship, that readers must infer.

Tight Times by Barbara Shook Hazen
> A boy desperately wants a pet, but times are rough in his house. Even the title requires inferential thinking.

INFERRING-Author Sets
Alexandra Day
> Frank and Ernest
> Frank and Ernest Play Ball
> Frank and Ernest on the Road
> The charming stories of two fast friends, a bear and an elephant, who take temporary

work in a diner, for a baseball team, and as truck drivers. They use the jargon that matches each profession. Kids have a blast inferring the meaning of the unique vocabulary.

James Marshall
> George and Martha
> George and Martha Encore
> George and Martha Rise and Shine
> Short short stories about the antics of two lovable hippos. The writing leaves enough out

to require readers to infer on practically every page. Great books to introduce inferring.

Chris Van Allsburg
> The Garden of Abdul Gasazi
> Jumanji
> The Mysteries of Harris Burdick
> The Stranger
> The Wreck of the Zephyr
> Throughout these books, the author leaves clues to lead the reader to make inferences to

better understand as the author's white dog pops up in every story.

Test Questions from Past Tests

Using the reading selection, what will Pap say when Tate asks him if she can build a doghouse for Sable? _____ How do you know? Give one detail from the selection to support your answer. _____	Why was it important that spring came? a. The snow melted and Annie could go to get more corn meal. b. Now the animals could go and find their own food in the wood. c. Taffy would return and Annie would be too busy to feed other animals.
What would happen if there were no gravity? a. The air would not be cold enough to form snowflakes. b. We would not see snow because it would not fall to earth. c. The clouds would not be able to form snowflakes.	Why did the animals go back to the wood? a. Annie didn't have food and there was food in the wood. b. Annie's cat came home and scared them all away. c. Spring had come and Annie's yard was too crowded.
Why did Taffy leave? a. to have her kittens b. to go where it was warmer c. to find food for herself	Why does the sun look big? a. It is yellow so people can see it better. b. It is hotter than the other stars. c. It is closer to Earth than the other stars.
What grade are Molly and Mike in this year? a. second b. third c. first	Use information from the reading selection to complete the diagram. The mouth look like a _____ The head looks like a _____ The scales help the seahorse _____ The tail helps the seahorse _____

Give another title for this reading selection. _____ Use three examples from the selection to support your title. a. b. c.	Monkeys use their tails to a. find food on the ground b. groom other monkeys c. balance in the trees
Why does Joey take her pail with her in the car? a. She has her snack in her pail. b. She keeps her treasures in her pail. c. She forgets to put it back in her room.	Why did Thomas Edison invent the phonograph? a. He wanted to make something he could get a patent for. b. He wanted to save sounds and replay them. c. He wanted to send messages to other towns over electric wires
At the end of the reading selection, Allie, Amy and Gracie finally meet. Do you think that the three girls will become friends? _____ Use three details from the selection to support your answer. a. b. c.	What do you think Julia says about her blanket when she gets home from her first day of school? a. I will need a new red blanket. b. I like Billy's blanket more than mine. c. I don't need my blanket anymore.
This is a paragraph from the selection. "Allie and Amy were best friends. They lived in apartment buildings next door to each other. When they were not together, they were talking on the phone." What does the paragraph tell about Allie and Amy's friendship? a. It explains why Allie and Amy need a new friend. b. It shows that Allie and Amy are close friends. c. It gives details about where Allie and Amy live.	Show how kits grow by completing the chart below. {table below}

Show how kits grow by completing the chart below.

Week	Description
Birth	Kit's eyes are closed, and they don't have any fur.
One week	
Two weeks	Kits leave the nest.
Six months	

| Which food will a rabbit eat?
a. chicken
b. lettuce
c. honey | Why does Julia bring her blanket to school on the first day?
a. The blanket is red and pretty.
b. The blanket makes her feel safe.
c. The blanket helps her sleep. |

Suggested Strategies for Teaching Inferring

PREDICT FROM PICTURES

Select a picture, possibly from a newspaper or magazine, that has a caption. The picture should show people interacting or reacting to something. Cover the caption, and show the picture to the students. Ask them to look at it carefully for a few minutes and try to mentally compose an explanation for what is happening in the picture. Ask them to look at all areas of the picture for details and helpful information.

Then ask students to write as much as possible to explain what is happening in the picture. Read the caption to the students and ask them to compare it with their ideas. (Captions are intended to be short explanations for pictures, so the student work will probably be much more comprehensive.)

