WRITING WITH SKILL, LEVEL ONE

LEVEL 5 OF THE COMPLETE WRITER

by

Susan Wise Bauer

INSTRUCTOR TEXT

ADVANCE UNCORRECTED PROOF. DO NOT QUOTE WITHOUT COMPARING TO PUBLISHED VERSION

CONTENTS

Introductionvi
Part I: Basic Skills (Weeks 1-3)
Part II: Building Blocks for Composition (Weeks 4-15) 37 Overview of Weeks 4-15
Part III: Sentence Skills (Weeks 16-22)205 Overview of Weeks 16-22
Part IV: Writing About Stories (Weeks 23-26)307 Overview of Weeks 16-22
Part V: Documentation (Weeks 27-31)
Part VI: Writing About Poems (Weeks 32–34) 00
Part VII: Final Projects (Weeks 35-36) 00

INTRODUCTION

Level One of *Writing With Skill* is the first in a four-level writing series designed to prepare students for advanced work in rhetoric and composition. This first level builds basic skills in organization and sentence structure.

The course is designed to "pick up and go." After you read the General Instructions, you may go directly to Week One and begin. But I do recommend that you take the time (if not now, soon) to read the Overview of the Year's Sequence that follows.

General Instructions

The directions in this course are targeted at the student. As the student moves into the middle grades, she is ready to take on more and more responsibility for her own academic work. Allow her to read the instructions and begin to follow them on her own before you step in with additional help and guidance.

Ultimately, writing is a self-guided activity. This course will develop the student's ability to plan and carry out a piece of writing on her own.

In your text, some instructions will be followed by the notation (Student Responsibility). These are to be completed by the student independently, with no assistance from you. When instructions appear without this notation, the student may need you to help with the assignment or to check his work.

NOTE TO INSTRUCTOR: Train the student to read the instructions thoroughly! Students who are transitioning into independent work will be inclined to skim instructions and then tell you that they don't understand. Your first step, when the student is confused, should *always* be to say, "Read the instructions out loud to me." Often, you'll find that the student skipped or misunderstood the directions.

The student will need to keep a Composition Notebook. She should use a three-ring notebook divided into six sections. The sections should be labelled "Narrations," "Outlines," "Topoi," "Copia," "Literary Criticism," and "Reference." However, the student has been instructed to label only the first three sections and the last section. The "Copia" and "Literary Criticism" sections will not be used until later in the course (and we're anxious not to scare young writers by making them think that they're going to be writing research papers about novels).

The student should plan on studying writing four days per week. It is appropriate for students at this level to begin to type their assignments. Before the student begins to use any word processing program, make sure that all grammar and spell check options are turned

off. These crutches make it easy for the young student to write carelessly, depending on the program to pick up any errors. Our goal is to teach students to write carefully, paying close attention to both mechanics and organization.

Beginning in Week 3, the student will need a thesaurus. Although any comprehensive thesaurus will work, the most recent version of the classic Roget's International Thesaurus is recommended. Avoid condensed or pocket-sized thesaurii, since these are less complete.

Many young writers may need to continue on with regular handwriting (penmanship) practice at a different time during the day.

Evaluation

Rubrics (guides for evaluation) are provided for your use. In my opinion, giving a "grade" is not useful at this level. Use the rubric to decide whether the student has done an adequate job by following the instructions for the assignment. If the student has not followed the instructions, show him specifically where his composition falls short, and ask him to revise the assignment.

Samples of acceptable answers are also given when appropriate. These acceptable answers have the minimum level of complexity and information you should require from the student; if the student wishes to answer with more detail and subtlety, encourage him to do so.

Customizing the Course

You should feel free to adapt the assignments and pace to fit your student.

The first three weeks of the course progress slowly in order to build confidence and accustom the student to working independently. If the student has no difficulty writing narratives, you may skip Week One. Weeks Two and Three should be completed, but the student may do more than one lesson per day.

During the rest of the course, the student may progress faster or slower than the recommended pace. You should also adjust required word lengths and complexity to suit your own needs.

OVERVIEW OF THE YEAR'S SEQUENCE

This course has five elements, introduced gradually over the first twenty-four weeks of study.

Narrations. First, the student will review how to write narrations; the ability to summarize a story in three or four sentences is a basic skill which should be in place before middle-grade writing begins. In the first three weeks of the course, the student will review this basic skill. In the next twelve-week unit, eleven of the weeks begin with a more difficult one-day narration exercise (the exception is the second week, when an unfamiliar skill introduced in Week One is carried over into Week Two so that the student has additional time to understand it). When these exercises are completed, the student should place them in the first section of the notebook.

It is normal for a student at this level to find one or two of the narrations unusually challenging; sometimes a story just doesn't make sense to a particular reader. But if the student struggles with more than two or three of the narrations you may need to spend a few weeks working on this skill before continuing on with *Writing With Skill*. Additional narration practice is provided in the preceding level of this series, *Writing With Ease*, *Level Four*. (A placement test for *Writing With Ease* is available on the Writing With Ease page at peacehillpress.com.)

Outlines. Instead of immediately starting to write compositions, the student will begin by working on skills that need to be in place *before* she begins to write.

Writing involves two difficult tasks. First, the student has to decide what he's writing about—the general topic, the information to include, and where to find that information. Second, the student must put that information into correct order before setting it down on paper.

Instead of asking the student to do both difficult tasks at the same time, this curriculum will give him the chance to learn them separately. He will begin by practicing the second task: setting information down in order.

The student will complete 26 outlining exercises over the course of the year. Outlining helps the student put information in the correct order; once he has ordered his facts, he can begin to write about them. When the student practices outlining, he is developing his ability to carry out the second task in writing.

In this level of the course, the student will concentrate on finding the main idea in each paragraph or section of a composition. This is the most important step in learning to outline. Later levels of this course progress on to more complex outlining skills; the final weeks of this course will prepare the student for the next level by introducing very basic two-level outlining.

These outlines should be placed in the second section of the notebook.

viii Writing with Skill

Topoi. *Topoi* is the plural forum of the Greek word *topos*, from which we get the English word "topic". The study of *topoi* develops the student's ability to carry out the first step in the writing process: figuring out what to say.

In classical rhetoric—the study of writing in ancient and medieval times—topoi helped writers and speakers to come up with arguments. An Athenian who wanted to convince his hearers that the leaders of Athens were better than the rulers of Rome, might begin his speech by telling the story of what happened to Rome when it had insane or evil emperors. Then, he might go on to explain that the reason why Athens is flourishing is because it has sane, virtuous leaders.

Both parts of the argument are *topoi*. The first (telling the story of what happened to Rome) is a *topos* called "chronological narrative"—a story told from beginning to end in the same order that it happened in time. The second is a *topos* called "cause and effect sequence"—connecting something that happened (Athens flourished!) with whatever caused it (sane, virtuous leaders).

Topos literally means "place," and topoi are places that the young writer goes in order to find material for composition. If the student's assignment in history is, "Read this chapter about the Great Pyramid and then write a brief composition," having a list of topoi in mind helps the student come up with the subject of the composition. He might think, "Can I tell a story about the Great Pyramid from beginning to end? Yes, I could write about its construction." (That would be a chronological narrative on a historical topic.) Or he might think, "Can I explain cause and effect about the Great Pyramid? Yes, I could write about Egyptian views on the afterlife, and how those views caused the Great Pyramid to be built." (That would be a cause and effect sequence for a historical event.)

Over the course of the year, the student will learn how to construct four basic (and valuable) *topoi* in history and science: chronological narrative, description, descriptive sequence, and cause and effect sequence. These are simplifications of *topoi* that Aristotle first proposed as tools for debators, adapted for the use of middle-grade writers. Chronological narratives make use of the skills developed in the narration exercises; the other forms make use of the skills developed in outlining.

Copia. Beginning in Week 13, *copia* exercises will replace the narration assignments. These exercises are intended to improve the student's prose style.

Copia ("abundance") is the widely accepted nickname for the famous writing text Brevis de copia praeceptio ("A Short Rule for Copiousness"), written by the Renaissance scholar and theologian Desiderius Erasmus and printed in 1512. In Copia, Erasmus offered students a detailed analysis of prose style, encouraging them to develop many different prose patterns ("abundant" ways of expression). He then took a single sentence, "Your letter pleased me greatly," and rephrased it 195 different ways, including:

Your epistle exhilarated me intensely. At your words a delight of no order kind came over me. How exceedingly agreeable did we find your epistle! Your brief note made me burst with joy. Your by no means displeasing letter has arrived.1

The *copia* exercises in *Writing With Skill* ask students to rephrase, recast, and reword assigned sentences. The practice of *copia* forces students to use variety and encourages them to be alert to the patterns of sentences. *Copia* exercises were a staple of grammar-school education in Erasmus's day; they trained students to be "resourceful in language" and served as a basis for all future literary education."²

The *copia* exercises do assume a basic knowledge of grammar. They are designed to complement *Advanced Language Lessons*, *Level 1*, but can be used along with any thorough grammar course.

Literary Criticism. Beginning in Week 23, the student will begin to learn how to write about literature: fiction and poetry.

Basic literary criticism is a type of writing that most students will be asked to perform at some point in their academic career; even engineering students are usually required to take a literature course in the freshman year of college, and will be assigned "reaction" or "literary analysis" papers. In the first year of this curriculum, students will begin to gently build the skills needed for writing about imaginative literature. They will spend four weeks learning to write the answers to basic questions about fiction, and three weeks doing the same for poetry. These written answers will form the foundation of more advanced skills, taught in later years of this course.

Documentation. In the first 26 weeks of the course, the student's focus will be on learning the basic forms, or *topoi*, that can be used to construct a longer composition. Once these basic forms are learned, an additional skill will be added: properly documenting the sources of information. Starting in Week 27, the student will continue to practice the *topoi* but will also begin to add footnotes and in-text citations to his compositions. Through this, he'll also learn to avoid plagiarism.

Final Projects. In the last two weeks of the course, the student will put all of the skills he's learned together to produce two longer compositions. Although source material for assignments is provided in the first 34 weeks of the course, the student will need to find his own source material for the final projects. Suggestions for possible topics and sources are provided in this instructor text only.

^{1.} Desiderius Erasmus, Copia: Foundations of the Abundant Style: De duplici copia verborum ac rerum Commentarii duo, trans and ed. Betty I. Knott, in Collected Works of Erasmus: Literary and Educational Writings 2, ed. Craig R. Thompson, vol. 28 (Toronto: University of Toronto Press, 1978), ch. 33.

^{2.} Desiderius Erasmus, Colloquies, trans. Craig R. Thompson (Toronto: University of Toronto Press, 1997), p. 164.

Part I

BASIC SKILLS WEEKS 1-3

Overview of Weeks 1-3

The first three weeks of this course will review and practice three basic skills: finding the main idea in a story, finding the main idea in a paragraph, and using a thesaurus to find synonyms.

The student has been instructed to label the first section of the Composition Notebook "Narrations" and the second "Outlines."

Narrations. First, the student will review how to write narrations.

Summarizing forces the student to identify the central story, or plot, of a narrative. This story-line is the *skeleton* of a narrative fiction; it lies underneath all of the details, dialogue, and actions, and organizes them into a particular order. Finding the story-line in narrative fiction will make it easier for the student, later on, to write her own compositions. This review will also equip the student for the lessons in beginning literary criticism (Weeks 23–26).

Finished narrations should be placed in the first section of the student's Composition Notebook.

Outlines. Before the student begins to write her own compositions, she will study how other writers organize *their* work—what order they put their information in. She will learn how to *outline* their work by noting down the main idea in each section of their compositions. This will teach her the basic skills of outlining, which she can then use to organize her own compositions.

Finished outlines should be placed in the second section of the student's Composition Notebook.

