Chapter One

Overview of Reading to Learn

Introduction

The process for reading to learn (RtL) is a tool that helps content teachers design effective text-based lessons. For the purposes of this book, a text-based lesson refers to any lesson where students are expected to develop content knowledge through the reading of a complex text. While RtL is a process teachers can use to frame text-based lessons, it is also a process that students can master and use in any context whenever they need to read and learn from challenging material.

For years, reading experts have advocated the use of various literacy strategies to support the reading and comprehension of complex texts. Many strategies have been well researched and have been shown to support reading comprehension and achievement (e.g.). Recent studies (e.g.) also suggest that using multiple literacy strategies is even more effective than using any single approach. However, this research does not help teachers select the best strategies for any given context, nor does it help them determine the best combination of strategies to support student learning of content material. The process of Reading to Learn provides a framework to help teachers and students identify a set of strategies within any specific context to support the learning that needs to take place.

The purpose of this chapter is to introduce the RtL Process. In order to do this, the chapter begins with a narrative of the process being used in an English Language Arts classroom.

The intent of the narrative is to illustrate Reading to Learn in action. This narrative is followed by a brief description of the phases and strategies of the process, as well as an explanation of important characteristics to consider when applying it in the classroom. The chapter ends with a second narrative of a teacher applying the process in a mathematics classroom.

When teachers begin to learn about the process for reading to learn, several common questions arise. Some of these include the following:

- What does the reading process look like in the classroom? What should I be doing as the teacher? What should the students be doing?
- When do I encourage students to use the process for reading to learn? Should students use it every time they read? Are there certain situations when it should be used and situations when it should not be used?
- How do I apply the reading process in the classroom? Is it a process for teachers, for students, or both?

These questions do not encompass all that may arise when we begin to consider what a process for reading to learn looks like. Depending on an individual's own goals and level of experience, many more questions may surface as we consider what reading to learn entails. Therefore, before reading the narrative below, take a few moments to consider what questions you have at this point.

Narrative #1 - Reading to Learn in English Language Arts

As you read the narrative below, consider the questions raised above. You may also wish to explore how the teacher balances content learning with reading or how the teacher sequences specific activities. One strategy to consider when reading this narrative is to look for specific steps of an overall process and record what you observe in the margins. Afterwards you can compare your observations to the description that appears after the narrative.

How Writer's Build Suspense

In Mrs. Sullivan's 8th grade English class, the students are reading part of the short story "Night Drive" by Will F. Jenkins. This story is a suspenseful thriller about revenge. Mrs. Sullivan has divided the text into four parts. The students are beginning to read the second part as class begins. In this part of the story, the female protagonist realizes she might have a serial killer in her car.

At the beginning of class, Mrs. Sullivan speaks to the students. "As you know, we need to warm up before we start reading. So let's review our purpose for today." She scans the room and looks at a quiet boy in the middle of the room. "Johnny, remind us why we are reading "Night Drive"."

Johnny pauses for a moment and says, "We are looking for examples of how the author builds suspense."

Mrs. Sullivan smiles. "Excellent. Tell me a little more. Why will this be useful?"

Johnny thinks for a moment. "Because you want us to use some of the same strategies in the stories we are writing."

Mrs. Sullivan nods her head in approval. "Well done Johnny." Looking at the class she says, "Yesterday we identified ways the author starts to build suspense. What were some of the strategies Jenkins uses?" Once again, Mrs. Sullivan scans the room. Many hands are raised, but she calls on an attentive student in the back of the room. "Jessica."

Jessica opens a notebook on her desk. She considers it for a moment and then responds. "We identified four strategies: descriptions of nervousness, eerie details, details that don't fit or seem out of place, and references to a past mystery."

Mrs. Sullivan looks pleased. Walking towards the front of the room she says, "That was a very complete answer, Jessica. Thank you." She points to a prompt written on the white board. "Please open your writer's notebooks. You have five minutes to respond to the following prompts: Describe what you anticipate will happen in the next section of the story. Also, predict what strategies you think Jenkins will use to build suspense. He will use some of the strategies you have already noticed. He will also show you some new ones. What do you think these will be?" When she is finished, Mrs. Sullivan looks at the clock on the wall. "You have five minutes. Go." She pauses for a second. "Remember, use all of the time to write!"

