



TEXAS LITERACY INITIATIVE



Making Inferences and Predictions

Grades 6 – 12





Cognitive Strategy Routine

Cognitive Strategy Lesson Planning

Title of Text _____

Step 1 Use a real-world example	Anchor lesson:
Step 2 Give the strategy a name.	"Today, we are going to learn a strategy called _____"
Step 3 Define the strategy, how and when it is used, and how it helps with reading.	Strategy definition: How it helps us comprehend:
Step 4 Give students touchstones.	Model hand gesture, explain strategy poster, and refer to anchor lesson.

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Strategy Instruction

DIRECT • EXPLICIT • SYSTEMATIC

Increase of Responsibility

1. Use a real-world example to create a context (anchor lesson).
2. Give the strategy a name.
3. Define the strategy, how and when it is used, and how it helps with reading.
4. Give students touchstones, such as a hand gesture or icon, to help them remember the strategy.
5. Think aloud, using the strategy in a variety of contexts.
6. Engage students by providing opportunities for them to share their thinking during the reading. Practice shared application with planned discussion prompts.
7. Scaffold practice, providing opportunities for students to use the strategy while reading, with teacher support and monitoring.
8. Provide accountability measures for students while using the strategy independently.

Ongoing Assessment and Feedback

Ongoing Assessment may include informal assessments such as anecdotal records, observations of class discussion, portfolios, projects, student records of thinking (post-it notes, drawings, and writings), as well as formal assessments.

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Strategy Instruction

DIRECT • EXPLICIT • SYSTEMATIC

Responsibility

1. Use a real-world example to create a context (anchor lesson).
2. Give the strategy a name.
3. Define the strategy, how and when it is used, and how it helps with reading.
4. Give students touchstones, such as a hand gesture or icon, to help them remember the strategy.

Ongoing Asses





Use a Real-World Example (Step 1)



- An anchor lesson is a real-world example used to create context for a cognitive strategy.
- We refer to the anchor lesson to remind students of the cognitive strategy.





Anchor Lesson for Making Inferences & Predictions





Use a Real-World Example (Step 1)

“Remember when we looked through the purse and used the clues in the purse and our background knowledge to figure out who owned the purse?”



Record what you will say for Step 1 on your orange Cognitive Strategy Routine Lesson Planning Card.

Cognitive Strategy Lesson Planning	
Title of Text _____	
Step 1 Use a real world example.	Anchor lesson: _____
Step 2 Give the strategy a name.	Today, we are going to learn a strategy called _____
Step 3 Define the strategy, how and when it is used, and how it helps with reading.	Strategy definition: _____
	How it helps us comprehend: _____
Step 4 Give students touchstones.	Model hand gestures, explain strategy poster, and refer to anchor lesson.

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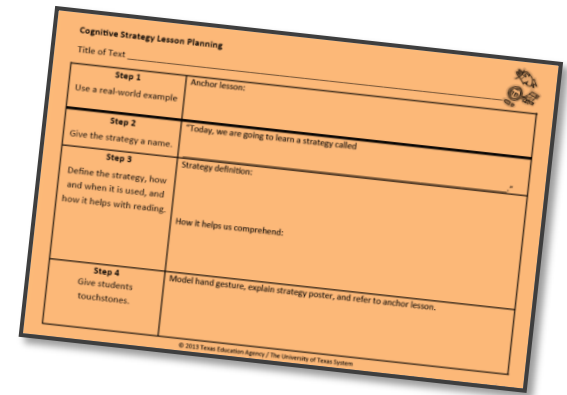




Give the Strategy a Name (Step 2)

“Today, we’re going to talk about a strategy called Making Inferences and Predictions.”

Record what you will say for Step 2 on your orange Cognitive Strategy Routine Lesson Planning Card.



The image shows an orange 'Cognitive Strategy Lesson Planning Card' tilted at an angle. It has a title 'Cognitive Strategy Lesson Planning' and a field for 'Title of Text'. The card is divided into four steps:

Step 1	Anchor lesson:
Use a real-world example	
Step 2	"Today, we are going to learn a strategy called
Give the strategy a name.	
Step 3	Strategy definition:
Define the strategy, how and when it is used, and how it helps with reading.	How it helps us comprehend:
Step 4	Model hand gesture, explain strategy poster, and refer to anchor lesson.
Give students touchstones.	

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Define the Strategy (Step 3)

“An inference is when we combine our background knowledge along with information in the text to understand what the author is not telling us directly. An inference about future information is a prediction. When we make inferences, it helps us understand text more fully.”