In the third week, the student will practice using the thesaurus as she writes both a narration and an outline. She will need her own thesaurus. Although any comprehensive thesaurus will work, the most recent version of the classic Roget's International Thesaurus is recommended. Avoid condensed or pocket-sized thesaurii, since these are less complete. Free online thesaurii, as well as the "thesaurus" tool in most word processors, are also very incomplete. (With reference books, you get what you pay for.) Use a print thesaurus instead.

WEEK 1

Day One: Original Narration Exercise



Focus: Summarizing a narrative by choosing the main events and listing them chronologically

The steps that say "Student Responsibility" should be completed by the student with no assistance or feedback from you. Other steps may require you to help the student and/or check the student's work.

The student instructions are reproduced below for your convenience.

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from the beginning of the first chapter of *The Pepins and Their Problems*, by Polly Horvath.

At the end of the excerpt, you will see a small number that sits up above the last word. This small number is called a *superscript* number. *Super* means "above, over," so a superscript number sits up above the regular script, or print.

When you see the superscript number, look down at the bottom of the page. You will see a line of smaller type beginning with the same number. This is called a *footnote*, because it is a note at the foot, or bottom, of the page. The footnote tells you the title of the book that the excerpt comes

from, the author, the publisher, the year of publication, and the page numbers in the book where the excerpt is found.



Student instructions for Step Two:

This is a short and simple passage—a warm-up for you!

When you summarize a narrative, it's often best to start by jotting down a few phrases or short sentences that remind you of things that happened in the story. Although you may not need to do this with such a short passage, practice this now. On scratch paper, write down four



or five phrases or short sentences that will remind you of the things that happened in the passage. Do not use more than five phrases or short sentences!

Be sure to write the events down in the same order that they happen in the story. If you have trouble with this assignment, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP TWO

The student should have written down on scratch paper four or five short phrases or sentences that summarize the main events. The phrases/sentences should resemble a few of the following (these are given only as a guide):

The Pepins always have problems.

The Pepins and their bizarre problems

Toads in their shoes

Couldn't put on their shoes.

No one knew what to do.

They went next door to ask their neighbor for help

Their neighbor had toads in his shoes too

No one knew how to get the toads out

This should be an easy assignment, but if the student is having difficulty getting started, ask him:

Who are the main characters in this story? What problem do they have? How do they try to solve the problem? Does the solution work?

(The Pepins)
(There are toads in their shoes)
(They go ask their neighbor)
(No it does not.)

STEP THREE: Write summary sentences

Student instructions for Step Three:

After you've written down your four or five phrases or sentences, try to combine them into two or three sentences. You can do this by putting two phrases in the same sentence (for example, "Toads in their shoes" and "They couldn't put on their shoes" could be combined into "They couldn't put on their shoes because there were toads in the shoes"). Or you may find that one or more of your jotted notes turns out to be unnecessary. (If you leave out the detail that Mr. Bradshaw was eating corn cereal, the summary will still make sense!)

Say your two or three sentences out loud several times before writing them down. After you've written the sentences down, ask your instructor to check them. Remember to proofread the sentences first. Reading them out loud *after* you've written them is an excellent way to check your own work.

If you have trouble, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP THREE

In this step, the student practices turning the jotted phrases and sentences into two or three smooth, coherent sentences. She should say her sentences out loud several times before she

Week 1 5

writes; listen to make sure that you hear her talking out loud, and if necessary remind her that she should be speaking before she writes.

An acceptable narration might sound like one of the following:

"The Pepins were always having strange problems. One morning, they woke up to find toads in their shoes. None of them knew what to do."

OR

"The Pepins woke up one morning to find out that their shoes were full of toads. So were their neighbor's, Mr. Bradshaw. None of them knew how to get the toads out of the shoes."

OR

"The Pepins found toads in their shoes and couldn't get them out. They went next door to ask Mr. Bradshaw for help, but he didn't know how to get the toads out either."

When the summary is finished, check it using the following rubric (guide to evaluation). This rubric focuses only on the skills emphasized in this lesson and in the accompanying grammar handbook. Future rubrics will build on this, as the student learns more about both organization and mechanics.

Week One Narration Rubric

Organization

- 1 Events should be in chronological order.
- 2 If two or more events are listed in a single sentence, they should have a cause and effect relationship.

For example:

The Pepins didn't know what to do, so they went next door to ask Mr. Bradshaw is acceptable; they went next door because they didn't know what to do.

The Pepins had toads in their shoes, and they went next door is not acceptable. There is no clear causal relationship between the two sentences.

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.

Day Two: Original Narration Exercise



Focus: Summarizing a narrative by choosing the main events and listing them chronologically

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from *The Wolves of Willoughby Chase*, by Joan Aiken. In this passage, young Sylvia is travelling to stay with her wealthy cousin Bonnie at the country house known as Willoughby Chase. She has not had enough to eat, and her clothes are old and thin, so she is both hungry and cold—but she knows that she should be suspicious of the strange man who is sharing the railway carriage with her. When he offers her a box of chocolates, she refuses, even though her mouth waters.

STEP TWO: Note important events

Student instructions for Step Two:

On scratch paper, write down five or six phrases or short sentences that will remind you of the things that happened in the passage. *Do not use more than six phrases or short sentences!* There are many vivid details in this passage (like the "jam tarts, maids of honour, lemon cheese cakes, Chelsea buns, and numerous little iced confections"). Remember that details should not be included in a summary—try to stay focused on the main events.

Be sure to write the events down in the same order that they happen in the story. If you have trouble with this assignment, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP TWO

Today's exercise is designed to remind that student that details should not go into a summary. The details in this passage—the description of the cakes, the wolves, Sylvia's dream—are so vivid that the student will be tempted to include them. If you see him writing many more than five or six short phrases or sentences, check to make sure that he is not listing details instead of main events.

The student's phrases/sentences should resemble some of the following (these are given only as a guide):

The man offered Sylvia cakes to eat Sylvia was uncomfortable with the man Sylvia ignored man Stranger offered her cakes but she refused Sylvia fell asleep in the train Week 1 7

Train stopped because of wolves
Wolves got on the line
Train stopped
Wolves tried to get into the train
A wolf broke the window
A wolf broke into the train compartment
The stranger stabbed the wolf

If the student is having difficulty condensing the story, ask him:

How does Sylvia react to the man in the train?

(She tries to ignore him/feels uncomfortable.)
(Wolves are on the line.)
(A wolf breaks in through the window.)
(He stabs the wolf with a piece of glass.)

What happens to stop the train?
What happens after the train stops?
How does the man react?

STEP THREE: Write summary sentences

Student instructions for Step Three:

After you've written down your five or six phrases or sentences, try to combine them into three or four sentences. Remember: you can do this by putting two phrases or sentences together (for example, "Sylvia was uncomfortable" and "The man offered her cakes but she refused" could be combined into "Sylvia was uncomfortable with the man, so when he offered her cakes she refused"). Or you may find that one or more of your jotted notes turns out to be unnecessary. (If you completely leave out the information that the man offered her cakes, the summary will still make sense!)

Say your three or four sentences out loud several times before writing them down. After you've written the sentences down, ask your instructor to check them. Remember to proofread the sentences first by reading them out loud.

If you have trouble, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP THREE

In this step, the student practices turning the jotted phrases and sentences into three or four smooth, coherent sentences. She should say her sentences out loud several times before she writes; listen to make sure that you hear her talking out loud, and if necessary remind her that she should be speaking before she writes.

An acceptable narration might sound like one of the following:

"Sylvia found herself on the train with a stranger. He offered her cakes, but she tried to ignore him. After they had been travelling for a while, wolves on the line stopped the train. One wolf broke into the train car, but the stranger stabbed it to death." OR

"Sylvia was very uncomfortable with the stranger who was in her compartment, so she tried to ignore him and went to sleep. She woke up when the train stopped. Wolves were on the line, and one of them broke into the compartment. The man threw his cloak over the wolf and stabbed it with a piece of glass." OR

"When Sylvia took the train to see her cousin, she had to share her compartment with a stranger. Then wolves on the line stopped the train. One wolf broke into the compartment, but the man killed it."

When the summary is finished, check it using the Week One Narration Rubric from Day One.

Day Three: Original Narration Exercise



Focus: Summarizing nonfiction by choosing the main events and listing them chronologically

In Days One and Two, the student wrote narrations summarizing two excerpts from novels—long works of creative fiction. However, narrations can also be used to summarize nonfiction (history, science, biography, etc.).

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

The following passage about the Russian czar Peter the Great, who ruled 1628–1725, comes from *The Story of the World, Volume 3: Early Modern Times*, by Susan Wise Bauer.

STEP TWO: Note important events

Student instructions for Step Two:

On scratch paper, write down six or seven phrases or short sentences that will remind you of the things that happened in the passage. Do not use more than seven phrases or short sentences! Make sure that you focus on the main events in the passage (like the Russian army's conquest of Azov) rather than the smaller details (the weather started to grow colder).

Be sure to write the events down in the same order that they happen in the story. If you have trouble with this assignment, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP TWO

The student should have written down on scratch paper six or seven short phrases or sentences that summarize the main events. The phrases/sentences should resemble some of the following:

Peter the Great wanted to sail to Europe Peter fascinated by the West Peter the Great wanted his merchant ships to visit the West He needed a port Week 1 9

His only port city was frozen for half the year

The Russians needed a warmer port

Peter wanted to capture the Port of Azov

The Port of Azov was on the Sea of Azov which led to the Black Sea and Mediterranean

The Turks controlled the Port of Azov

Peter thought he could defeat the Turks

Peter took his army to Azov and laid siege to it

The Russian siege didn't work

Turkish ships kept sailing in and out

The Russians built warships and barges

The Russians spent the winter building a fleet

The new Russian navy drove off the Turkish galleys

The Russians got into the fortress on a pile of rubble

The Russian army defeated the Turks

Peter and his army captured Azov

If the student is having difficulty condensing the passage, ask him:

What does Peter the Great want at the beginning of the passage? (To visit the West)

Why can't the Russian ships visit the West? (They don't have a port to sail in and out of.)

What does Peter decide to do? (Take Azov away from the Turks)

Why doesn't the siege work at first? (Turkish ships can sail into Azov with food and

weapons.)

How do the Russians stop the Turkish ships? (They build a navy and block the Turkish

galleys.)

What is the end result? (They conquer Azov.)

STEP THREE: Write summary sentences

Student instructions for Step Three:

After you've written down your six or seven phrases or sentences, try to combine them into four sentences. Remember: you can do this by putting two phrases or sentences together, or you may find that one or more of your jotted notes turns out to be unnecessary.

Say your sentences out loud several times before writing them down. After you've written the sentences down, ask your instructor to check them. Remember to proofread the sentences first by reading them out loud.

If you have trouble, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP THREE

In this step, the student practices turning the jotted phrases and sentences into four smooth, coherent sentences. She should say her sentences out loud several times before she writes; listen to make sure that you hear her talking out loud, and if necessary remind her that she should be speaking before she writes.

An acceptable narration might sound like one of the following:

"Peter the Great was fascinated by the West. He wanted his ships to sail to Europe, but the only Russian port was frozen for half the year. So he laid siege to the Port of Azov, which was held by the Turks. After the Russians built a navy to drive off the Turkish ships, Azov was conquered."

OR

"Peter the Great wanted his ships to sail to the West. His only port was frozen for much of the year, so he laid siege to the Port of Azov. At first, the Russians could not conquer it because the Turkish ships resupplied it from the water. So over the winter the Russians built a new navy and used it to conquer Azov."

OR

"Peter the Great wanted to sail to the West, but first he had to conquer the Port of Azov. The port was held by the Turks, and without ships, the Russians were not able to besiege it successfully. After they built a navy, though, they were able to drive off the Turkish warships. Then they conquered Azov by building a mound of rubbish and using it to climb over the walls."

When the summary is finished, check it using the Week One Narration Rubric from Day One.