Try this same strategy with other illustrations, posters, diagrams, graphs, etc.

SURVEYING AND PREDICTING

Demonstrate to your students that readers have ways of figuring out what books are about before they begin reading. Explain that the cover of the book offers clues. Invite students to look at the cover of a book then turn to a partner and share ways that the cover can help them make a prediction. Students should share things such as the title, cover illustration, and author's name. Have them discuss how these things help readers get an idea of what the story will be about.

Encourage students to recognize that the pictures on the cover of the book help with predicting setting, characters and events. The title tells us what the story will probably be about and knowing what authors write about sometimes helps us (for example, Eric Carle's books are often about insects).

Then have younger students do a picture walk, looking at the illustrations and making predictions about the story. Older students can look through the text at illustrations, chapter titles, the back of the book, sections that are bold-faced, charts, graphs, etc.

PREDICTION WEB

This strategy allows students to predict words, phrases or events that will occur in a selection.

Select a passage that is at the readers' instructional level and preview it with the students. Use the title, cover and illustrations to prompt discussion. Create a web on which predictions will be recorded. In the center of the web write the title of the selection.

Ask for general ideas or ask specific questions that will lend themselves to predictions. Example: What do you think will happen first in the story. What do you think is happening on this page? Do you know what that item is called? Write predictions in web style around the center circle.

Have students read to a designated page in the selection. Then discuss the story up to that point, paying particular attention to predictions recorded on the web. Have students confirm which predictions were correct. Discuss why it seemed likely that a certain prediction might have come true, and what was different in the story that led to a different outcome.

Have students revise or expand predictions for the next segment of the story. Continue this process throughout the reading, discussing literary elements (characters, setting, plot, and themes) along with story structure (beginning, middle and end) and vocabulary words.

READ ALOUD PREDICTIONS

Try stopping at an appropriate place in a read aloud book and ask the students to select a partner and get eye-to-eye and knee-to-knee. They can then share their predictions with their partners. This will ensure that a high percentage of students are engaged in predicting.

PREDICTION STRATEGY CHART

After practicing with predictions, create a class chart outlining how to make good predictions while reading. Students can continue to add information to the chart as the days go on and they have other suggestions.

PREDICTION BOOK REPORT

Students can write a prediction book report. After selecting a book to read, have them read the first chapter, then write a prediction and support it with information from the text. Students then read until they are about halfway through the book, reread their original prediction and write about whether or not it was confirmed. Then they write another prediction with support information. They read until there is only one or two chapters left and repeat the process. After completing the book, students will write a reflection on their predictions, what they altered, what clues they used or could have used, etc.

3-COLUMN PREDICTION CHART

Provide students with a 3-column chart. In the first column, they record predictions with support for those predictions given in the second column. The third column is a place for them to record the page on which they either confirmed or rejected that prediction. If a prediction is rejected, students then write a new prediction in the first column with support and continue in a like manner until they are finished reading.

PICTURE FLICK

A "Picture Flick" is a more formal version of what children and adults do before they read a book that includes illustrations. Big Books with obvious story lines work well for this strategy, but it can be done with any picture book.
1. Show the front cover of the book and invite comments.
2. Open the book and display it page by page.
3. Encourage children to look at the pictures but not to comment.
4. Allow children to form small groups and "tell the story."
5. Return to the whole group and read the story to the children.
6. Discuss how their predictions were confirmed or not confirmed.
7. Make available copies of the book for students to read independently.

PREDICTION QUESTIONING

After having students make predictions about what they think will happen next in a reading selection, ask the following questions:
- Why did you make the prediction?
- What did you base the prediction on?
- Was the prediction influenced by your past experience? If so, what?

CHAPTER TITLE PREDICTIONS

Give students a list of the chapter titles of a book before they read the book. Have them write a creative story weaving all the chapter titles in order throughout their story. Allow time for students to share their stories with the class, then have them read the story.

When they finish reading the story, have them compare the story that they wrote to the one they just read.

PREDICTION T-CHART

Have students create a T-chart to record their predictions. They should label the left-hand side "Prediction" and the right-hand side "Thinking Behind My Prediction." As they read independently, they can make predictions at appropriate places and cite information from the text and their background knowledge that led them to make that prediction. After finishing the entire selection, have students go back to their predictions and mark each one with either a "C" if it was confirmed or an "X" if it was not confirmed by the reading.

PREDICT-O-GRAM

Provide students with a list of words they will find in the story they are to read. These words should be connected to the setting, characters, goal or problem, action, resolution, etc.