Define the Strategy (Step 3)

Record what you will say for Step 3 on your orange Cognitive Strategy Routine Lesson Planning Card.

Cognitive Strategy Lesson Planning

Title of Text _____

Step 1 Use a real-world example	Anchor lesson:
Step 2 Give the strategy a name.	"Today, we are going to learn a strategy called _____"
Step 3 Define the strategy, how and when it is used, and how it helps with reading.	Strategy definition: How it helps us comprehend:
Step 4 Give students touchstones.	Model hand gesture, explain strategy poster, and refer to anchor lesson.

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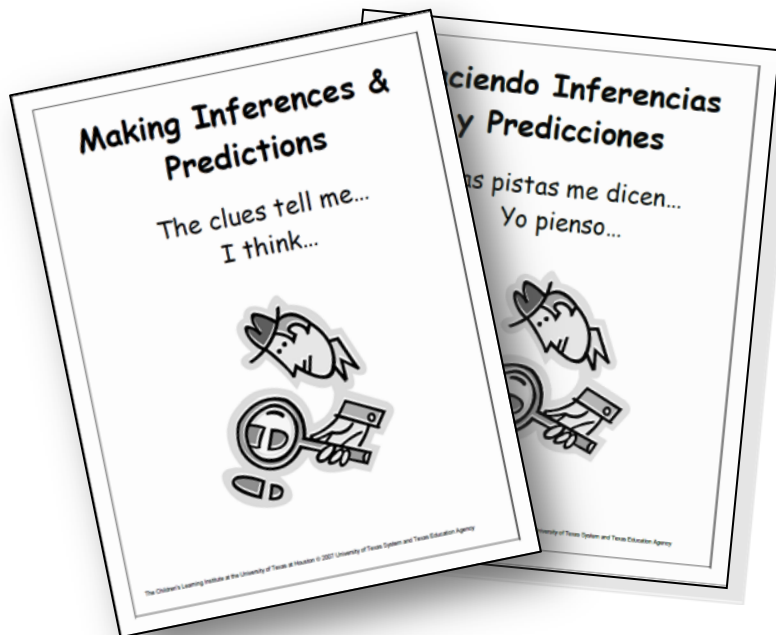
An inference is...





Give Students Touchstones (Step 4)

You may choose to provide students with a hand motion that signals “Making Inferences and Predictions.”



Display strategy posters in the classroom.





Give Students Touchstones (Step 4)

Touchstones: Explain the strategy poster and refer to the anchor lesson.

“When I make an inference, I will show you by pointing to the poster. Look at the detective on our poster. He is searching for clues in the text and using his background knowledge to make an inference. We made inferences when we tried to figure out to whom the purple purse belonged.”





Give Students Touchstones (Step 4)

Record what you will say for Step 4 on your orange Cognitive Strategy Routine Lesson Planning Card.

Cognitive Strategy Lesson Planning

Title of Text _____

Step 1 Use a real-world example	Anchor lesson: _____
Step 2 Give the strategy a name.	"Today, we are going to learn a strategy called _____"
Step 3 Define the strategy, how and when it is used, and how it helps with reading.	Strategy definition: _____ How it helps us comprehend: _____
Step 4 Give students touchstones.	Model hand gesture, explain strategy poster, and refer to anchor lesson. _____

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Think-Aloud (Step 5)

“A think-aloud is a way to provide *instruction* rather than just give *instructions*” (Daniels & Zemelman, 2004, p. 238).

Students who struggle with reading “in general do not possess knowledge of strategies and often are not aware of when and how to apply the knowledge they do possess” (Duffy et al., 1987, p. 348).



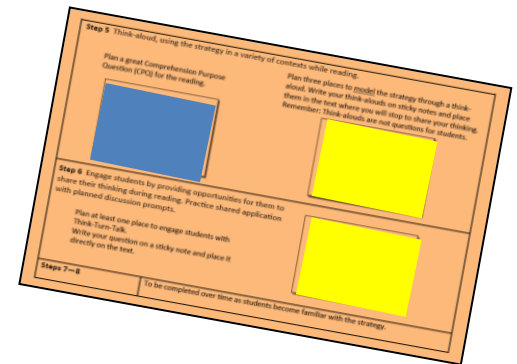


Cognitive Strategy Lesson Planning Card (Side 2)

Step 5 is where we SHOW students how we use the strategy while reading.

We plan a Comprehension Purpose Question (CPQ), as well as places to model thinking-aloud for students.