Day Four: Challenge Exercise



Focus: Summarizing a complete narrative by choosing the main events and listing them chronologically

In the final review exercise of this week, the student will practice summing up an entire story, from beginning to end. While the story is not difficult, there are many details, and it may take the student some time to sort out the main events.

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

This traditional folktale is German in origin—but it is so old that no one knows for sure where it came from (or what it means). The Brothers Grimm included it in their 1812 collection of fairy tales, but this version is from Andrew Lang's classic collection, *The Red Fairy Book*.

Week 1

STEP TWO: Note important events and write summary sentences

Student instructions for Step Two:

You can summarize a long story like this in one of two ways.

If you're able to, just list the six or eight most important events in the story, in the same order that they happen in the story. But because there are so many details in the story, you might have to write down *each* event first—even though this will make a much longer list. However, once you've written down the longer list, you should be able to group events together and condense them so that you end up with only six or eigh *main* events.

Here's an example. You might be able to look at the first five paragraphs of the story and sum them up in a single sentence:

Dullhead had two older brothers who refused to share their food with a stranger.

But you might have to list each event instead, like this:

Dullhead was the youngest of three sons

All three brothers met a little man in the the forest

He asked them to share their food and drink

The two oldest would not share their food with him

The two oldest brothers hurt themselves after they refused to share

Then you would need to work at condensing those five sentences into one or two sentences. You could start by crossing out the repetition:

Dullhead was the youngest of three sons

All three brothers met a little man in the the forest

He asked them to share their food and drink

The two oldest would not share their food with him

The two oldest brothers hurt themselves after they refused to share

Then, cross out the details that aren't necessary for the understanding of the story.

Dullhead was the youngest of three sons

met a little man in the the forest

He asked them to share their food and drink

The two oldest

hurt themselves after they refused to share

Now, the first part of your summary might sound like this:

Dullhead was the youngest of three sons who met a little man in the forest. He asked to share their food, but the two oldest refused.

Your finished summary should not be more than eight sentences in length.

You should expect this exercise to take you some time, so don't get frustrated! When you have finished your summary, read it aloud. If it is still too long, read through it a second time, looking for unnecessary information or repeated phrases. Cut these out and try to combine sentences.

If you have trouble with this assignment, ask your instructor for help. And when you are finished with your summary, check your work with your instructor.

HOW TO HELP THE STUDENT WITH STEP TWO

The student has been given the choice of either summarizing directly or writing down on scratch paper a list of main events and *then* summarizing. If the student chooses to list the main events, his phrases/sentences should resemble some of the following:

Dullhead was the youngest of three sons
Dullhead had two brothers and was the youngest

All three brothers met a little man in the the forest

He asked them to share their food and drink

The two oldest would not share their food with him

The two oldest brothers hurt themselves after they refused to share

Dullhead shared his food

He was given a golden goose

He stayed at an inn

The inn-keeper's daughters tried to pluck the feathers

They stuck to the goose when they touched it

Dullhead took the goose with the three girls attached to it

Four more people touched them and stuck to each other

They came to a town ruled by a king with a serious daughter

The king had promised that whoever could make his daughter laugh would marry her

The Princess laughed when she saw Dullhead and the people stuck to him

The King did not want Dullhead to marry his daughter

He told Dullhead to find a man who could drink a whole cellar of wine

Dullhead found a man who could drink it

He told Dullhead to find a man who could eat a mountain of bread

Dullhead found a man who could eat all the bread

He told Dullhead to find a ship that could sail on land or water

Dullhead found the little man

The little man gave him the ship

The king gave Dullhead his daughter

Dullhead and the princess ruled the kingdom for many years

An acceptable finished summary might resemble one of the following:

Dullhead was the youngest of three sons who met a little man in the forest. He asked to share their food, but the two oldest refused. Dullhead shared his food, and was given a golden goose as a reward. Seven people tried to touch the goose and stuck to it instead. When Dullhead took the goose and the seven people into a nearby town, the princess of the town laughed at him. The king had promised that she could marry anyone who made her laugh, but he did not want Dullhead to be his son-in-law. So he gave Dullhead three impossible tasks. The little man helped Dullhead finish the tasks, and he was able to marry the princess.

Dullhead met a little man in the forest and was kind to him. The little man gave him a golden goose as his reward. Then Dullhead discovered that anyone who tried to steal a feather from the goose stuck to it. Soon he had seven people stuck to the goose. He took the goose and the seven people into a nearby town, which was ruled by a King with a serious daughter. The King had promised that whoever made the Princess laugh could marry her. Dullhead and his goose made the Princess laugh, but instead of giving him the Princess, the King asked him to do three tasks. Dullhead finished the tasks with the help of the little man and married the Princess.

Week 1 13

Dullhead received a magical golden goose as a reward because he was kind to a little man in the forest. Everyone who tried to steal a feather from the goose stuck to it. So Dullhead took the goose and all of the people who were stuck to it into a nearby town. The town was ruled by a king who had promised his daughter to anyone who could make her laugh. She laughed when she saw Dullhead, but the king did not want him to to marry the princess. So he told Dullhead to find a man who could eat a mountain of bread, a man who could drink a cellarfull of wine, and a ship that coud sail on land or water. With the magical help of the little man, Dullhead found all three and married the princess.

If the student is unable to trim his summary down to eight sentences, ask him to answer the following questions in one sentence each.

What good thing did Dullhead do?
What did he get as a reward?
What was strange about it?
Where did he go?
What promise had been made?
Was it kept? If not, what happened instead?
How did Dullhead react?
What was the end result?

Check the student's summary using the following rubric.

Week One Challenge Narration Rubric

Organization

- 1 Events should be in chronological order.
- 2 If two or more events are listed in a single sentence, they should have a cause and effect relationship.
- **3** The summary must not be more than eight sentences in length.
- 4 It should mention the little man, the goose, Dullhead, the king, and the princess; the other characters do not need to be named as long as the series of events is clear.
- 5 It should end with Dullhead's marriage to the princess.

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.
- **3** The student may choose to capitalize *King* and *Princess* (since the story does) or to leave them lowercase, but should be consistent throughout the story.

WEEK 2

Day One: Introduction to Outlining



Focus: Understanding the basic principles of outlining

For the last week, the student has reviewed writing narrations—three or four sentences summarizing the central story, or plot, of a narrative. Now the student will begin to work on a new form of summary writing: outlining.

Before the student begins outlining, he will become familiar with two terms: *paragraph* and *topic sentence*.

The student will work independently today; his instructions are reproduced below for your convenience.

STEP ONE: Understand paragraphs

A paragraph is a group of sentences that are all related to a single subject. You can recognize a paragraph because the first sentence is *indented* (begins half an inch further to the right than all the other sentences).

Look at the following paragraph from the book *Inside of a Dog: What Dogs See*, *Smell, and Know*:

All of the sentences in this paragraph are related to one subject: the fight between the wolfhound and the Chihuaua. The first sentence is indented.

Now read the following three paragraphs, found in *Understanding Light: The Science of Visible and Invisible Rays:*

The sentences in these three paragraph are also all related to a single subject. What object does the paragraph describe?



All of the paragraphs tell us something about *the human eye*. But you can't just use "The human eye" as the subject for each paragraph, because *all* of the paragraphs talk about the human eye.

Instead, each paragraph tells us about a different part or function of the human eye. In the first paragraph, all of the sentences are related to the subject "What the human eye can do." In the second paragraph, all of the sentences are related to the subject "What people understand about how the human eye works." What is the subject of the third paragraph? Remember: it will have something to do with the human eye.



The subject of the third paragraph is, "The structure of the human eye" or "What the human eye looks like."

When you start to outline, you will try to summarize the subject of each paragraph in one or two phrases or in one sentence. Your summary sentence or phrases should be specific enough to show how the paragraph is different from other paragraphs that might have the same *general* subject.

STEP TWO: Understand topic sentences

Sometimes, paragraphs have *topic sentences*. A topic sentence does your work for you, because it states the subject of the paragraph outright. Topic sentences are usually found near the beginning or end of a paragraph.

Read the following four paragraphs. In each paragraph, the topic sentence is in bold print.

The first paragraph is about the discovery of the Pacific Ocean by Balboa—which is exactly what the topic sentence tells you. The second paragraph is about the clusters of galaxies in the universe. The third paragraph tells the story of the camera. And the fourth paragraph is all about distraction.

In each of these paragraphs, the topic sentence sums up the subject of the paragraph. But many paragraphs do not have a single topic sentence. Look again at the three paragraphs from *Understanding Light* that you looked at in Step One. Beside each paragraph, you will see the summary phrases or sentence that explain the paragraph's main subject.

These are perfectly good paragraphs—but none of them have a single topic sentence that sums up the main subject. Not every good paragraph has a topic sentence, but in every good paragraph, all of the sentences relate to a single main subject.

You will not be required to identify or write topic sentences in this year of study. However, you will often see the term *topic sentence* used, so you should know what it means.

Week 2

STEP THREE: Understand basic outlining

In the final step of today's lesson, you'll study the basic principles of outlining.

When you outline a passage of writing, you begin by finding the main idea in each paragraph and assigning it a Roman numeral. Your goal is not to write a single sentence that incorporates *all* (or even most) of the information in the paragraph. Instead, you should try to write a sentence (or several phrases) that sums up the paragraph's central theme, or subject.

You can often find the central subject of the paragraph by asking two questions for each paragraph:

- 1. What is the main thing or person that the paragraph is about?
- 2. Why is that thing important?

Read the following paragraph from $The\ Story\ of\ Canada$, by Janet Lunn and Christopher Moore.

Now answer the following questions before looking at the answers. What is the main thing that the paragraph is about?



Buffalo. The paragraph does talk about the Blackfoot people as well-but notice that the paragraph begins with the *buffalo*, and that all of the references to the Blackfoot people are made to explain how the *buffalo* were used

Why is the buffalo important?



Because the Blackfoot people used it for food, clothing, and other purposes.

If you were to put together these two answers in one sentence, it would look something like this:

I. The Blackfoot people used buffalo for food, clothing, and many other purposes.

(Notice that I is the Roman numeral for "1" or "first paragraph"

The next paragraph in The Story of Canada reads:

Ask the question: What is the main thing that the paragraph is about?



Horses.

Why are horses important?



The Blackfoot tribe learned how to ride them in the 1700s. So your sentence would sound like this:

II. The Blackfoot tribe learned to use horses in the 1700s. (Note that II is the Roman numeral for "2" or "second paragraph."

Remember: you are not trying to summarize every detail in the entire paragraph. You are finding the central idea in it.

In the next day's work, you'll try to find the central idea in each paragraph for yourself.

Day Two: Outlining Exercise



Focus: Finding the main idea in each paragraph of a passage about history

In today's exercise, the student will construct her first one-level outline.

As you help the student with the rest of this year's outlining exercises, keep this principle in mind: There may be several different, but valid, ways to outline any given paragraph. If the student can give good reasons why he's chosen his points, don't worry about whether he's constructed the best possible outline.

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

This excerpt is from a biography called *Hatshepsut: Egypt's First Female Pharaoh*, by Pamela Dell and Rosemary G. Palmer.

You'll find the passage easier to understand if you have a little background information. Hatshepsut's father, Thutmose I, died around 1492 BC and left two heirs: his daughter Hatshepsut and his son Thutmose II. Hatshepsut had the best claim to the throne, because she was the daughter of Thutmose I's most important wife. But Thutmose I wanted his son, Thutmose II to be the next ruler of Egypt instead. Unfortunately, Thutmose II was the son of a much less important wife.

To make Thutmose II more acceptable to the people as the next pharoah, Thutmose I arranged for him to marry Hatshepsut—his half-sister. The Egyptian royal pharaohs often did this. They believed that their blood was divine, so they were reluctant to marry anyone from outside the royal family—that would be like mixing divine and human blood.