As the students write, Mrs. Sullivan walks around the room. She frequently stops to read what a student is writing and whisper feedback or encouragement in his or her ear. After the five minutes are over, Mrs. Sullivan asks a few students to read what they wrote. She then asks them to take out their stories and to divide into their reading pairs.

Once the students are with their partners, Mrs. Sullivan explains the reading task. "Today you will be doing what you did yesterday. You will underline sentences or passages in the second section of the story. You will also code the text. However, yesterday you put an 'S' in the margins to indicate a passage that builds suspense. Today I want you to be more specific. I have created a legend based on yesterday's observations. As you see, I would like you to put an 'FN' next to lines that indicate feelings of nervousness. For eerie or scary details put an 'ED' in the margins. If you think Jenkins is referring to a past mystery, write 'PM'. And, write 'ODD' for details that seem odd or out of place. You can still put an 'S' for suspense if you think Jenkins is using a strategy we have not described or coded yet." She looks at the room. "Any questions?" The students look like they are ready to begin reading. "Okay, you may begin. You have twenty minutes to finish reading and coding Section Two."

As the students read softly in pairs, Mrs. Sullivan walks around the room occasionally chatting with students. The students in each group take turns reading. Each pair also stops every few minutes to discuss and code passages that build suspense. When the twenty minutes are over,

most of the students are finished. A few pairs are still reading. Mrs. Sullivan tells the students who have finished to record the author's new strategies in their notebooks.

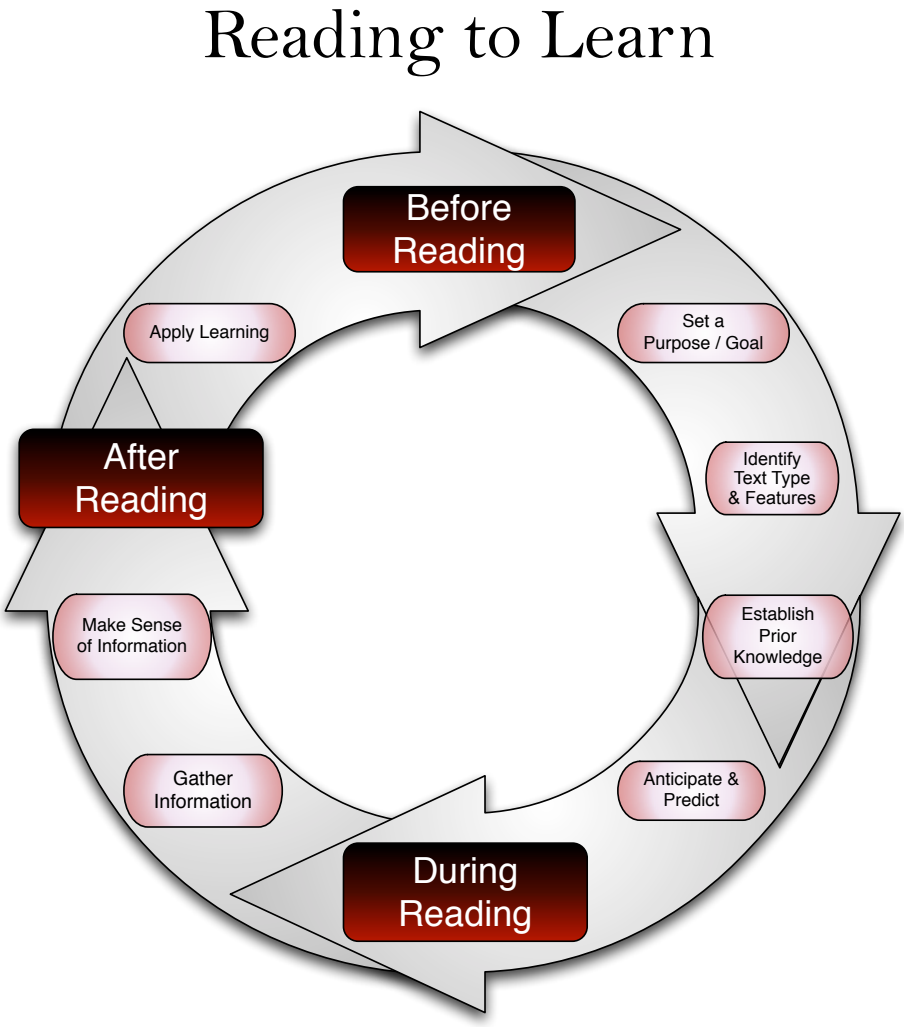
When all of the students have finished reading and coding the text, Mrs. Sullivan asks them to describe the new strategies Jenkins uses to build suspense. She lists these on the white board. After doing this, she asks the students to turn in their notebooks so she can review their work and give feedback. She then gives them fifteen minutes to work on the mysteries they are writing. She reminds them to use strategies for building suspense. Once again, as the students work, Mrs. Sullivan walks around the room holding mini conferences with students.