Step 5 will differ with each lesson. We transfer the sticky notes from the planning card and place them on the text.





Making Inferences Graphic Organizer

Graphic organizers can help struggling students to focus “attention on the text while they read or help them organize the incoming information contained in the text” (Almasi, 2003, p. 92).

This type of activity helps students to actively think about the text while they are reading. This particular organizer helps students to “explore a text by using text-explicit and text-implicit thinking processes... It is a child-centered strategy that allows the teacher to guide children both to the ideas in the text and to the processes involved in getting those ideas” (Searfoss & Readence, 1994, pp. 246-248).





Think-Aloud (Step 5)



Use scaffolds to support student learning.

Making Inferences Graphic Organizer

Title: Their Eyes are Watching God – pp. 1-3
 CPQ: What do we learn about the woman coming into town?

P. #	Statement About the Text that is Thought to be True	Direct (Explicit) or Inference (Implicit)?	Evidence (Text Clues)	Background Knowledge (Connections to What I Know)
1	She was coming back from burying the dead of someone who died suddenly.	direct	<ul style="list-style-type: none"> She had come back from burying the dead ... the sudden dead. 	
2	The townspeople used to be envious of her but now they enjoyed seeing her fall on hard times and they were talking badly about her.	inference	<ul style="list-style-type: none"> remember the envy they had stored swallowed with relish Burning statements ... laughs The mood come alive Words like harmony in a song 	They are remembering the envy was in the past. When you remember something and the mood of that means you enjoy it. people's statements burn they laugh at you, they mean.
2	She's 40 years old.	direct	<ul style="list-style-type: none"> What dat ole forty year ole 'oman doin' ... 	
2	Her hair is long and she's wearing it down which isn't appropriate for an older woman.	inference	<ul style="list-style-type: none"> What dat ole forty year ole 'oman doin' wid her hair swingin' down her back like some young gal? 	Most women in their hair down like young girls are asking what she's doing wearing her hair like me they think it's not appropriate.

In the Text

Its says it **right here**. I can see those words.

The **AUTHOR** says it **DIRECTLY**.

In My Head

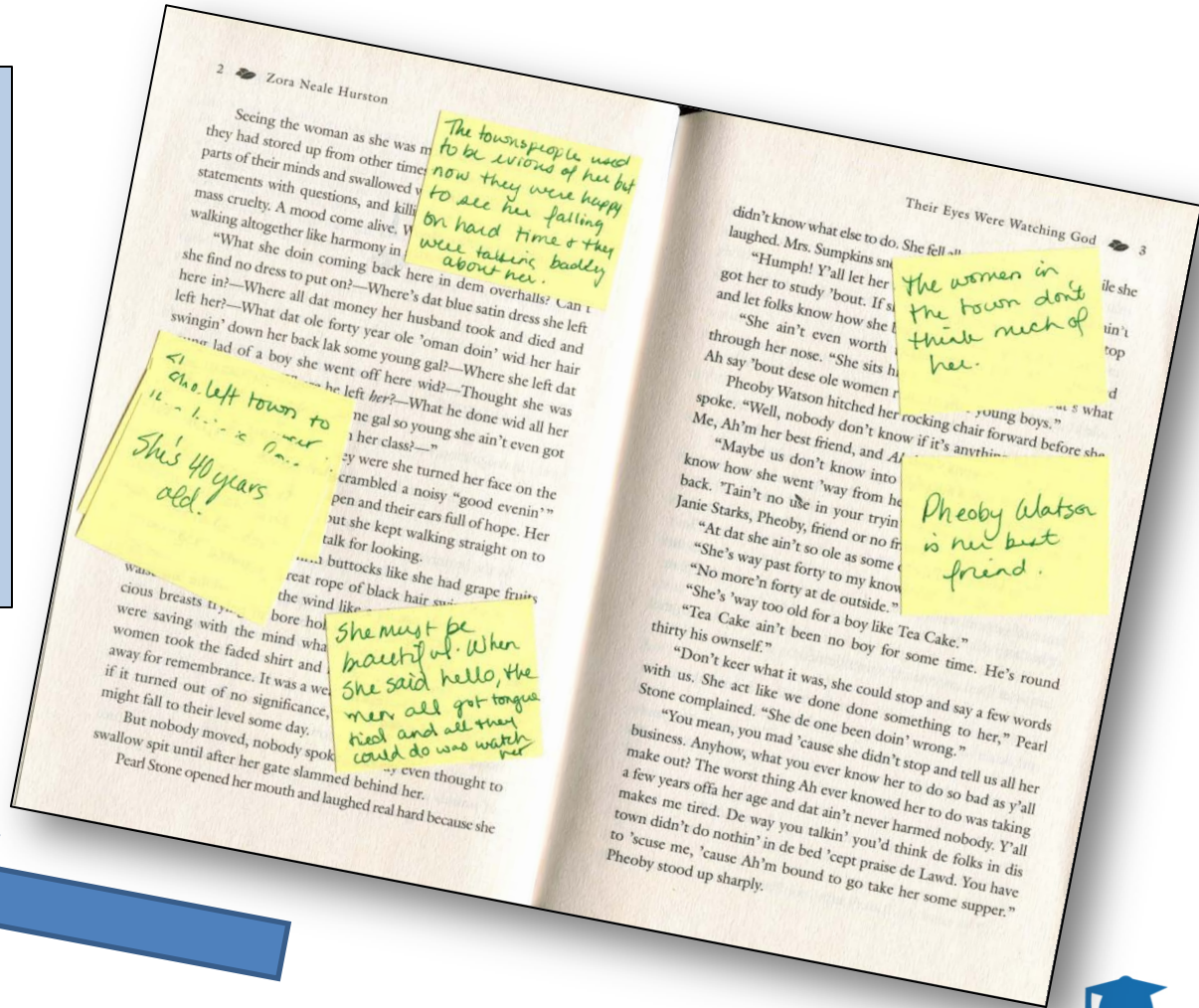
I have to use **clues** from the text and my **background knowledge**...