Week 2

STEP TWO: Begin to construct your one-level outline

Student instructions for Step Two:

The passage selected for today's outlining exercise has short, easy paragraphs. Remember, you should begin by asking one simple question:

1. What is the main thing or person that this section is about?

In this passage, every single paragraph is about Hatshepsut, Thutmose II—or both of them.

Begin your outline by deciding whether each paragraph is about Hatshepsut, Thutmose II, or both. Write your answers on the outline below, remembering that each Roman numeral stands for a paragraph of the reading. The first point is done for you.

I. Hatshepsut and Thutmose II

II.

III.

IV.

V.

VI.

VII. When you are finished, check your work with your instructor.

HOW TO HELP THE STUDENT WITH STEP TWO

The student's answers should be:

I. Hatshepsut and Thutmose II

II. Hatshepsut

III. Hatshepsut

IV. Thutmose II

V. Thutmos II

VI. Hatshepsut

VII. Hatshepsut

The first five paragraphs should be very straightforward, since only one of the two characters is mentioned. In the sixth and seventh paragraphs, Thutmose is mentioned, but the focus is very clearly on Hatshepsut's roles as wife and mother.

STEP THREE: Finish constructing a one-level outline

Student instructions for Step Three:

Now finish your outline by asking the second question: In each paragraph, what did these people do? Or, to put it another way: What event, or part of their lives, or accomplishment does the entire paragraph talk about?

Remember, you should not be listing individual details from the paragraphs. Instead, try to think of the single word or phrase that sums up what all the details have in common.

Consider the first paragraph:

No one knows for sure whether Hatshepsut and Thutmose II were married when their

father died. But at the time of their marriage, neither of them was an adult. Hatshepsut was probably between 12 and 15, and Thutmose was probably a few years older or younger.

You wouldn't finish out the first main point on your outline by writing:

I. Hatshepsut and Thutmose II may have married before their father died, were both very young

Both the timing of their marriage, and the *age* at which they were married, are details. But both of those details tell you more about their *marriage*. So your first point should be:

I. Hatshepsut and Thutmose II and their marriage

or

I. Hatshepsut and Thutmose II's marriage

Try now to finish your outline by finding the main subject of each paragraph. If you have trouble, ask your instructor for help. When you are finished, check your work with your instructor.

HOW TO HELP THE STUDENT WITH STEP THREE

The student's answers should resemble the following:

- Hatshepsut and Thutmose II get married OR Hatshepsut and Thutmose II's marriage
- II. Hatshepsut and her vows OR Hatshepsut's vows
- III. Hatshepsut and her titles OR Hatshepsut's titles
- IV. Thutmose II and his battles OR Thutmos II's buildings
- V. Thutmos II and his buildings OR Thutmose II's buildings
- VI. Hatshepsut and her duties OR Hatshepsut and her duties as King's Wife
- VII. Hatshepsut and her role as mother OR Hatshepsut and her children

If the student struggles with this assignment, use the following dialogues:

Paragraph 2

Instructor: Hatshepsut promised to do five things. What were they?

Student: Be feminine, exude fragrance, speak in musical tones, make herself loved, tend her lord

Instructor: What word do the writers use for these promises? They say that Hatshepsut took traditional. . .

Student: Vows

Instructor: So this paragraph is all about Hatshepsut's five. . .

Student: Vows

Paragraph 3

Instructor: There are four proper names for Hatshepsut listed in this paragraph. What does the paragraph call these names? Hint: they are King's Daughter, King's Great Royal Wife, God's Wife of Amun, King's Sister.

Student: They are titles.

Week 2 21

Instructor: So this paragraph is all about Hatshepsut's four. . .

Student: Titles

Paragraph 4

Instructor: This paragraph tells you all about one kind of success that Thutmose II may—or may not—have had. What kind of success was that?

Student: Success in battle OR Military success

Instructor: So the paragraph is all about Thutmose II's battles. That is your main point.

Paragraph 5

Instructor: What three things did Thutmose II build, according to this paragraph?

Student: Monuments, other works, the temple complex at Karnak

Instructor: So this paragraph is about Thutmose II's success at. . .

Student: Building

Instructor: That is your main point.

Paragraph 6

Instructor: The main point of this paragraph is found in the very first sentence. What did Hatshepsut perform?

Student: Her royal wifely duties

Instructor: "Hatshepsut's duties" are the main subject of the paragraph.

Paragraph 7

Instructor: This paragraph is all about another kind of job that Hatshepsut had. What was that job, or role?

Student: To be a mother

Instructor: So you could say that this paragraph is all about Hatshepsut's role as a. . .

Student: Mother

Day Three: Outlining Exercise



Focus: Finding the main idea in each paragraph of a passage about science

The student will continue to practice basic outlining skills for the rest of this week.

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

This excerpt, from the basic geology text *The Round World*, discusses the metals found in the crust of the Earth (the outermost layer of the earth).

STEP TWO: Understand how to outline science writing (Student Responsibility)

Student instructions for Step Two:

When you outline science writing, you may need to ask slightly different versions of the questions suggested at the beginning of this week. Remember, those questions are:

- 1. What is the main thing or person that the paragraph is about?
- 2. Why is that thing important?

For a science text, you might sometimes find it more useful to ask:

- 1. What is being described or defined in this paragraph?
- 2. Is there one central thing which is most important about it?

Look at the first paragraph again and ask yourself: What is being described or defined in this paragraph?

This isn't an easy question to answer, because the paragraph starts out with a *negative* definition. What is *not* (or rarely) found in the earth's crust?



Pure metals.

This paragraph is centered around describing what is found in the earth's crust *instead of* pure metals. Pure metals aren't found in the earth's crust—what is found instead?



Metals combined with other elements.

That answers both questions—metals are being described in this paragraph, and the most important thing about those metals is that they're combined with other elements.

So the first point in your outline would look like this:

I. Metals combined with other elements

Week 2 23

There may be more than one good way to phrase a main point. If, for example, you wrote

I. The makeup of metals in the crust

that could also sum up the main idea of the paragraph—which then goes on to define exactly *what* the makeup of metals in the crust is.

STEP THREE: Construct a one-level outline

Student instructions for Step Three:

Now finish your outline by finding the main point for each of the remaining three paragraphs.

If you have difficulty, use the hints below. When you are finished, check your work with your instructor.

- I. The makeup of metals in the crust (this point was already covered for you!)
- II. This point has to do with amounts
- III. This paragraph has a definition in it. What is being defined? (You don't have to give the *content* of the definition.)
- IV. How many kinds of what?

HOW TO HELP THE STUDENT WITH STEP THREE:

The student's answers should resemble the following:

- I. Metals combined with other elements OR The makeup of metals in the crust
- II. The quantity of metals in the crusts
- III. The definition of ore
- IV. The three kinds of rock

Note that the student should *not* put the following level of detail into the outline:

- III. Ore is a rock with enough metal to make extraction worthwile
- IV. The three kinds of rock are igneous, sedimentary, and metamorphic

Those details belong in a two level outline:

- III. The definition of ore
 - A. Geological processes concentrated the metal
 - B. Rocks with concentrated metal are called ore
- IV. The three kinds of rock
 - A. Igneous
 - B. Sedimentary
 - C. Metamorphic

If the student has difficulty with the outline, use the following dialogue:

Section 2

Instructor: In this paragraph, there are two words repeated twice (each). What are they?

Student: Quantity and metal

Instructor: The main point of this paragraph is, "The quantity of metal in the earth's crust."

Section 3

Instructor: What do we call a rock with enough metal in it to make extraction worthwhile?

Student: Ore

Instructor: The main point is, "The definition of ore."

Section 4

Instructor: How many kinds of rock are there?

Student: Three

Instructor: The main point is, "Three kinds of rock."

Day Four: Outlining Exercise



Focus: Finding the main topic in each paragraph of a passage about science

STEP ONE: Understand topical outlines (Student Responsibility)

Student instructions for Step One:

In the last passage you outlined, each paragraph talked about the same basic topic: metals in the earth's crust. But even though *every* paragraph talked about metals in the earth's crust, you couldn't outline it by writing:

I. Metals

II. Metals

III. Metals

IV. Metals

Instead, you had to identify what was being *said* about metals in each paragraph. The first paragraph talked about metals combined with each other, the second about how *much* metal was in the crust, the third about metal in rock (ore), and the fourth about the kinds of rock that have metal in them.

But sometimes a writer will use each paragraph of an essay to talk about a different topic. Look at the following paragraphs, adapted from a popular book about birds published at the beginning of the last century:

Week 2 25

Each one of these paragraphs describes a different bird. The simplest way to outline the passage is:

- I. The road runner
- II. Petrels
- III. Crows
- IV. The dusky grouse

This topical outline doesn't try to find the most *important* thing about the road runner, petrels, crows, or the dusky grouse. Since the paragraphs go on to give a whole list of facts about each bird, it would be almost impossible to figure out which fact is the most "central." What's central in each paragraph is the bird itself.

So the topical outline simply lists the topics: one kind of bird for each paragraph.

STEP TWO: Read (Student Responsibility)

Student instructions for Step Two:

This excerpt is taken from the science book *Real Things in Nature*. After you've read the passage, you will construct a basic topical outline of its paragraphs.

STEP THREE: Construct a one-level outline

Student instructions for Step Three:

Now write a one-level outline for the passage, listing only the main topic discussed in each paragraph. If you have difficulty, ask your instructor for help.

When you are finished, check your work with your instructor.

HOW TO HELP THE STUDENT WITH STEP THREE

The student's outline should resemble the following:

- I. The sun
- II. The corona
- III. Meteors
- IV. Shooting stars
- V. Comets

The topics of the paragraphs are fairly simple to find, but if the student has difficulty, ask the following questions:

- I. What is a huge, intensely hot globe made of gases and vapors and 5,000 times more brilliant than white-hot boiling iron?
- II. What is the envelope, or crown, of the sun?
- III. What are the clouds of stone that travel in orbits and are usually invisible?
- IV. What do we call a meteor that moves into the atmosphere and burns up?
- V. What are crowds of stones that move in a swarm around the sun and then never come back?

WEEK 3

Day One: Original Narration Exercise



Focus: Summarizing nonfiction by choosing the main events and listing them chronologically

This week, the student will review the skills of narration and outlining and will be introduced to the use of a thesaurus. In today's narration exercise, the student will write a summary that she will make use of in the next lesson.

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from *The Story of My Life*, the autobiography (a biography written by the person herself) of Helen Keller. Helen Keller was born in 1880. She lost both her hearing and sight after a serious illness when she was nineteen months old. Because she could neither see nor hear, she couldn't communicate with others. When she was six years old, her parents asked the Perkins Institute for the Blind in Boston to help them by sending Helen a teacher. The teacher who came was Anne Sullivan, aged twenty. Sullivan took on the job of trying to communicate with Helen. In this part of the autobiography, Helen describes the moment when her teacher suddenly found a way to make contact with her.

STEP TWO: Understand the use of first and third person (Student Responsibility)

Student instructions for Step Two:

You will notice that the passage is written in the *first person*—from the point of view of Helen Keller herself. Look at the following quote from the story and circle each bolded pronoun. These are first person pronouns.

We walked down the path to the well-house, attracted by the fragrance of the honeysuckle with which it was covered. Some one was drawing water and my teacher placed my hand under the spout. As the cool stream gushed over one hand she spelled into the other the word water, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers.

Now read another version of the quote, in which the first person pronouns have been changed to third person pronouns and names.

Helen and Miss Sullivan walked down the path to the well-house, attracted by the fragrance of the honeysuckle with which it was covered. Some one was drawing water and Helen's teacher placed her hand under the spout. As the cool stream gushed over one hand she spelled into the other the word *water*, first slowly, then rapidly. Helen stood still, her whole attention fixed upon the motions of her fingers.