Before reading the story, students read each of the words and predict which part of the story each word will relate to. They write the words in the proper portion of the Predict-O-Gram (see next page). By completing the Predict-O-Gram prior to reading, students will better understand the important parts of the story.

After reading the story, have students return to their Predict-O-Gram and check their predictions. Allow them to change anything they would like to change. Discuss each of the words and where it belongs with the entire class. Some words will probably fit into more than one category.

PROBABLE PASSAGE

Probably Passage is very similar to the Predict-O-Gram. Begin by introducing key vocabulary from the story to students. Choose vocabulary that represents various elements of the story. Have students use the key vocabulary to create probably sentences to predict each element in the story. Providing a story frame/story map similar to the one that follows facilitates this process. Encourage students to share their predictions with the class. Read the story to confirm or modify original predictions.

Example from *Chrysanthemum* by Kevin Henkes
Key Vocabulary: *Chrysanthemum, dreadful, school, perfect, Victoria, wilted, bloomed, Mrs. Twinkle, name*

Setting: I think the story takes place in school.
Characters: The characters' names are Chrysanthemum, Victoria, and Mrs. Twinkle.
Problem: The flowers were perfect when they bloomed, but then they wilted and looked dreadful.
Solution: The students decided to buy new flowers for their school.

Predict-O-Gram

Characters

Setting

Problem

Action

Solution

Probable Passages

Setting:

Characters:

Problem:

Events

Solution:

PREDICTING WITH NONFICTION TEXT

Although students are fairly good at making predictions about fiction, nonfiction text presents some special challenges. Teaching students to find clues in the text structure will help them determine what type of information the author will be presenting next. The following list of signal structures, words, and phrases will guide readers as they follow the path of ideas an author has created.

If the Text Contains These Items:	You Can Probably Expect to Find These Structures
1. A question	1. An answer
2. A colon (:)	2. A list
3. A headline	3. Information about the headline topic
4. *That is*, *i.e., in other words, consists of, is equal to, means*	4. A definition
5. *Therefore*	5. Results or conclusions
6. *For example, e.g., for instance such as, is like, including, to illustrate*	6. Example(s)
7. *Similarly, in the same way, just like just as, likewise, in comparison, also*	7. A comparison (how things are the same)
8. *In contrast, on the other hand, however, whereas, but, yet*	8. A contrast (hot things are different)

Use simple paragraphs to model how a reader might predict what will follow based on the text structure. For example, if the text states, "There were three main causes of World War I," the student might predict there will be a list of 3 things that caused WW I. Once students understand how the type of information the author will present can be predicted, they will be able to ready a place in their minds for that information.

ANTICIPATION GUIDE

Anticipation guides are a series of statements that students respond to individually before reading and are often discussed in groups before the actual reading takes place. They provide a purpose for reading. Write key ideas you want students to gain from reading the text in short declarative sentences. Some should be factual while others should misrepresent what is in the text; however, all must be believable. After students finish reading have them return to the Anticipation Guide and make whether or not they agree with each statement again. A template is provided on the next page.

ANTICIPATION GUIDE

Before Reading
Agree   Disagree
agree

After Reading
Agree   Dis-

_____   _____   1. _____   _____   _____

                               _____

                               _____

_____   _____   2. _____   _____   _____

                               _____

                               _____

_____   _____   3. _____   _____   _____

                               _____

                               _____

_____   _____   4. _____   _____   _____

                               _____

                               _____

_____   _____   5. _____   _____   _____

                               _____

                               _____

CLOZE STRATEGIES

Cloze procedures have a variety of uses. As an instructional tool, they can help students learn to make logical predictions. Select a passage that students are to read. This may be something they have read previously or it may be a new selection. Delete words that require the reader to use strategies that focus on meaning, structure of the language or visual clues. If you are working on meaning or structure, delete the entire word. If you want to work on visual clues, provide the first, middle, or last letter(s) of the word.

Following are some variations on cloze activities

- **Riddle cloze**—after playing around with riddles with your students, provide riddles written with the cloze technique such as "I'm red and have four wheels. You can _____ in me. When you are s_____-ing in me, someone _____ me down the sidewalk. I am a wagon. (Cover the last sentence until students have an opportunity to provide the missing words.)
- **Nursery rhyme cloze**. This is an easy way to introduce children to cloze if they are familiar with nursery rhymes. "Jack and Jill went up the _____ to fetch a pail of _____. Jack fell _____ and broke his crown, and _____ cam tumbling after.
- **Poetry cloze.** Children must think of rhyme, rhythm, and language as they think of words deleted from a poem. This works well with older children as well as younger ones depending on the complexity of the poem.
- **"Scratch it" cloze.** After preparing a passage with permanent marker on an overhead transparency, cover key words with white out. When children guess what the word should be, they use a coin to scratch off the white covering. This same strategy can be used with masking tape or colored tape.