I have to make an **INFERENCE**.





CPQ: What do we learn about the woman coming into town?



Step 5 Think-aloud, using the strategy in a variety of contexts while reading.

Plan a great Comprehension Purpose Question (CPQ) for the reading.

Plan three places to model the strategy through a think-aloud. Write your think-alouds on sticky notes and place them in the text where you will stop to share your thinking. Remember: Think-alouds are not questions for students.

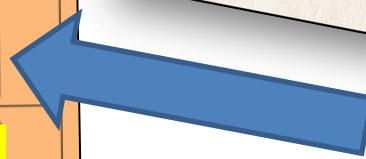
CPQ

Model the Strategy 3 Times

Step 6 Engage students by providing opportunities for them to share their thinking during reading. Practice shared application with planned discussion prompts.

Plan at least one place to engage students with Think-Turn-Talk. Write your question on a sticky note and place it directly on the text.

Steps 7-8 To be completed over time as students become familiar with the strategy.



Making Inferences Graphic Organizer

Title: Their Eyes Were Watching God – pp. 1-3

CPQ: What do we learn about the woman coming into town?

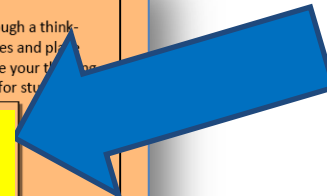
P. #	My Answers to the CPQ	Direct (Explicit) or Inference (Implicit)?	Evidence (Text Clues)	Background Knowledge (Connections to What I Know)
1	She was coming back from burying the dead - someone who died suddenly.	direct	<ul style="list-style-type: none"> • She had come back from burying the dead... the sudden dead. 	
2	The townspeople used to be envious of her, but now they enjoyed seeing her fall on hard times.	inference	<ul style="list-style-type: none"> • Remember the envy they had stored. • Swallowed with relish. • Burning statements... laughs. • The mood comes alive. • Coming back in dem overalls? • Where's that blue satin dress? 	They are remembering the envy, so it was in the past. When you relish something and the mood comes alive, it means you enjoy it. When people's statements burn and they laugh at you, they are being mean. She's dressed like she is poor.
2	She's 40 years old.	direct	<ul style="list-style-type: none"> • What dat ole forty year ole 'oman doin'... 	
2	Her hair is long and she's wearing it down, which isn't appropriate for an older woman.	inference	<ul style="list-style-type: none"> • What dat ole forty year ole 'oman doin' wid her hair swingin' down her back lak some young gal? 	Most women in their 40s don't wear their hair down (which means long) like young girls. The fact they are asking what she thinks she's doing wearing her hair like that, tells me they think it's not appropriate.

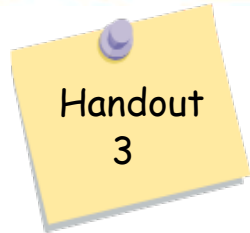


Your Turn! (Step 5)

- Use the Think-Aloud sticky notes to record the first three statements you will stop to think-aloud for students.