When you write your summary, you may either use the first person (as though *you* were Helen, summarizing her own story) or the third person point of view. Whichever you choose, be sure to use the same point of view all the way through the summary.

STEP THREE: Note important events

Student instructions for Step Three:

Now jot down six or seven phrases or short sentences that remind you of the main events in the passage. Remember, you can use either the first or third person. You can write

Miss Sullivan gave Helen a doll

or

Miss Sullivan gave me a doll

as long as you keep the same point of view in every phrase or sentence.

Do not use more than seven phrases or short sentences! Be sure to write the events down in the same order that they happen in the passage.

If you have trouble with this assignment, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP THREE

The student's list of events should resemble six or seven of the following. (The examples below are in the third person; it's fine for the student to use the first person instead.)

Miss Sullivan gave Helen a doll

She spelled "doll" into Helen's hand

Helen spelled doll too

Helen showed her mother how to spell doll

She didn't understand what she was doing

She learned to spell many words but didn't know what they meant

Miss Sullivan tried to teach her what "doll" meant

Helen could not understand that words stood for things

Helen broke her doll

She wasn't sorry

Her teacher took her outside

They walked to the well house

Miss Sullivan put Helen's hand under the water

She pumped water over Helen's hand and spelled "water" into it

Helen understood that the word "water" meant water

Week 3 29

Helen understood what a name was for the first time She could think with words for the first time She felt sorrow for the first time

If the student has difficulty locating the central events, ask her to answer the following questions in one complete sentence each:

What did Miss Sullivan bring Helen?
In the first paragraph, what did Miss Sullivan teach Helen to do?
Did Helen understand this?
Where did Miss Sullivan take her, and what did they do there?
What two things did Miss Sullivan do at the same time?
What was the result?

STEP FOUR: Write summary sentences

Student instructions for Step Four:

After you've written down your six or seven phrases or sentences, try to combine them into four sentences. Remember: you can do this by putting two phrases or sentences together, or you may find that one or more of your jotted notes turns out to be unnecessary.

Say your sentences out loud several times before writing them down. After you've written the sentences down, ask your instructor to check them. Remember to proofread the sentences first by reading them out loud.

If you have trouble, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP FOUR

In this step, the student practices turning the jotted phrases and sentences into four smooth, coherent sentences. She should say her sentences out loud several times before she writes; listen to make sure that you hear her talking out loud, and if necessary remind her that she should be speaking before she writes.

An acceptable narration might sound like one of the following:

When Miss Sullivan came to teach Helen Keller, she gave Helen a doll and tried to teach her what the word "doll" meant. Helen learned the word, but she didn't understand what it meant. So Miss Sullivan took her outside, pumped water over her hand, and spelled "water" at the same time. Finally, Helen understood what a name was.

I learned how to spell words, but I didn't understand what they meant. One day, my teacher pumped water over one of my hands and spelled "water" into the other. Suddenly I understood that the word stood for the cool thing flowing over my hand. I had words for the first time.

When the summary is finished, check it using the following rubric.

Week Two Narration Rubric

Organization

- 1 Events should be in chronological order.
- **2** If two or more events are listed in a single sentence, they should have a cause and effect relationship.
- **3** The summary should end with a statement about Helen's new understanding of words/names.

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.
- **3** Either first or third person should be used consistently throughout. OPTIONAL
- 4 Quotation marks should be used to set off words that are spelled out to Helen

Note: The student is probably not familiar with the grammar rule governing #4. The rule is: When words are referred to as words, they are set off with either quotation marks or italics. "Word as word" means that the focus is on the word *itself*, not on the meaning, so:

I felt water on my hand.

She spelled "water" on my hand.

You may explain this rule to the student if you choose, but if you think the student will be confused, feel free to ignore it.

Day Two: Thesaurus Use



Focus: Summarizing a narrative by choosing the main events and listing them chronologically

Today's lesson introduces the student to the thesaurus. If you are not familiar with thesaurus use, be sure to read the student instructions carefully.

The student will not begin the *copia* exercises (rewriting sentences with the help of the thesaurus) until Part III of this course. However, she may sometimes find it helpful to consult a thesaurus in Part II, so the skill is introduced here.

Choosing the correct synonym is a skill that takes time, maturity, and plenty of exposure to good writing. Beginning writers will often choose a synonym that has the wrong shade of

Week 3 31

meaning. For example, the thesaurus gives the following synonyms for "sad":

oppressed, unhappy, sorry, dejected, woebegone, inconsolable

If I write, "I was angry and sad," the following synonyms would be appropriate:

I was angry and oppressed.

I was angry and unhappy.

I was angry and dejected.

I was angry and inconsolable,

But "sorry" and "woebegone" are not good choices, because those emotions—while they *do* involve sadness—aren't likely to co-exist with anger.

The exercises that follow give the student some guidance in choosing good synonyms. However, at this level, it's important not to over-correct or over-explain. The more the student reads, explores, and experiments, the better his sense for the correct word will become.

As a completely optional exercise, you can help the student develop word sense using Google Books (books.google.com).³ Type a single word or expression into the search box. When the search results load, choose the "Preview Available" option. The results will reload, including only books that you can click on to read an entire page (as opposed to "snippet view," which only gives you the view of a single line).

Skimming down the results will help the student gain a sense of the ways in which particular words are used. For example, the exercise that follows asks the student to distinguish between "zealous" and "willing," but this may be difficult if the student hasn't seen the word "zealous" used in different contexts. A quick search for "zealous" on Google Books starts with a number of books that have "zealous" in the title. You want to see how the word is used in sentences, though, so you would scroll down past these books and look for "zealous" in the actual text that appears as a brief excerpt next to the book cover. These include:

Johnson was truly zealous for the success of "The Adventurer."

—James Boswell, *The Life of Samuel Johnson*

Every year some zealous Frenchman exposes the iniquities of the Tudors. . .

—John Acton, Letters of Lord Acton to Mary Gladstone

. . . his zealous and unwearied exertions. . .

—United States War Department, Report of the Secretary of War

Attorneys also owe an obligation to be zealous advocates for their clients.

—O. Russel Murray, The Mediation Handbook

^{3.} The following instructions use the Google book search as it worked in the spring of 2011. Websites change constantly, so you may need to adapt the instructions.

Simply reading these sentences will begin to give the student a sense of the word's exact meaning.

If you come up with too many archaic uses, you can also limit the search to books published within the 21st (or another) century.

STEP ONE: Understand thesaurus use (Student Responsibility)

Student instructions for Step One:

A thesaurus is a reference book that groups together words with similiar but different shades of meaning. (A dictionary, on the other hand, contains definitions of single, particular words.) When you write, you can use the thesaurus to find the exact word you need. (Note: The numbers in the following description are based on the fourth edition of *Roget's International Thesaurus*. You will probably use a different edition, but the organization of your thesaurus will be the same even if the numbers are a little different.)

A thesaurus contains two types of lists.

The first half of the thesaurus contains words grouped by meaning and part of speech. These word groups all have numbers. For example, the list headed

475. Knowledge

might contain:

- 1. **nouns** that name different kinds of knowledge (information, facts, experience, perception, insight, understanding, wisdom, literacy), as well as names for fields of knowledge (literature, science, art, technology) and names of people who know things (scientist, scholar, authority, expert, intellectual),
- 2. **verbs** for the act of knowing (know, perceive, recognize, discern, be learned in, be expert in), and
- 3. **adjectives** that describe both people who are knowledgeable (informed, instructed, trained, familiar with, learned, educated, bookish) and things which are known (well-known, recognized, familiar, grasped, common, public).

The second half of the thesaurus contains an alphabetical listing of thousands of vocabulary words. This is the part of the thesarus that you'll go to first as you write.

In the last lesson, you learned that Helen Keller "left the well-house eager to learn." Suppose that, while writing your summary, it seemed most natural to write, "After Helen Keller learned that words stood for things, she was eager to learn." That's true, but when writing a summary you should try not to copy the exact wording in the passage. So instead, you could turn to the second half of your thesaurus and look up *eager* in the *e* section.

Beneath the word *eager*, you would find a series of other adjectives with different shades of meaning, each followed by a number: for example,

consenting 775.4
desirous 634.21
willing 622.5
zealous 635.9

Which of these comes closest to the meaning of *eager*, as Helen Keller used it? Probably not "consenting," because that just implies that she wouldn't *refuse* to learn if offered the opportunity—but in the passage, Keller is anxious to learn. "Willing" also fails to show how eager Keller was. But "desirous" and "zealous" both imply a real desire and need to learn.

If you decide that "zealous" is the closest to "eager," you would then turn back to the group of words numbered 635 in the first half of the thesaurus. That group of words is headed "Eagerness," so all of the nouns, adjectives, and verbs in it will have something to do with being eager. Glancing down the group, you would see that Section 635 has 15 different subgroups. The first six subgroups contan nouns; the next two contain verbs; the five after that, adjectives;

Week 3 33

and the final two, adverbs.

Since the word "zealous" was followed by the number 635.9, you would then look down to subgroup 9 of Section 635. There, you would find a series of adjectives closely related to the adjective zealous:

eager, anxious, avid, keen, prompt, ready, lively, vital, champing at the bit and many more.

You could choose one of these adjectives to substitute for *eager* and write one of the following:

She was anxious to learn.

She was keen to learn.

She was champing at the bit to learn.

Sometimes you'll find that the word you chose to follow leads you to a section where none of the words seem to fit. That's normal; using a thesaurus is sometimes a process of trial and error. But reading through the lists will help expand your vocabulary and fill your memory with words.

STEP TWO: Practice thesaurus use

Student instructions for Step Two:

Begin to practice your thesaurus skills now, using two sentences from Helen Keller's memoir.

For each underlined noun, adjective, and verb, find four synonyms in your thesaurus. List those synonyms on the lines provided. Remember that you must provide noun synonyms for nouns, adjective synonyms for adjectives, and verb synonyms for verbs.

When you look up a verb, remember that you'll need to look it up in the present tense. "Felt" is in a past tense. The present tense of "felt" is "feel." "Feel" is the word you'd look up in the second half of the thesaurus.

After you've found the synonyms, rewrite each sentence one time on your own paper, choosing from among the listed synonyms. Do not repeat any of the synonyms. When you've finished, read your sentences out loud and listen to how the sound and rhythm changes. Remember to put your verbs back in the past tense!

If you're not sure which subsections of the thesaurus you should go to, ask your instructor for help.

When you're finished, show your work to your instructor.

HOW TO HELP THE STUDENT WITH STEP TWO

The student's answers should resemble the following, although other synonyms are certainly acceptable. "Sorrow" and "regret" are often used as synonyms; if necessary, explain to the student that since Keller uses both, she means that she felt two different emotions. Synonyms for "sorrow" should highlight sadness; synonyms for "regret" should highlight pangs of conscience.

Suddenly I <u>felt</u> a <u>misty</u> consciousness as of something forgotten—a thrill of returning thought; and somehow the <u>mystery</u> of language was revealed to me.

```
felt sense, feel, experience, perceive, apprehend, be aware of
misty faint, pale, weak, dimy, shadowy, obscure, hazy, blurry, uncertain
```

mystery enigma, puzzle, problem, riddle, miraculousness, sealed book, unknown quantity

Neither sorrow nor regret followed my passionate outburst.

sorrow grief, care, woe, sadness, unhappiness, dejection, melancholy, gloom

regret shame, contrition, scruples, self-reproach, penitence

outburst outbreak, flare-up, blaze, explosion, eruption, fit, upheaval

The student's sentences might resemble the following:

Suddenly I sensed a shadowy consciousness as of something forgotten—a thrill of returning thought; and somehow the enigma of language was revealed to me. Neither grief nor shame followed my passionate explosion.

You may need to remind the student that verbs should be put in the past tense.