Just before the bell rings, Mrs. Sullivan returns to the front of the room. She points to the homework assignment on the board. "Before you leave, make sure you have tonight's homework assignment written down. Make sure to go on the classroom website to complete the entry ticket for tomorrow. Please let me know how 'coding the text' is helping you understand what Jenkins is doing to engage or hook the reader. The ticket will also ask you to explain which strategies you are including in your own stories. As always, just be thoughtful." As the bell rings, she yells above the din, "Have a good day! See you all tomorrow. Excellent work today!"

Reading to Learn

The narrative from Mrs. Sullivan's classroom provides an illustration of the process of Reading to Learn in action (see Figure 1.1). It is a description of a real lesson used in an actual classroom. As depicted in the diagram on the following page, the process has three distinct phases. The first phase prepares readers to read. The second part facilitates deep reading. The final phase asks readers to apply what they have learned. Each part of the process is described in greater detail below.

Figure 1.1



Phase One - Preparing to Read

At the beginning of the process for reading to learn, readers prepare to understand and learn from the text. In the narrative above, Mrs. Sullivan prepares the students by asking them to apply four specific strategies or steps. First, she explains to the students that they are reading to learn how authors build suspense and to look for strategies that Will F. Jenkins uses to build suspense. In addition to these reminders, Mrs. Sullivan asks the students to review what they learned during the previous class and to predict what they might learn in the current lesson. The four steps that Mrs. Sullivan encourages students to take can be labeled in the following ways.

- Determine the purpose of the reading
- Identify the text type and important features
- Establish prior knowledge
- Anticipate or predict what will be learned

Each step is described in greater detail below.

Determining the Purpose for Reading

Too often students do not know why they are reading a text. This is particularly true when teachers assign reading. When readers do not know *why* they are reading a text, they try to comprehend everything or they have difficulty focusing as they read. In either case, the outcome

is the same: students often retain very little or the wrong information. In short, when individuals know why they are reading they develop a foundation for reading with purpose and intent.

A strategy that helps a reader know why he or she is reading a challenging text is to determine the *purpose* for reading. There are two broad reasons for reading to learn. The first is to learn facts or details. The second is to learn a procedure for how to do something. For example, a student may need to understand the parts of a cell or how to execute the steps in a mathematical algorithm. In the scenario above, the students are learning how one author builds suspense to engage readers.

A question that helps readers determine the purpose is "Why am I reading this text?" A purpose for reading a social studies textbook may be to understand important causes of the Civil War. A common purpose for reading a word problem is to solve it. Determining the purpose is particularly important in testing situations. When students read passages on tests like the SAT they should read the questions at the end first because answering the questions about each passage is the *only* reason they need to read the passage.

Identifying Text Type and Features

A second pre-reading strategy that helps readers prepare to read is identifying what is being read. This requires a reader to know what type of text he or she is reading as well as any features that will assist in comprehending important information. This is akin to preparing to go on a challenging hike. At the start of the hike it is important to review the terrain in advance. Will there be any peaks to traverse? Where can the water bottles be refilled? Just as hikers should be familiar with the upcoming terrain, readers should also review the terrain of the text. For

example, are they familiar with the genre or type of document? Do they know how information is likely to be organized? Do they know which features to heed and which to ignore?

In order to become skilled at identifying text types and important features, a reader needs to be familiar with the genres and document types that are common to a discipline. In addition, readers need to be aware of the many visible and invisible features of these texts. For example, when reading a narrative, a student will comprehend more if he or she is familiar with the genre and can recognize important elements of the plot. If a student is reading a chapter in a math textbook in order to learn how to apply the commutative property, it helps if the student recognizes that the examples align with the problems at the end of the chapter. In the scenario above, Mrs. Sullivan makes sure that students know they are reading a mystery where the author uses deliberate strategies to build suspense. The students are prepared to look for suspense-inducing details, just as a hiker might be on the lookout for a potable water source.