Step 5 Think-aloud, using the strategy in a variety of contexts while reading.	
Plan a great Comprehension Purpose Question (CPQ) for the reading.	Plan three places to <u>model</u> the strategy through a think-aloud. Write your think-alouds on sticky notes and place them in the text where you will stop to share your thoughts. Remember: Think-alouds are not questions for students.
<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"><div style="border: 1px solid black; width: 50px; height: 50px; display: flex; align-items: center; justify-content: center;">CPQ</div></div>	<div style="background-color: yellow; width: 100px; height: 100px; margin: 0 auto;"></div>
Step 6 Engage students by providing opportunities for them to share their thinking during reading. Practice shared application with planned discussion prompts.	
Plan at least one place to engage students with Think-Turn-Talk. Write your question on a sticky note and place it directly on the text.	<div style="background-color: yellow; width: 100px; height: 100px; margin: 0 auto;"></div>
Steps 7–8	To be completed over time as students become familiar with the strategy.





Engage Students (Step 6)

Ask students to share their thinking. Add statements to the graphic organizer and ask them to identify whether or not the statement is directly stated in the text or if they have to make an inference.

Is this true? Did the author tell us this directly or are we making an inference?





Engage Students (Step 6)

“Discussion plays a key role in supporting the development of students’ understanding of text. It is through the interaction – or the transaction – of ideas, language, and perspective that comprehension is developed” (Israel & Duffy, 2009, p. 523).





Engage Students (Step 6)

Ask Think-Turn-Talk questions that require students to make inferences or predictions.

- “How did Janie feel about her discovery and why did she feel that way?”
- “Why is Nanny pushing so hard for Janie to get married?”
- “What are you inferring now?”
- “What do you think might happen?”

Step 5 Think-aloud, using the strategy in a variety of contexts while reading.

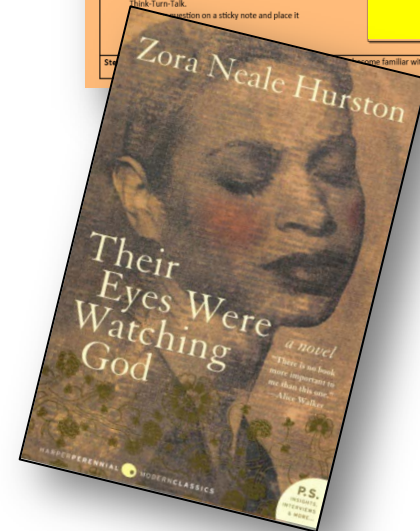
Plan a great Comprehension Purpose Question (CPQ) for the reading.

Plan three places to model the strategy through a think-aloud. Write your think-alouds on sticky notes and place them in the text where you will stop to share your thinking. Remember: Think-alouds are not questions for students.

Step 6 Engage students by providing opportunities for them to share their thinking during reading. Practice shared application with planned discussion prompts.

Plan at least one place to engage students with Think-Turn-Talk. Write your question on a sticky note and place it.

Step 7 Engage students by providing opportunities for them to share their thinking during reading. Practice shared application with planned discussion prompts.





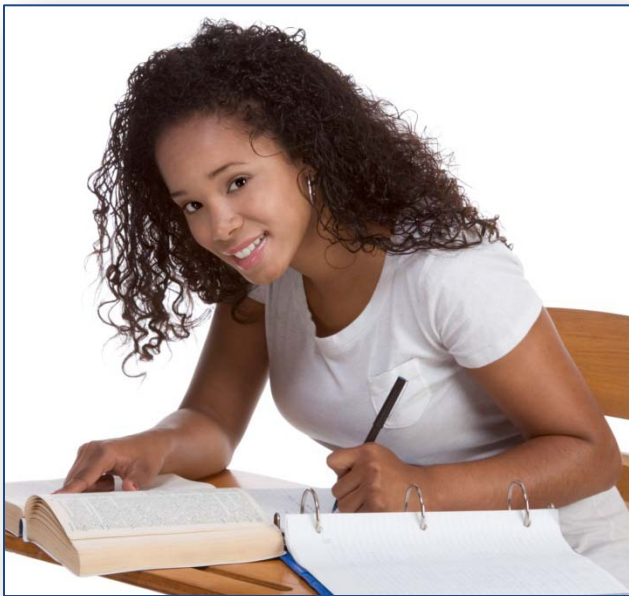
Scaffold Practice (Step 7)

“Today, we are going to read a well-known poem called, *Invictus*. As you work to understand the poem, record the inferences you are making on sticky notes. You will share your inferences with your group. Be prepared to explain why you think what you do.”