Day Three: Outlining Exercise



Focus: Finding the main idea in each paragraph of a passage about science

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

The following passage has two parts. The first four paragraphs all deal with the same topic (earthworms); each paragraph explores a different part or feature of the earthworm. The last three paragraphs describe different relatives of the earthworm, so each one has a different topic.

STEP TWO: Construct a one-level outline

Student instructions for Step Two:

Now write a one-level outline for the passage on the worksheet below.

Because the passage shifts from a detailed discussion of earthworms to a more topical description of other worms, you should also shift your outlining style when you get to the last three paragraphs. For the first four paragraphs, use the questions

- 1. What is being described or defined in this paragraph?
- 2. Is there one central thing which is most important about it?

to find the main point. For the last three paragraphs, simply list the topic covered.

Two of the points are done for you.

If you have difficulty, ask your instructor for help. And when you're finished, check your work with your instructor.

Week 3 35

HOW TO HELP THE STUDENT WITH STEP TWO

The student's outline should combine the two kinds of outlining the student has already practiced; the first four points should give the main idea of each paragraph, while the last three should list the topic of each paragraph. The finished outline should resemble the following:

- I. The difference between earthworms and insect larvae
- II. How earthworms benefit the soil OR The earthworm and the soil
- III. What happens when the worm is cut in two OR Cutting the worm in half
- IV. The structure of the earthworm
- V. Hairworms
- VI. The lugworm
- VII. The leech

If the student has difficulty, use the following dialogues

Section 2

Instructor: This paragraph is all about the ways in which an earthworm benefits one particular thing. What is it?

Student: The soil

Instructor "How earthworms benefit the soil" is the main idea.

Section 3

Instructor: What happens to the worm in this paragraph?

Student: It gets cut in half

Instructor: Everything else in the paragraph is related to that main idea.

Section 4

Instructor: The main idea of this paragraph is stated in the very first sentence. Read the first part of that sentence out loud.

Student: The structure of the animal is very simple

Instructor: Breathing organs, blood, the blood system, eyes, and hearing all have to do with the structure of the earthworm

Sections 6 and 7

Instructor: What kind of worm is described?

Student: The lugworm and The leech

Instructor: That is the topic of the paragraph.

Day Four: Thesaurus Use



Focus: Using the thesaurus

STEP ONE: Practice thesaurus use

Student instructions for Step One:

For each underlined noun, adjective, and verb, find four synonyms in your thesaurus. (You only need to use two for "loosened.") List those synonyms on the lines provided. Remember that you must provide noun synonyms for nouns, adjective synonyms for adjectives, and verb synonyms for verbs.

When you look up a verb, remember that you'll need to look up the active form and the the present tense. "Is loosened" is the past tense and passive form of "loosen." "Is aired" is the past tense and passive form of "air." (Make sure you look at the *verb* "air," not the *noun* "air"!) What is the active, present form of "is enriched"?

After you've found the synonyms, rewrite each sentence one time on your own paper, choosing from among the listed synonyms. Do not repeat any of the synonyms. When you've finished, read your sentences out loud and listen to how the sound and rhythm changes. Remember to put your verbs back in the past tense!

When you are finding synonyms for science writing, you should be particularly careful to pick words close in meaning. Leeches are found in pools, not oceans—even though "pool" and "ocean" may both be found in the same section of your thesaurus. In this exercise, work hard to find the *right* synonyms.

When you're finished, show your work to your instructor.

HOW TO HELP THE STUDENT WITH STEP ONE

This exercise is challenging, not because the words are difficult, but because the student must find very close equivalents; "soil" is the same as "dirt," but in this context it is not the same as "dust" or "soot." You may need to encourage the student to look at more than one thesaurus entry; for example, the thesaurus entry for "soil" includes "dirt" but no other useful synonyms, so the student will then need to look up "dirt." The entry for "dirt" includes "land," and the entry for "land" includes "ground" and "earth."

Thus the <u>soil</u> is <u>loosened</u>, <u>aired</u> and <u>enriched</u> by the same process.

soil dirt, land, earth, ground

loosened break up, separate, work loose

aired aerate, aerify, give air, freshen, oxygenate, ventilate enriched cultivate, enhance, upgrade, augment, build up, fertilize

The leech is a wormlike animal often found in pools.

animal being, creature, living thing, wild thing, entity, thing, invertebrate

found discover, encounter, identify, locate, observe, spot, see

Part II

BUILDING BLOCKS FOR COMPOSITION WEEKS 4-15

Overview of Weeks 4-15

In the next twelve weeks of this course, the student will spend one day working on a review of narration skills. On the second day of each week, he will complete an outlining exercise; on the third and fourth days, he will learn about *topoi* by analyzing and copying a model. The first 12 topoi lessons cover the most basic composition elements: chronological narration and description.

The only exception to the pattern is in Weeks 4–5, when the first assignment to copy a model is extended over two days so that the student is not overwhelmed.

Weekly pattern:

Review of Year 4 Skills, 1-Level Outlines, Foundational Topoi

Day 1: Narrative summary

Day 2: Outlining exercise

Day 3: Analyze topos model

Day 4: Practice topoi model

Topoi, Weeks 4-15

Chronological narration in history (Weeks 1, 3, 8)

Chronological narration in science (Weeks 2, 4, 12)

Spatial description of a place (Weeks 5, 6, 7, 8)

Scientific description of an object or phenomenon (Weeks 9, 10, 11, 12)

WEEK 4

Day One: Original Narration Exercise



Focus: Summarizing a narrative by choosing the main events and listing them chronologically.

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

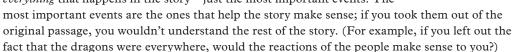
Read the following excerpt from Edith Nesbit's The Book of Dragons.

STEP TWO: **Note important events**

Student instructions for Step Two:

You will now summarize the passage in three or four sentences and write those sentences down on your own paper.

Before you can write a brief summary of a lengthy passage, you'll need to identify the most important events in the passage. On your scratch paper, write down five or six phrases or short sentences that will remind you of the things that happened in the story. Do not use more than six phrases or short sentences! Remember, you're not supposed to write down everything that happens in the story—just the most important events. The



Be sure to write the events down in the same order that they happen in the story. Here's a head start: begin with the sentence, "Effie got a dragon in her eye." If you have trouble with this assignment, ask your instructor for help.



The student should have written down on scratch paper five or six short phrases or sentences that summarize the main events. The phrases/sentences should resemble five or six of the following (these are given only as a guide):



Effie got a dragon in her eye.

Her brother found a dragon in his tea.

Doctor and father amazed by dragons

Soon there were dragons all over the place.

Dragons—looked the same, all different sizes.

At first the newspapers called them lizards.

The large dragons went to bed early.

The small dragons got everywhere.

Got into everything, larger ones bit and got into beds

No point in offering a reward, everybody wanted to kill them

Everyone killed the dragons.

The police caught the dragons on sticky wood and canvas towers.

The stores were full of dragon poison and other remedies.

But there were more dragons than ever.

(Remember, the student should not provide more than five or six phrases/sentences.)

Beginning writers often have difficulty telling the difference between main events and supporting details. Watch the student as she writes down her phrases. If she's writing too many phrases, or the sentences are long and complex, stop her before she goes on. Ask her the following questions to help her distinguish between main events and supporting details:

Is the story about Effie and her family, or about the dragons? (Dragons)

How did the characters in the story react to the dragons (They were interested/curious, when they first appeared? they kept them as specimens, they were pleased with them)

What changed their reaction to the dragons? (There were dragons everywhere.)

How did people try to get rid of the dragons? (They killed them; the police Just list two things. set up sticky towers to catch them; they poisoned them.)

What was the result? (There were more dragons than ever.)

If the student is still having trouble deciding what events to leave out, ask her: If you left this event out, would the rest of the story still make sense? If it would, it's a minor detail and can be eliminated.

STEP THREE: Write summary sentences

Student instructions for Step Three:

After you've written down your five or six phrases or sentences, try to combine them into three or four sentences. You can do this by putting two phrases in the same sentence (for example, "Effie got a dragon in her eye" and "Her brother got a dragon in his tea" could be combined into "Effie and her brother both found small dragons). Or you may find that one or more of your jotted notes turns out to be unnecessary. (If you wrote down, "Everyone killed the

Week 4 41

dragons" as well as "Police caught dragons and burned them," you don't really need the second sentence. If everyone was killing the dragons, that includes the police.)

Try to avoid listing minor details; instead, stick to main events. If you took a main event out of the original story, the rest of the story wouldn't make sense. (It doesn't really matter what the newspapers first called the dragons—without that detail, the story still makes sense. But if we didn't know that the dragons were everywhere, we wouldn't understand why they were such a big problem.

Say your three or four sentences out loud several times before writing them down. After you've written the sentences down, ask your instructor to check them.

If you have trouble, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP THREE

In this step, the student practices turning the jotted phrases and sentences into three or four coherent, smooth sentences. She should say her three or four sentences out loud several times before she writes; listen to make sure that you hear her talking out loud, and if necessary remind her that she should be speaking before she writes.

You may need to help her combine two phrases into one sentence. (For example, Soon there were dragons all over the place and Dragons—looked the same, all different sizes could be combined into "Soon there were dragons of all different sizes all over the place.") Encourage her to eliminate those phrases which seem unnecessary; in the list above, At first the newspapers called them lizards should be cut because the subject of naming the dragons never comes up again.

When the summary is finished, check it using the following rubric.

Week Four Narration Rubric

Organization

- 1 Events should be in chronological order.
- 2 If two or more events are listed in a single sentence, they should have a cause and effect relationship.

For example:

The dragons were everywhere, and everyone killed them.

is acceptable; because the dragons were everywhere, everyone killed them.

The newspapers called the dragons lizards at first, and everyone killed them.

is not acceptable. There is no causal relationship between the two sentences.

3 Each event of major importance should be in the summary (if it were missing from the original passage, the narrative would no longer make sense.)

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.

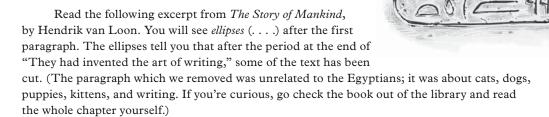
Day Two: Outlining Exercise



Focus: Finding the main idea in each paragraph of a historical narrative

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:



STEP TWO: Construct a one-level outline

Student instructions for Step Two:

Instead of simply summarizing this passage, you will outline it.

Let's review the outlining process. You'll begin by looking for the main idea in each section of text. The passage above is divided into four sections (there's an extra space between each section). For each section, try to come up with a single sentence that states the main idea. In previous lessons, you did this for single paragraphs; often, though, a single main idea will be explored in more than one paragraph.

Don't try to include as much information as possible in this single sentence. Ask yourself two sets of questions:

- 1. What is the main thing or person that this section is about? *Or* Is the section about an idea?
- 2. Why is that thing or person important? Or What did that thing or person do/what was done to it? Or What is the idea?

Try that for the first section. What is the main thing or person that this section is about? If you're not sure, ask yourself: Who was responsible for all the inventions and discoveries in that first paragraph?



The Egyptians.

Now look at everything else in the passage, which tells you why the Egyptians were important: they were important because of all the things they did.

You can't list each individual invention or discovery, because you're not trying to include *all* the information in a single sentence. If you knew someone who played basketball, football, soccer, volleyball, and field hockey, you wouldn't summarize by saying, "She plays basketball, football, soccer, volleyball, and field hockey." You'd say, "She plays many sports."

Week 4 43

Try finishing your sentence now. What did you come up with?



Your sentence should sound like one of these:

- I. The Egyptians invented and discovered many things or
- I. The Egyptians made many inventions and discoveries.

(Be sure not to simply copy the first sentence in the paragraph. Remember, this is supposed to be a summary in *your own words*.)

Now work on coming up with a summary sentence for each one of the remaining four sections. (You can use the sentence we gave you for the first section.) When you write an outline, you should use Roman numerals for the summary sentences, like this:

- I. The Egyptians made many inventions and discoveries.
- II. Second sentence
- III. Third sentence
- IV. Fourth sentence

For this assignment, try to use complete sentences (although this isn't always necessary in an outline).