Establishing Prior Knowledge

One of the most important strategies that helps prepare a reader to learn from reading is establishing prior knowledge. This skill is important because new information is more easily retained if it can be connected to old information. Prior knowledge works much like a paint primer. It treats the wall so that new paint will stick to it more effectively. In the scenario above, Mrs. Sullivan makes sure the students review the strategies they already identified in the previous class. This helps them recognize strategies that were already identified and to be on the lookout for new ones.

A question a reader can ask to establish prior knowledge is "What do I already know about this?" If prior knowledge does exist, steps can be taken to *activate* this information. Simple ways to do this include talking with another person or writing down what one knows. If a reader knows nothing or very little about the topic of a text, steps can be taken to *build* some rudimentary knowledge. In this situation, a reader can engage in any number of simple activities to establish some basic knowledge to prime the brain. Watching short videos or reading short informational texts can be very helpful.

Predicting & Anticipating

A final pre-reading strategy is predicting or anticipating what will be learned. This skill is important because it encourages a reader to read with even greater focus. When readers predict or anticipate they consider what they might learn or encounter next in a text. For example, when reading a novel, readers might predict what will happen to a character in the next chapter. Within an expository text, students could anticipate the type of information that will be addressed. When reading arguments, students could predict an author's premise and the evidence he or she might use to support it.

Once students predict what they will learn, most want to find out if their predictions are correct. In Mrs. Sullivan's text-based lesson on suspense she encouraged students to predict new strategies the author might use in the story. An obvious question to ask during this step is "What do I predict or anticipate learning?" Once again there are numerous activities readers can use to engage in this type of thinking. Some of these are as simple as sharing predictions with a peer or writing them down.

Phase Two - Active Reading

Once readers have prepared to read, they are ready for the second phase of Reading to Learn. This phase is active reading. Active reading refers to reading with purpose. Too often students read passively and without purpose. This is why so many students will tell you that they remember very little after they have finished reading something that is difficult. In order to read deeply, readers must be able to *gather information* that will help them accomplish their purpose. Next they need to *make meaning* out of it. In the example above, the students in Mrs. Sullivan's class gather information by identifying lines in the story that build suspense. They make meaning out of these lines by coding and labeling the strategies the author uses.

Gathering Information

Once a reader is ready to read, he or she needs to be able to gather information that will accomplish the purpose for reading. This reading strategy is a lot like building a fire. Before a fire can be ignited, the appropriate materials need to be collected. Collecting the right materials during reading requires knowing what to look for and identifying it, as well as being able to sort what is useful from what is not. Helpful questions to ask when gathering information is "What information is important?" or "What information do I need to know?"

There are many strategies readers can use to identify needed information and sort it from the less important. Some strategies include, but are not limited to, taking notes, using graphic organizers, highlighting, and coding the text. In the scenario from Mrs. Sullivan's classroom, she has the students simply gather information by identifying lines within the text that they believe include strategies the author is using to build suspense.

Making Meaning of Information

Just as there is more to building a fire than collecting wood, building comprehension takes more than simply gathering information. When we gather information we do not necessarily understand it. In other words, the purpose for reading academic texts frequently requires students to do more than repeat information. Once a reader has collected the necessary information, he or she often needs to make sense out of it. A question that can be asked at this step is, "What does it all mean?"

Once again, there are a variety of approaches to make meaning out of the information within a text. Some strategies include asking probing questions, drawing connections, making inferences, and considering implications. Sometimes, a single strategy can have students gather and make sense of information together. For example, in the scenario above, the coding strategy that students use asks students to first identify a potential strategy and then to make sense of it by inferring what type of strategy it could be. If it is a strategy they have previously identified, they are to use a pre-established label. If the strategy is one they may not have seen yet, they also have a code for that as well.

Phase Three - Applying Learning

The final stage of reading to learn is the post-reading phase. This is when students apply what they have learned during the active reading phase. This final stage is an opportunity to use what was learned in a novel way. At this time the reader may engage in an activity that encourages the readers to embed what has been learned into longterm memory so that the new learning can be used to leverage future learning.

Applying what was learned during reading is a lot like the final stage of the writing process: publishing. In the last stage of the reading process, readers need to do something with the knowledge they have learned. There are a variety of options. Some are simple; others are more complex. For example, a reader might spend time summarizing what he or she learned. On the other hand, a reader might use the knowledge to craft a written response or use it to help solve a complex problem. In Mrs. Sullivan's class, the students are encouraged to apply their understanding of the strategies for building suspense by using them in their own writing.