TWO-COLUMN NOTES

Students must find support in a text for inferences they make. Two-column notes can help with finding that support and recording it.

Divide a sheet of paper into two columns using a T-chart format. Label the left hand side "The Text Says" and the right hand side "I Know." As students are reading, they make inferences and record them in the right hand column. In the left hand column they write quotes from the text that have led them to make the inference they recorded on the right.

Several other headings can be used with the two-column note strategy to increase students' abilities to make inferences:

- Facts/Inferences
- Quote or Picture from Text/My Inference
- Words in the Text/Prediction of What Will Happen

The Text Says . . .	I Know . . .

INFERENCE EQUATION

To help students understand the process of inferring, encourage them to think in terms of an Inference Equation. The equation provides a visual support system for readers as they strive to understand this comprehension strategy.

Information (clues) + Reader Knowledge = Inference

Learners need a broad extent of experiences with inferring in many different kinds of text. They need to see the process modeled over and over and over again.

A form for recording inferences is found on the next page.

INFERENCES

INFERENCE EQUATION

Information (clues) + Reader Knowledge = Inference

Spend time really thinking about inferences. Try to notice times when you infer. If you smell something good coming from the kitchen, can you infer what it is? If you notice your teacher looking unhappy, can you infer what is wrong? Look all around in your life. Notice inferences in your reading. Record your inferences below.

Clues . . . (from real life or from a book)	What I Know . . .	My Inference . . .
Example: There are big, black clouds in the sky.	Dark clouds can mean rain.	I think it is going to rain.

RECORDING MY INFERENCES

Reader _____   Text _____

During Independent Reading, focus on inferences. Jot your thoughts in the chart below.

While reading, I was able to infer that:	Support for my inference is on page _____	Text + Me = Inference I was able to make this inference because:

INFERRING FEELINGS

Introduce a variety of feeling words. When students understand 5-6 different feelings, write each one on a card (sad, mad, happy, disappointed, frustrated, etc.). Have the class form a circle with one student in the middle. Pin one of the cards on that student's back. The student in the middle turns around so everyone can read the word. then classmates give clues by saying "I felt that way when . . ." After receiving 5-6 clues, the student with the word on his back attempts to guess the feeling. He also must give reasons why he thinks that's the word on his back.

INFERRING ABOUT CHARACTERS

When making inferences about characters, there are several areas the reader must examine — the character's physical traits, inner traits, dialogue, and actions. Students should list examples from the text that fit each of these areas, then make inferences about the character based on what they have listed. Following are some things to analyze for each area:

Physical Traits
Words used to describe facial expression, body, clothing, hair, etc.

Inner Traits
Words that tell what the character is thinking (words not spoken) that reflect mood, feelings, reactions and personality

Dialogue
Consider dialogue between two characters. What does it reveal about a character's thoughts? What do you think the character is thinking when he/she says those words?

Action
Review the character's actions and think about why the character acts as he does, predict what the character might do next, think about adjectives or phrases that describe the character's behavior.

GET THE FEELING

Discuss with students how an author will often not tell you how a character is feeling. Instead, he shows the reader by describing the character's behavior. It's then up to the reader to use his own experience to figure out or infer how a character is feeling.

Select a part of a text where a character's feelings are displayed through actions. Think aloud and describe the character's actions, your own knowledge or experiences, and the inference you made about the character's feelings. Write an inference statement such as "We inferred that the character felt _____ because the text said _____ and we know from experience that _____. Repeat this procedure with additional sections of text.

Then have students work in pairs to find another example of the character's feelings that requires readers to infer. Pairs should write their inference statement on a plain white paper using markers. Then have pairs display the page they used to make the inference marked with a sticky note along with their written inference. Students circulate around the room to read and discuss inferences made by all of the groups.