When you are finished, check your assignment with your instructor.

HOW TO HELP THE STUDENT WITH STEP TWO

For each section of text, the student should pick out a major point by asking herself two sets of questions:

- 1. What is the main thing or person that this section is about? Or Is the section about an idea?
- 2. Why is that thing or person important? *Or* What did that thing or person do/what was done to it? *Or* What is the idea?

Suggested answers (the student's sentences should resemble the following but don't need to be identical):

- I. The Egyptians invented and discovered many things.
- II. Egyptian writing could not be read
- III. A French officer discovered a stone with writing on it.
- IV. Champollion discovered the main principles of Egyptian writing.

If the student struggles with this assignment, use the following dialogues:

Section 2

Instructor: What is the main thing this section is about? Hint: it is mentioned in every single sentences.

Student: Egyptian writing or hieroglyphs [the student may use this name even though it is not in the passage].

Note to Instructor: If the student answers "strange pictures" or "queer figures," point out that these are synonyms for the same thing and ask: What is that thing?

Instructor: What is important about this writing? Hint: the answer is suggested in the first and third sentences and stated clearly in the last sentence.

Student: No one could read or decipher or understand it.

Instructor: Make sure that your main point has "Egyptian writing" as the subject of the sentence.

Section 3

Instructor: It may be a little harder for you to find the main idea of this section. Is Bonaparte's visit to Africa the most important thing that happens? Hint: do we hear any more about it after this one section?

Student: No.

Instructor: What is the other important event in this section?

Student: A French officer discovers a stone with writing on it or A French officer found the Rosetta Stone or A French officer found a slab of basalt with three inscriptions on it.

Instructor: That is the main idea of the passage, because if you don't know about the discovery of the stone, you won't understand the next section.

Note to Instructor: Encourage the student to put his sentence in the past tense, since the passage itself is in the past tense.

Section 4

Instructor: This last section tells you about Champollion [this should be pronounced *sham-poe-LYAHN*, with the "ly" slurred together to make a single sound].

Student: He discovered the meaning of Egyptian writing or He discovered the main principles of hieroglyphs.

Instructor: That's an important point—but it doesn't cover the information in the last two and half sentences. Those sentences aren't about Champollion. What are they about?

Student: They are about us OR They are about our being able to read Egyptian writing.

Note to Instructor: If the student says "About us," ask, "About our being able to do what?" Instructor: So the sections about Champollion and about us are both about the same *action* or *ability*. What is that action or ability?

Student: Reading Egyptian writing

Instructor: Your last main point should be about learning to read Egyptian writing. Try to put that into a phrase of your own.

Week 4 45

Day Three: Analyzing the Topos



Focus: Understanding the form of a chronological narrative about a past event

The passage the student outlined in the last writing session is an example of this week's *topos:* a **chronological narrative about a past event** (the deciphering of Egyptian writing). Remember, a *topos* is a form of writing: a "place" that the student can go to find topics in history and science.

A chronological narrative about a past event explains what happened in the past, and in what sequence. A chronological narrative can stand on its own as a history composition, or can be a smaller part of a larger paper.

In today's assignment, the student will examine how a chronological narrative is put together. The work should be done independently; the student's directions are reproduced below for your reference.

STEP ONE: Examine model passages

When you set out to write a chronological narrative in history, you aim to answer two simple questions:

Who did what to whom? (Or, What was done to what?) In what sequence?

Look again at the outline you made of the passage from *The Story of Mankind*. The exact words you used will be different, but the outline probably looks something like this:

- I. The Egyptians invented and discovered many things.
- II. Egyptian writing could not be read
- III. A French officer discovered a stone with writing on it.
- IV. Champollion discovered the main principles of Egyptian writing.

Notice that each one of these main points answers the first question: Who did what to whom? (Or, What was done to what?)

- I. Who? The Egyptians Did what? invented and discovered To what? many things.
- II. What? Egyptian writing What was done to it? could not be read
- III. Who? A French officer Did what? discovered to what? a stone with writing on it.
- IV. Who? Champollion Did what? discovered To what? the main principles of Egyptian writing.

The points are also put into chronological order (in other words, the oldest event comes first, the next oldest second, and so on). First, Egyptians invented writing. After that, the ability to read the writing faded away. Long after that, a French officer discovered the stone. And after the discovery of the stone, Champollion cracked the code of Egyptian writing.

Here is a second example of a **chronological narrative about a past event**, from *Albert Einstein and the Theory of Relativity*, by Robert Cwiklik. It describes a village festival that Albert Einstein went to when he was four years old.

This chronological narrative about a past event introduces a discussion about Albert Einstein's early interest in electricity. Because chronological narratives sound like stories, they seize the reader's attention.

Glance back over the four sections and notice the order of events.

In the first section, nothing has happened yet; the crowd is just waiting for an event. With your pencil, underline "the crowd" (the *who*) once. Underline the phrase "they were waiting" twice (this answers the question *did what?*).

The second section happens right after the first section. You know this because of the word "suddenly." Draw a box around "suddenly." Underline "gas lamps" once and "dimmed" twice. These words answer the question *What did what?*

In the third section, underline "the band" and "the people" (the *who*) once. Underline the phrase "grew so quiet" twice (this answers the question *did what?*).

In the final section, draw a box around "then." This time word tells you that the last section comes *after* the events listed earlier. Underline "electric lights" once and "exploded in a blaze" twice. These words answer the question *What did what?*

Now look at the summary below:

At first, the crowd was waiting.

Suddenly the gas lamps dimmed.

The band and the people grew quiet.

Then electric lights exploded in a blaze.

The original narrative has a lot more details in it—but this summary shows you exactly how the writer tells each main event in chronological order.

STEP TWO: Write down the pattern of the topos

Now copy the following chart onto a blank sheet of paper in the "Reference" section of your Composition Notebook. You will be adding to this page as you learn more about chronological narratives, so leave plenty of room at the bottom of the page; also leave blank space under the "Remember" column.

Chronological Narrative of a Past Event

Definition: A narrative telling what happened in the past and in what sequence

Procedure

Remember

- 1. Ask Who did what to whom? (Or, What was done to what?)
- 2. Create main points by placing the answers in chronological order.

Week 4 47

Day Four: Practicing the Topos



Focus: Learning how to write a chronological narrative about a past event

A chronological narrative about a past event can be used in many different kinds of writing. If the student is asked to write about history, he can decide to tell, in order, what happened during a battle, or when a king died and his heir fought for the throne, or when an explorer set off to find a new land. But he can also use a short chronological narrative as the introduction to a scientific composition, or as a way to grab the reader's interest in a composition on any other subject. Here's the beginning of Susan Casey's book *The Wave: In Pursuit of the Rogues, Freaks, and Giants of the Ocean*

57.5° N, 12.7° W, 175 miles off the coast of Scotland February 8, 2000

The clock read midnight when the hundred-foot wave hit the ship, rising from the North Atlantic out of the darkness. Among the ocean's terrors a wave this size was the most feared and the least understood, more myth than reality—or so people had thought. This giant was certainly real. As the RRS *Discovery* plunged down into the wave's deep trough, it heeled twenty-eight degrees to port, rolled thirty degrees back to starboard, then recovered to face the incoming seas. . . . Captain Keith Avery steered his vessel directly into the onslaught, just as he had been doing for the past five days. . . . He stood barefoot at the help, the only way he could maintain traction after a refrigerator toppled over, splashing out a slick of milk, juice, and broken glass (no time to clean it up—the waves just kept coming). . . . [The] waves suddenly grew even bigger and meaner and steeper. Avery heard a loud bang coming from *Discovery's* foredeck. He squinted in the dark to see that the fifty-man lifeboard had partially ripped from its two-in-thick steel cleats and was pounding against the hull.⁴

That's a much more interesting beginning than "The significant wave height, an average of the largest 33 percent of the waves, was sixty-one feet, with frequent spikes far beyond that," which the writer gets to after the story is over.

Today, the student will practice putting together a chronological narrative of his own.

Note to Instructor: The "Practicing the Topos" exercises provide you with detailed answers and a script to help guide the student. However, if you feel comfortable guiding the student on your own, you may always allow the student to practice the topos by drawing mate-

rial from his current history or science reading and using the same principles outlined below.

In later weeks, the "Practicing the Topos" exercise will be completed in a single session.

^{4.} Susan Casey, The Wave: In Pursuit of the Rogues, Freaks, and Giants of the Ocean (New York: Doubleday, 2010) pp. 3-4

Since this is the first time the student has attempted to use this skill, this first exercise will be divided between today and the first day of next week's lesson.

STEP ONE: Plan the narrative

Student instructions for Step One:

Your first step is to plan out the narrative by choosing a theme (this will also serve as your title) and selecting the events you'll write about.

On the next page, you'll see a list of events, written out chronologically for you, from the life of Alexander the Great. The bolded entries are main events; the indented entries are further details about those main events. (These details are taken from Plutarch's "Life of Alexander," written in 75 AD.)

Your assignment is to write a chronological narrative based on these events. This chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.

You may choose where your narrative begins and ends, but the narrative must progress chronologically forward at all times. Do not try to include all of the events! Instead, you will need to select which events to use and which ones to leave out. This will force you to pick a "theme" for your chronological narrative.

For example: if you decide that your chronological narrative will be about "Alexander's Invasions," you might want to start your chronological narrative at 334 BC, the invasion of Persia, and only include the following events:

Invaded Persia in 334

Invaded Egypt in 332 BC

Defeated Darius for a second time

Declared himself king of Persia

Invaded India in 326 BC

because all of those events have something to do with Alexander's invasions.

If, on the other hand, you wanted to write a chronological narrative about "Alexander's Early Life," you might choose the following events:

Born in 356 BC

Son of Philip II, king of Macedon

Tamed the horse Bucephalus at age 10

Taught by Aristotle from ages 13-16

Fought at his father's side beginning in 338 BC

and ignore the Persians completely.

Because this is the first time you've written a chronological narrative, you may use either of the lists above. Here are other possible themes:

"Alexander's Reign"

"The End of Alexander's Life"

"Alexander and Persia"

Choose a theme and select four or five main events to use in your chronological narrative. (You can also come up with a theme of your own.)

If you have difficulty, ask your instructor for help.

EVENTS IN ALEXANDER THE GREAT'S LIFE

Born in 356 BC

Mother, Olympia

Son of Philip II, king of Macedon

Philip conquered most of Greece

Week 4 49

Greek cities added to Macedonian kingdom

Tamed the horse Bucephalus at age 10

Philip intended to buy horse

Horse: wild, unmanageable

Alexander asked to ride the horse

Promised his father: If I can't ride it, I'll pay for it

Horse was afraid of shadow

Turned horse towards sun, rode horse

Taught by Aristotle from ages 13-16

Most famous philosopher in the world at this time

Gave Alexander lifelong thirst for knowledge

Interested in medicine, philosophy, history

Fought at his father's side beginning in 338 BC

Led his father's army to victory, Battle of Chaeronea

Father assassinated in 336

Assassin was bodyguard, Pausanias

Pausanias then killed by rest of bodyguard

Succeeded his father to the throne

Twenty years old

Had all of his rivals to the throne murdered

Greek cities rebelled, had to reconquer them

Invaded Persia in 334

Went to the city of Gordium

Untied the Gordian knot (impossible to untie) by cutting it

Defeated the Persian king Darius at the Battle of Issus

Darius fled, left his wife, mother, and daughters behind

Alexander treated the women with respect

Invaded Egypt in 332 BC

Proclaimed Pharoah

Founded Alexandria

Defeated Darius for a second time

Darius and army defeated at the Battle of Gaugamela

Darius once again forced to flee

Alexander captured Babylon and Susa

Darius was assassinated by his own kinsman, Bessus

Declared himself king of Persia

Invaded India in 326 BC

Crossed the Indus River

Fought against Indian king Porus and troop of elephants

Troops mutinied and refused to go any further

Alexander, furious, shut himself into his tent

Finally Alexander agreed to go home

Returned to Babylon

Marched back through the Gedrosian Desert

Famine, thirst, disease killed 3/4 of men before he got home

Died in 323 BC

Came down with a fever in early June

Fever lasted for weeks

In the last few days, unable to speak or name a successor

Died on June 28th

Kingdom divided among his generals

HOW TO HELP THE STUDENT WITH STEP ONE

In this step, the student will simply choose how many events to include in his chronological narrative. You may need to help him select the correct events. Encourage him to include four or five main (bolded) events, but no more. Remind him that he can leave out main events that do not go with his theme.