Important Characteristics of Reading to Learn

The descriptions above provide an introductory explanation of what the process of Reading to Learn looks like, but they do not answer questions about when or how to use it. In order to address these questions, there are additional characteristics of reading to learn that are important to consider.

Use the Process to Learning from Challenging Texts

Reading to learn is very different than *reading for pleasure*. If students are engaged in voluntary or leisure reading, the process for reading to learn may not apply. On the other hand, when students need to learn important information through reading, the reading to learn process will apply. However, it is important to point out that engaging in a deliberate process is most useful when the work is challenging. A process helps in these situations because the process helps scaffold for success. Such scaffolding is not necessary when a task is easy. However, as mentioned in the Introduction, students need a lot more practice reading challenging texts. The

next chapter discusses the issue of challenge more deeply and provides guidance in selecting texts that are appropriately challenging.

Use the Process as a Blueprint

The reading to learn process is not intended to be rigid. The phases and skills provide a blueprint rather than a script for engaging in challenging reading work. However, as with any blueprint some elements are more flexible than others. In keeping with the blueprint metaphor, consider the phases of the reading to learn process as weight bearing walls. In other words, removing or modifying them will undermine the integrity of the entire structure. This is particularly true with the pre-reading phase. Too often students and teachers do not take enough time to prepare for reading and attempt to read too quickly.

While all the three phases of reading to learn should be present when students read challenging texts, the steps and skills within the phases are more flexible. Consider these components of the process to be non-weight bearing walls that homeowners can move and modify based on specific needs. Similarly, readers and teachers have flexibility to modify, reorder, or even sometimes skip some steps that are part of the process for reading to learn. Again, this is particularly true with the four pre-reading steps. For example, a teacher may wish to have students establish prior knowledge before defining the purpose for reading. Or, if students have a very clear purpose for reading and are very motivated, they may not need to predict what they will learn.

Another flexible aspect of reading to learn is that the process does not always progress in a linear fashion. For example, a common strategy for taking notes is the use of two-column

notes. With this strategy students gather information and details in the lefthand column. As they gather these notes, they also write down questions, comments, and reactions in the righthand column which helps them make meaning as they read. Thus, this strategy encourages readers to gather information and make meaning out of it in a recursive and not a linear manner.

A Process for Students and Teachers

The process for reading to learn helps both teachers and students. Ultimately, the purpose of the process is to help readers learn how to successfully read challenging texts. However, just as the writing process is designed to help writers engage in writing work, the writing process also helps teachers organize writing instruction. Similarly, the reading to learn process helps teachers organize reading work in any content area. In the scenario above, Mrs. Sullivan uses the reading process to organize her lesson. However, she also takes multiple opportunities to demonstrate that she is using the process to help students complete their reading work. In this way, she models effective content reading. The next chapter provides greater detail on how to use the process to design text-based lessons.

Scenario #2 - Reading to Learn in Mathematics

By now you should have an initial understanding of what the process of Reading to Learn looks like, as well as when and how it can be applied in the classroom. To help solidify this understanding even further, this chapter concludes with another example of a teacher applying the process in a content classroom. This narrative takes place in a math class and can be compared to the one at the beginning of the chapter. Readers are encouraged to use the codes in the box to identify different parts of the process as they are enacted during the lesson. Below are some questions that can also be used to analyze both scenarios and think more deeply about the process.

- What are some similarities and differences in how the reading process is applied in both classrooms?
- How does the reading process help to emphasize or support learning of essential content knowledge? What content knowledge is targeted in each scenario?
- What reading skill is focused on in each lesson?

Suggested Codes

SP - Setting a Purpose
TT - Identifying Text Type
PK - Establishing Prior Knowledge
PA - Predicting and Anticipating
GI - Gathering Information
MM - Making Meaning of Information
AL - Applying Learning

The Distributive Property

The students in Mr. White's sophomore algebra class just completed the warm-up word problem in their math journals. After they close their journals, Mr. White asks them to take out their textbooks. When everyone is ready, he says, "We are going to begin lesson eight point five

today. I would like to someone to remind the class what we do when we begin a new lesson." Mr. White selects a popsicle stick from a can on his desk and reads a name on it. "Max. Can you tell us what we do?"