Provide Accountability Measures (Step 8)



“After reading the excerpt today, I would like you to write your response to the CPQ. In your writing, explain what you learned about the character and her motivations. Be sure to provide text evidence and background knowledge to support your thinking.”



Ships at a distance have every man's wish on board. For some they come in with the tide. For others they sail forever on the horizon, never out of sight, never landing until the Watcher turns his eyes away in resignation, his dreams mocked to death by Time. That is the life of men.

Now, women forget all those things they don't want to remember, and remember everything they don't want to forget. The dream is the truth. Then they act and do things accordingly.

So the beginning of this was a woman and she had come back from burying the dead. Not the dead of sick and ailing with friends at the pillow and the feet. She had come back from the sodden and the bloated; the sudden dead, their eyes flung wide open in judgment.

The people all saw her come because it was sundown. The sun was gone, but he had left his footprints in the sky. It was the time for sitting on porches beside the road. It was the time to hear things and talk. These sitters had been tongueless, earless, eyeless conveniences all day long. Mules and other brutes had occupied their skins. But now, the sun and the bossman were gone, so the skins felt powerful and human. They became lords of sounds and lesser things. They passed nations through their mouths. They sat in judgment.

Seeing the woman as she was made them remember the envy they had stored up from other times. So they chewed up the back parts of their minds and swallowed with relish. They made burning statements with questions, and killing tools out of laughs. It was mass cruelty. A mood come alive. Words walking without masters; walking altogether like harmony in a song.

“What she doin coming back here in dem overhalls? Can’t she find no dress to put on?—Where’s dat blue satin dress she left here in?—Where all dat money her husband took and died and left her?—What dat ole forty year ole ’oman doin’ wid her hair swingin’ down her back lak some young gal?—Where she left dat young lad of a boy she went off here wid?—Thought she was going to marry?—Where he left *her*?—What he done wid all her money?—Betcha he off wid some gal so young she ain’t even got —why she don’t stay in her class?—”

When she got to where they were she turned her face on the bander log and spoke. They scrambled a noisy “good evenin’” and left their mouths setting open and their ears full of hope. Her speech was pleasant enough, but she kept walking straight on to her gate. The porch couldn’t talk for looking.

But nobody moved, nobody spoke, nobody even thought to swallow spit until after her gate slammed behind her.

Pearl Stone opened her mouth and laughed real hard because she

didn't know what else to do. She fell all over Mrs. Sumpkins while she laughed. Mrs. Sumpkins snorted violently and sucked her teeth.

"Humph! Y'all let her worry yuh. You ain't like me. Ah ain't got her to study 'bout. If she ain't got manners enough to stop and let folks know how she been makin' out, let her g'wan!"

"She ain't even worth talkin' after," Lulu Moss drawled through her nose. "She sits high, but she looks low. Dat's what Ah say 'bout dese ole women runnin' after young boys."

Pheoby Watson hitched her rocking chair forward before she spoke. "Well, nobody don't know if it's anything to tell or not. Me, Ah'm her best friend, and Ah don't know."

"Maybe us don't know into things lak you do, but we all know how she went 'way from here and us sho seen her come back. 'Tain't no use in your tryin' to cloak no ole woman lak Janie Starks, Pheoby, friend or no friend."

"At dat she ain't so ole as some of y'all dat's talking."

"She's way past forty to my knowledge, Pheoby."

"No more'n forty at de outside."

"She's 'way too old for a boy like Tea Cake."

"Tea Cake ain't been no boy for some time. He's round thirty his ownself."

"Don't keer what it was, she could stop and say a few words with us. She act like we done done something to her," Pearl Stone complained. "She de one been doin' wrong."

Making Inferences Graphic Organizer

Title: _____

CPQ: _____

P. #	My Answers to the CPQ	Direct (Explicit) or Inference (Implicit)?	Evidence (Text Clues)	Background Knowledge (Connections to What I Know)

Making Inferences Graphic Organizer

Title: Their Eyes Were Watching God – pp. 1-3

CPQ: What do we learn about the woman coming into town?