QUICK INFERENCE ACTIVITIES

Got a few extra minutes? Try these inference activities:
- Have students fill in empty comic strip bubbles. What might the characters be saying to each other? During discussion, have students support their thinking.
- Play charades — in order to guess what's being acted out, students must make inferences.
- Show students an unfamiliar object and allow them to make inferences about what the object might be — antique tools work well for this.
- Share a newspaper headline with students and have them infer what the article may be about. Headlines that could have more than one meaning provide interesting practice. (Safety Experts Say School Bus Passengers Should Be Belted, Miners Refuse to Work after Death, etc.)

EXAMINE AUTHOR'S PURPOSE

Rarely does an author state explicitly his/her purpose for writing a particular text. Students must make inferences to answer questions dealing with the author's purpose. The following questions might be used to help students think about author's purpose.

- List the things you think the author had to know to write this selection.
- Why did the author write this selection?
- What do we learn about the author's thinking?
- What is the author trying to make us think about?

There are often several purposes that can be justified for authors to have written a selection. Unfortunately these types of questions are often found in multiple choice formats on achievement tests, and there is one correct answer. Provide opportunities for students to pick the best choice from 3 or 4 possible purposes. Once again, providing support for their choices will help them learn to base their answers on information found in a text.

INFERRING WITH POETRY

Poetry is an excellent genre for working on making inferences. Provide students with a two-column chart with a poem printed on the left-hand side. Students should underline, mark, draw arrows, etc. to text that leads them to make inferences. These are recorded on the right-hand side of the chart. At the bottom, students should complete the sentence, "I'm inferring . . ."

Discussion Questions to Encourage Inferring

- Why did the character act in a certain way?
- What influenced the character's action?
- How did a character's actions affect the outcome of an event?
- What would have happened if another event had not occurred?

QTA (QUESTIONING THE AUTHOR)

Some researchers developed a process called "Questioning the Author" (QtA) in which the reader is encouraged to carry on a conversation with the author while reading a selection. This helps readers relate information from different parts of the text and make connections with their prior knowledge. Some of these "author questions" that students might ask are listed below:

- What is the author trying to say here? What does the author mean here?
- What is the author's message?
- What is the author talking about?
- Does the author explain this clearly?
- Does this make sense with what the author told us before?
- How does this connect to what the author told us here?
- Does the author tell us why?

RIDDLES

Have students create riddles. They should write five clues, then arrange them in order of difficulty. The first clue should be the hardest followed by easier ones until getting to the last clue, which should be a give away. Students can trade riddles and try to solve each other's riddles. Students must make inferences to get the riddles correct. Or, post riddles in the hallway and have passers-by write guesses on them. At the end of the week, put a title on the riddle. The title will provide the answer to the riddle.

INFERRING THEMES

Seldom does an author come right out and tell the reader what the theme of a story is. It is usually up to the reader to infer the theme based on the plot of a story. "Themes are the underlying ideas, morals, and lessons that give the story its texture, depth, and meaning. Themes often make us feel angry, sad, guilty, joyful, frightened. We are likely to feel themes in our gut."

To help students with inferring theme, start with a familiar story such as *Goldilocks and the Three Bears.* Have students retell the plot of the story. Then ask, "What are the bigger ideas in *Goldilocks and the Three Bears?*" Students will identify such ideas as taking things that don't belong to you, selfishness, thoughtlessness, etc.

There are often multiple themes found within a story. Allow students to identify more than one theme as long as they provide support for their thinking.

PICTURE BOOK DETECTIVES

Encourage students to make inferences from picture books or illustrations in textbooks. Begin by telling students that good readers use illustration clues along with their prior knowledge and experiences to make inferences during reading. Model with a picture book or textbook how you look at illustrations and make inferences by thinking aloud. Repeat the thinking aloud multiple times, showing how to be a "detective" hunting for clues about character feelings and actions. Be on the lookout for picture clues that were NOT included in the text that tell you more about the setting, characters, problem, solutions, or events. List inferences and clues on a chart similar to the one found on the next page.

After modeling, invite students to work in pairs or small groups to study an illustration and tell what clues they used to make an inference. Allow each group to share with the class. Then encourage students to do the same as they read independently. They may complete their own inference chart during independent reading.

Discus with students how making picture inferences helps them to understand the text.

PICTURE BOOK DETECTIVES

The book + your experiences, knowledge = an inference

1. After reading a picture book with a partner, study all of the illustrations again. Which illustrations show examples of inferences? Watch for clues that are in the illustrations but were NOT in the words.
   Some examples might include:
   - character feelings
   - action clues
   - clues about the problem in the story
2. Use the chart below to record the page number, what you see, the clues from the book or your experience, and your inference.
3. Choose your favorite illustration from the selection that shows an inference. On a separate sheet of paper sketch the illustration. Act out the inference with a partner for the class.