A brown-haired boy in the front row answers. "We scan the lesson in the textbook to preview what we will be learning."

Mr. White smiles and places the popsicle stick back in the can. "That's right! So, I would like everyone to scan lesson eight point five now. I want you to pay attention to two things as you scan. First, as always, figure out the purpose of the lesson. I also want you to notice how many sections are in this chapter and what they are called. You have five minutes to do this. Go!"

Mr. White walks in between the desks as the students preview the lesson. Occasionally a few students start chatting and Mr. White quietly reminds them to work by themselves. After five minutes, Mr. White tells the students to discuss with each other in pairs what they found during their preview. He listens for a couple of minutes and then addresses the entire class.

"Okay. So, what is the purpose of this lesson?" he asks. Mr. White selects another stick from the can and reads a name. "Sandy."

A petite girl in the middle of the room answers. "We are going to multiply polynomials."

Sandy glances at the textbook and responds with a humorous smirk. "It's written on the first page where it says 'objective'." A few students laugh at Sandy's 'Isn't it obvious?' tone.

Mr. White smiles good-naturedly. "Excellent Sandy." He puts the popsicle stick back and pulls out another one from the can. Before he reads the name on the stick he asks, "How many of you are not sure what it means when we say we will be learning to multiply two binomials?" Almost half of the students in the class raise their hands. Mr. White nods his head when he looks at the hands. He looks back at the popsicle stick in his hand and reads the name on it. "Charlene. How many sections are in this chapter?"

A girl two seats down from Sandy replies, "There are three sections."

"What are they?" presses Mr. White.

"There is the introduction, a bunch of examples, and then the problems at the end."

"Well done Charlene."

Mr. White turns again to the entire class. "Yes. The focus of today's lesson will be to learn how to multiply two binomials. There is a name for the process that helps with this. It is called FOIL." Mr. White writes "FOIL" in large capital letters on the white board. "Now, that you have had time to scan the lesson, what do you think might be the trickiest part of this lesson? I would like you to write your response in your journal entry for today. Feel free to review the chapter once more if you are not sure what might be the trickiest part of today's lesson."

Many students open their math journals and begin writing. Others take a minute or so to look at the first few chapters of the lesson in the textbook. Mr. White circles the room and takes note of what the students are writing in their journals. When he returns to the front of the room, he picks up a pile of sheets from his desk.

"A lot of you wrote down that this chapter has a lot of big words in it. I agree with you. There is a lot of technical vocabulary. So, before you read, I want to make sure you are familiar with some of the important concepts in this chapter. You should all be familiar with knowledge rating guides. Please take five minutes to fill this out. Remember, you should be able to teach someone what a word means if you check that you know it well. Also, if you check that you have seen it before, write down what you think the word means."

When the students receive the knowledge rating guide, they begin reading the words on the list and indicate how well they know each word. The list contains the following terms: binomial, polynomial, trinomial, FOIL, and distributive property. After a few minutes, Mr. White asks the students to share their results with a neighbor. When all the students have had time to assess their understanding of the words, he asks for volunteers to quickly define each term.

After going over the vocabulary terms, Mr. White speaks again. "Now let's get down to business. I am going to demonstrate a process for multiplying two binomials called FOIL." He spends the next ten minutes demonstrating how to use FOIL. When he is finished showing the students how to solve a practice problem, he answers a few questions.

Mr. White addresses the entire class again. "Okay, now it is your turn. I would like you to read the three examples in your text book. I just demonstrated a problem that is like the first example. Examples Two and Three are a little different. So this is what I want you to do." He points to directions he has written on the white board. First, read each example and give it a name. I did the first one for you. I call it Multiplying Two Binomials." He points to a section of the white board where the following is written:

Example 1 - Multiplying Two Binomials

Example 2 -

Example 3

"What is a good name for the next two examples? Write these in your journal."

"Second, I want you to number your journals from one to eight for each of the practice problems. Leave enough room to do your work and to write the answer.

"Third, before you complete the problems, look at each practice problem and determine which example will help you solve it. Next to the number of each practice problem write down a one, two, or three to show which example the practice problem connects to. If you are not sure, raise your hand and I will help you."

"Finally, when you have connected each practice problem to the appropriate example, you may go ahead and work on the problems. If you do not finish in class, please do so for homework. Any questions?"

Mr. White answers a couple clarifying questions and then tells the students to begin. As they work, he walks around and helps individual students.