P. #	My Answers to the CPQ	Direct (Explicit) or Inference (Implicit)?	Evidence (Text Clues)	Background Knowledge (Connections to What I Know)
1	She was coming back from burying the dead - someone who died suddenly.	direct	<ul style="list-style-type: none"> • She had come back from burying the dead ... the sudden dead. 	
2	The townspeople used to be envious of her but now they enjoyed seeing her fall on hard times.	inference	<ul style="list-style-type: none"> • Remember the envy • Swallowed with relish • Burning statements ... laughs • Coming back in dem overalls? • Where's that blue satin dress? • All dat money 	They are remembering the envy so it was in the past. When you relish something and the mood comes alive that means you enjoy it. When people's statements burn and when they laugh at you, they are being mean. She's dressed like she is poor.
2	She's 40 years old.	direct	<ul style="list-style-type: none"> • What dat ole forty year ole 'oman doin' ... 	
2	Her hair is long and she's wearing it down which isn't appropriate for an older woman.	inference	<ul style="list-style-type: none"> • What dat ole forty year ole 'oman doin' wid her hair swingin' down her back like some young gal? 	Most women in their 40s don't wear their hair down (which means long) like young girls. The fact that they are asking what she thinks she's doing wearing her hair like, that tells me they think it's not appropriate.

2	She left the town to marry a poor, younger man, but that didn't work out.	inference	<ul style="list-style-type: none"> • Where she left dat young lad of a boy she went off here wid? • Thought she was going to marry? • What he done wid all her money? • Why she don't stay in her class? 	It says that she left with a younger man and she thought she was going to marry him. Now she is alone and it seems like her money is gone. Class is like lower class and middle class. She didn't stay in her class, which tells me he was poor compared to her.
2	She was higher class compared to the rest of the townspeople.	inference	<ul style="list-style-type: none"> • Remember the envy they had stored • Where's that blue satin dress • Where all dat money ... • Why she don't stay in her class? 	People are jealous of others when they have less than them. It sounds like she had money and used to dress nice. Since they talk about her staying in her class, it makes me think she's in a different class than all of them as well.
2	She must be beautiful. When she said hello, the men all got tongue-tied and all they could do was watch her.			
3	The women in the town don't think much of her.			
3	Pheoby Watson is her best friend.			

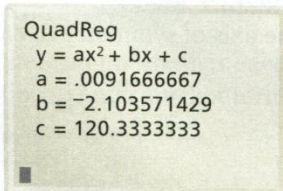
step 6

4 EXAMPLE **Real-World Connection**

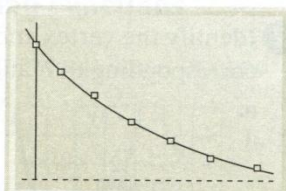


Hydraulics The table at the left shows the height of a column of water as it drains from its container. Model the data with a quadratic function. Graph the data and the function. Use the model to estimate the water level at 35 seconds.

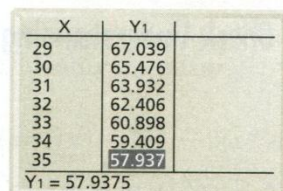
Step 1 Enter the data. Use **QuadReg**.



Step 2 Graph the data and the function.



Step 3 Use the table feature to find $f(35)$.



An approximate model of the quadratic function is $y = 0.009167x^2 - 2.10x + 120$.
 At 35 seconds the water level is approximately 58 mm.

Check Understanding

- 4** a. Use the quadratic model to estimate the water level at 25 seconds.
 b. Use the quadratic model to predict the water level at 3 minutes.
 c. **Critical Thinking** Is your prediction in part (b) reasonable? Explain.

Making Inferences Graphic Organizer

Title: Using Quadratic Models, Chapter 5, p. 236

CPQ: What information from the table helps you to know your prediction for b. is reasonable?

P. #	My Answers to the CPQ	Direct (Explicit) or Inference (Implicit)?	Evidence (Text Clues)	Background Knowledge (Connections to What I Know)
	As time elapses, the water level decreases.	inference	<ul style="list-style-type: none"> • $0\text{ s} = 120\text{ mm.}$ • $60\text{ s} = 28\text{ mm.}$ • Water drains from its container (says in the problem). 	When water drains from something, the level decreases like when you drain a bathtub. It takes time for something to drain. It doesn't happen instantly.
	b. The water level at 1 minute is 28 mm, my prediction of 39 mm at 3 minutes is unreasonable.	inference	<ul style="list-style-type: none"> • $60\text{ s} = 28\text{ mm.}$ 	At the start of the second minute, there are only 28 mm left. My prediction of 39 mm is higher than the level at the 1 minute mark. It's not possible for the container to refill itself because it is draining. My answer is unreasonable.