Picture Detective Inference Chart

Page _____	Describe the picture.	Clues from the picture Our experiences	Inference
Page _____	Describe the picture.	Clues from the picture Our experiences	Inference
Page _____	Describe the picture.	Clues from the picture Our experiences	Inference

PICTURE DETECTIVE INFERENCE CHART

Page _____	Describe the picture.	Clues from the picture Our experiences	Inference
Page _____	Describe the picture.	Clues from the picture Our experiences	Inference
Page _____	Describe the picture.	Clues from the picture Our experiences	Inference
Page _____	Describe the picture.	Clues from the picture Our experiences	Inference

PULL A PASSAGE

Explain to students that when good readers read they often use inferences to help them understand what they are reading. While reading aloud to students, stop and "pull a passage" out of the text that you used to make an inference. Write this passage on a chart or the overhead. Give two or three inferences that you made when you read the text. Tell what you visualized, remembered, and inferred. Say something like "The author didn't say this, but I know that _____ because the clues from the text were _____ and my experience is _____."

After modeling several passages, "pull a passage" for students and have them determine what the author meant but didn't come out and actually say it. Provide them with the following framework: The author didn't say this, but I know that _____ because the clues from the text were _____ and my experience is _____. Allow students to share their inferences. Provide additional modeling if necessary. Ask, "How did you know?" to encourage use of evidence from the text and experiences. The worksheet on the next page can be used to help students with this strategy.

Reflect with students on some of the following:
- How does inferring help you understand what you read?
- How does inferring make reading enjoyable?

PULL A PASSAGE

Sentence or passage is from (title) _____

Author _____   Page number _____

Sentence or passage from the reading is _____

_____

_____

Inference #1

The author didn't say _____

_____

But I know that _____

_____

_____

because the clues from the text were

_____

_____

_____

My own experiences that helped me infer
_____

_____

_____

Inference #2

The author didn't say _____

_____

But I know that _____

_____

_____

because the clues from the text were

_____

_____

_____

My own experiences that helped me infer
_____

_____

_____

PREDICT/QUESTION/INFER

Remind students that good readers predict prior to reading. In addition they ask questions about what they will be reading. Tell students that when they read, they should look for the answers to their questions. Some of these questions may be answered directly in the text, while others are answered by inferring. Inferring is when our brains use information from the text and our background knowledge to create a sensible answer to a high-level question. Inferring means using background information plus the text or "Me plus the text" to read between the lines.

Select a text to use for modeling. Preview illustrations, headings, captions and make predictions. Model how to ask questions before reading using clues from the text. Generate questions that begin with who, what, when, where, why and how. Also, use could, would, should and why to help students generate questions that require inferences. Write questions on separate post-it notes. Make a Predict, Question, Infer chart (see next page). Place all of the questions in the *Questions I Have Before Reading* column. Then read aloud from the text.

After reading, refer to your column of questions. Read each question, answer it, and determine which column to move the question to — either *Questions with Answers in the Text* OR *Inference Questions.* Students should assist in categorizing questions.

Then have pairs of students work together to generate additional questions for the chart. After reading, they should determine which column each question should be moved to.

Reflect with your students concerning some of the following:
- Ask students to discuss how the three strategies, predict, question and infer work together to help them understand what they read. Which kind of question is harder to answer?
- If students are only asking simple in the text questions, model and guide them toward inferential questioning. Do students infer as they answer their own questions?

PREDICT/QUESTION/INFER, PART I

Preview pictures with a partner or alone.
Write two predictions you have about the text. What do you predict or think you will learn?

1.   I predict (fiction)
        I think I will learn (nonfiction)

        _____

        _____

        _____

2.   I predict (fiction)
        I think I will learn (nonfiction)

        _____

        _____

        _____

Questions: Write question you have about the text before you read.

Why
Who
What
Where
How
Why

PREDICT/QUESTION/INFER, PART II

Before Reading
Look at all the pictures and headings. Think of questions you have. Use question words, such as Who, What, Where, When, How and Why to start questions. Write each question on a separate post-it note or paper and place questions in the *Questions I Have Before Reading* column.

After reading
Reread each question and answer it. Write answers on the back of the notes. Move the questions to either the *Questions Answered in the Text* column or the *Inference Questions* column. Discuss with classmates.

Questions I Have Before Reading	Questions with Answers in the Text	Inference Questions