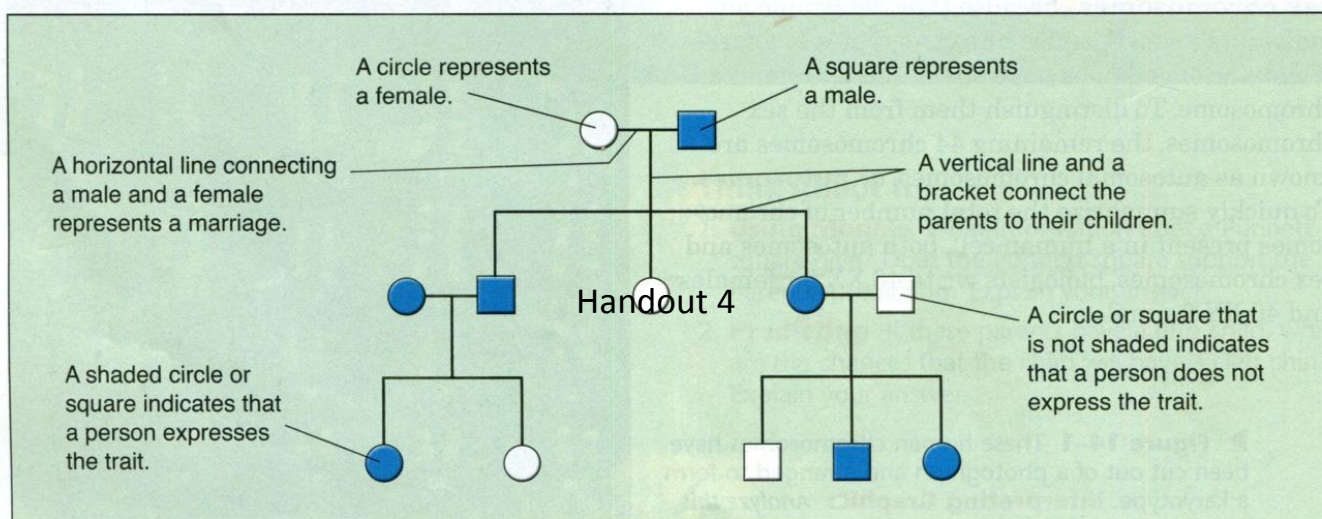
Go **Online**
active art

For: Pedigree activity
Visit: PHSchool.com
Web Code: cbp-4141

▼ **Figure 14-3** This drawing shows what the symbols in a pedigree represent. **Interpreting Graphics** What are the genotypes of both parents on the left in the second row? How do you know?

Pedigree Charts A **pedigree** chart, which shows the relationships within a family, can be used to help with this task. The pedigree in **Figure 14-3** shows how an interesting human trait, a white lock of hair just above the forehead, is transmitted through three generations of a family. The allele for the white forelock trait is dominant. At the top of the chart is a grandfather who had the white forelock trait. Two of his three children inherited the trait, although one child did not. Three grandchildren have the trait, and two do not.

Genetic counselors analyze pedigree charts to infer the genotypes of family members. For example, since the white forelock trait is dominant, all the family members that lack the trait must have homozygous recessive alleles. Since one of the grandfather's children lacks the white forelock trait, the grandfather must be heterozygous for the trait.



Making Inferences Graphic Organizer

Title: Pedigree Charts, Chapter 14, p. 342

CPQ: What are the genotypes of both parents on the left in the second row? How do you know?

P. #	My Answers to the CPQ	Direct (Explicit) or Inference (Implicit)?	Evidence (Text Clues)	Background Knowledge (Connections to What I Know)
Text	At the top of the chart is a grandfather. Grandfather has the heterozygous trait.	direct	<ul style="list-style-type: none"> • At the top of the chart is a grandfather ... • The grandfather must be heterozygous for the trait. 	
Figure 14-3	Square represents a male; circle a female. Shaded shape indicates the trait. Horizontal line = marriage. Vertical line = children.	direct	<ul style="list-style-type: none"> • Square represents male; circle female. • Shaded...expresses the trait; not shaded does not express trait. • Horizontal line reps marriage. • Vertical line reps children. 	
Figure 14-3	Both parents have the heterozygous genotype for the white forelock.	inference	<ul style="list-style-type: none"> • Circle (mom) and square (dad) are shaded. • The grandfather of the male has the trait. • They are linked to two circles (children). • Only one circle is shaded. 	Dad must be heterozygous, because only one of his parents has the trait and he has the trait. We don't know about mom's parents, but since only one of their kids has the trait, mom has to be heterozygous. If she was homozygous, then both kids would have the trait.