Two themes are already described in the assignment. The following events belong with the three remaining suggested themes:

"The Beginning of Alexander's Reign"

(These are simply the first five events of Alexander's independent rule, but if necessary, you can explain to the student that the final conquest of the Persians marked the end of Alexander's first great royal campaign.)

Succeeded his father to the throne

Twenty years old

Had all of his rivals to the throne murdered

Greek cities rebelled, had to reconquer them

Invaded Persia in 334

Went to the city of Gordium

Untied the Gordian knot (impossible to untie) by cutting it

Defeated the Persian king Darius at the Battle of Issus

Darius fled, left his wife, mother, and daughters behind

Alexander treated the women with respect

Invaded Egypt in 332 BC

Proclaimed Pharoah

Founded Alexandria

Defeated Darius for a second time

Darius and army defeated at the Battle of Gaugamela

Darius once again forced to flee

Alexander captured Babylon and Susa

Darius was assassinated by his own kinsman, Bessus

Declared himself king of Persia

"The End of Alexander's Life"

(These four events follow Alexander's assumption of the Persian crown, which was the high point of his power; the refusal of his troops to go further into India, was the first check to his power, and each of the following events decreased his authority a little more.)

Invaded India in 326 BC

Crossed the Indus River

Fought against Indian king Porus and troop of elephants

Troops mutinied and refused to go any further

Week 4 51

Alexander, furious, shut himself into his tent Finally Alexander agreed to go home

Returned to Babylon

Marched back through the Gedrosian Desert Famine, thirst, disease killed 3/4 of men before he got home

Died in 323 BC

Came down with a fever in early June Fever lasted for weeks In the last few days, unable to speak or name a successor Died on June 28th

Kingdom divided among his generals

"Alexander and Persia"

(The three following events are the only ones having to do directly with Persia. If the student chooses this theme, point out that he should eliminate the invasion of Egypt because, even though it happened between the first invasion of Persia and the second defeat of Darius, it doesn't directly relate to the theme; this would be a good time to explain that a chronological narrative doesn't have to include *every* event, as long as the events that *are* present are covered in chronological order. You can also tell the student that a narrative containing only three events is acceptable because there are so many details following the first and second events.)

Invaded Persia in 334

Went to the city of Gordium

Untied the Gordian knot (impossible to untie) by cutting it

Defeated the Persian king Darius at the Battle of Issus

Darius fled, left his wife, mother, and daughters behind

Alexander treated the women with respect

Defeated Darius for a second time

Darius and army defeated at the Battle of Gaugamela

Darius once again forced to flee

Alexander captured Babylon and Susa

Darius was assassinated by his own kinsman, Bessus

Declared himself king of Persia

STEP TWO: Become familiar with time and sequence words (Student Responsibility)

Student instructions for Step Two: The student will work independently for Step Two, but the instructions are reproduced below for your reference.

Remember, when you write a chronological narrative of a past event, you ask: Who did what to whom? (Or, What was done to what?). In this exercise, most of this information is

supplied so that you can concentrate on making the narrative flow smoothly forward in chronological order. (In later assignments, after you've had a little more practice, you'll take more responsibility for finding the information as well).

In this first chronological narrative assignment, concentrating on using **time** and **sequence** words to turn the listed events into clear, straightfoward prose. For example, if you were writing a narrative that included this main event:

Invaded Persia in 334

Went to the city of Gordium

Learned myth about Gordian knot (who untied it would rule the world)

Cut the knot

Defeated the Persian king Darius at the Battle of Issus

Darius fled, left his wife, mother, and daughters behind

Alexander treated the women with respect

one part of your narrative might end up sounding like this:

Alexander invaded Persia in 334. **Eventually,** he travelled to the city of Gordium. In the city was a knot known as the Gordian knot; according to myth, whoever could untie the knot would rule the world. **As soon as** he heard the myth, Alexander drew his sword and cut the knot instead.

After some time, Alexander met the Persian king, Darius, and the Persian army at the Battle of Issus. He defeated Darius in battle. **Immediately afterwards,** Darius fled. He fled so quickly that he left his wife, mother, and daughters behind him. But **when** Alexander realized this, he treated the women with respect.⁵

Look back at the words in bold print. All of them are **time** and **sequence** words — words that you use in a chronological narrative to show the order in which events happen.

Plan on using the following list of time words as you construct your chronological narrative. You'll try to use at least three of them, without repeating any. Finish today's work by reading the time words out loud.

SEE TIME AND SEQUENCE WORDS APPENDIX in student workbook.

You've finished a long assignment today. At the beginning of next week, you'll return to your list of events and use it to write brief chronological narrative.

^{5.} **Note:** If you know other details about Alexander (more about the Gordian knot, or the Battle of Issus, or the Persian king Darius), you may certainly use them to make the narrative more interesting. But remember: this isn't required, and you can't go over 300 words for the entire composition.

WEEK 5

Day One: Finishing the Chronological Narrative



Focus: Learning how to write a chronological narrative about a past event

At the end of last week, the student began to work on writing a chronological narrative of a past event. He selected events from a list, and also read through time and sequence words. Today, he will finish this narrative.

STEP ONE: Review the Topos (Student Responsibility)

Student instructions for Step One:

Turn to the Chronological Narrative of a Past Event chart in your Composition Notebook. Add the bolded events below under the "Remember" column.

Chronological Narrative of a Past Event

Definition: A narrative telling what happened in the past and in what sequence

Procedure

- 1. Ask Who did what to whom? (Or, What was done to what?)
- 2. Create main points by placing the answers in chronological order.

Remember

- 1. Select your main events to go with your theme
- 2. Make use of time words

You will find a copy of the Time and Sequence Words reference sheet in Appendix X. Take it out and place it in the Reference section of your Composition Notebook, just after the Chronological Narrative of a Past Event page.

STEP TWO: Write the Narrative

Student instructions for Step Two:

Now use the events list you worked on at the end of last week and write your own chronological narrative, based on it.

Here's a summary of your assignment:

- 1) This chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.
- 2) You may choose where your narrative begins and ends, but the narrative must progress chronologically forward at all times.
- 3) Do not try to include all of the events! Instead, you will need to select which events to use and which ones to leave out. This will force you to pick a "theme" for your chronological narrative.
 - 4) Use three or more time words in your narrative.

Try not to use the identical words of the events list. For example, if you are using the following events:

Son of Philip II, king of Macedon

Philip conquered most of Greece Greek cities added to Macedonian kingdom

try not to write:

Alexander was the **son** of Philip II, **king** of Macedon. Philip conquered most of Greece. He added the **Greek cities** to the **Macedonian kingdom**.

Changing the common nouns and their adjectives (the words in bold print) is a simple and straightforward way to make your narrative sound different:

Alexander was the **heir** of Philip II, **ruler** of Macedon. Philip conquered most of Greece. He added the **city-states** of **Greece** to **his realm**.

If you have difficulty, ask your instructor for help. And when you're finished, show your composition to your instructor.

HOW TO HELP THE STUDENT WITH STEP TWO

There are three possible areas of difficulty with this assignment.

1) The student may need encouragement to leave out some of the details related to his main events. For example, if he is using this main event:

Invaded India in 326 BC

Crossed the Indus River

Fought against Indian king Porus and troop of elephants

Troops mutinied and refused to go any further

Alexander, furious, shut himself into his tent

Finally Alexander agreed to go home

and his composition is running too long, you could point out that any of the following combinations of details makes sense:

Week 5 55

Invaded India in 326 BC

Troops mutinied and refused to go any further Alexander, furious, shut himself into his tent Finally Alexander agreed to go home

Invaded India in 326 BC

Crossed the Indus River Troops mutinied and refused to go any further Finally Alexander agreed to go home

Invaded India in 326 BC

Crossed the Indus River

Fought against Indian king Porus and troop of elephants

Troops mutinied and refused to go any further

Finally Alexander agreed to go home

Use your judgment in suggesting details that can be left out; the point of this exercise is not to pick the "right" details, but to practice moving the narrative forward.

- 2) The student may need help choosing the correct time words. If necessary, go over the "Time and Sequence Words" reference list with him and suggest six or seven appropriate words for him to choose from. If the student has difficulty moving from one topic to the next, encourage him to use his Time and Sequence Words for transitions. ("One of the first cities he encountered
- 3) The student may have trouble using his own phrasing. If necessary, help him find synonyms for the nouns and adjectives in the event list. Don't be afraid to give him two or three alternatives to choose from. (You can use a thesaurus for your own reference; see Appendix X if you're not familiar with thesaurus use.)

Right now, the student has only been asked to look at nouns and adjectives, and thesaurus use has not yet been covered. This is intentional. Remember: the focus of this lesson is the form of the chronological narrative, and trying to learn two new skills at the same time can discourage a young writer. There are many ways to rephrase sentences, and these will be covered in detail in the *copia* exercises that begin in Week 16. In these first weeks, the student is merely becoming familiar with the concept of restating ideas in different words.

When the narrative is finished, check it using the following rubric.

Week One/Two Rubric Chronological Narrative of Past Events

Organization

- 1 Events should be in chronological order.
- **2** Three or more time words should be used.
- **3** The composition should use more than 150 but fewer than 300 words.

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.
- **3** The exact words of the source material should not be used in every sentence.

Day Two: Outlining Exercise



Focus: Finding the main idea in each paragraph of a scientific narrative

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from 100 Greatest Science Discoveries of All Time, by Kendall Haven.

STEP TWO: Construct a one-level outline (Student Responsibility)

Student instructions for Step Two:

Begin to outline this passage by looking for the main idea in each section of text. You'll see that the passage above is divided into five sections (there's an extra space between each section). For each section, try to come up with a single sentence that states the main idea.

Remember, you shouldn't try to include as much information as possible in this single sentence. Ask yourself two sets of questions:

- 1. What is the main thing or person that this section is about? Or Is the section about an idea?
- 2. Why is that thing or person important? Or What did that thing or person do/what was done to it? Or What is the idea?

Week 5 57

Try that for the first section. What is the main thing or person that this section is about? (That should be easy—whose name is mentioned three times?)



Vesalius (of course).

Now look at everything else in the passage, which tells you a number of different facts about Andreas Vesalius's early life—where he was born, what he read, what he did, what field of study he decided to pursue. All of these facts don't belong in your sentence. But the last three (he read medical books, he dissected animals, he went to medical school) all tell you about a single quality that Vesalius had—a quality that makes him important. He was important because he was. . .

Try finishing that sentence now.



What did you come up with? It should sound like one of these:

- I. Vesalius was curious about living things.
- I. Vesalius was interested in living things.
- Vesalius was curious about how living things functioned.

Now work on coming up with a summary sentence for each one of the remaining four sections. (You can use the sentence we gave you for the first section.) Continue to use Roman numerals for the summary sentences, like this:

- I. Vesalius was curious about living things.
- II. Second sentence
- III. Third sentence
- IV. Fourth sentence
- V. Fifth sentence

For this assignment, try to use complete sentences (although this isn't always necessary in an outline).

If you have difficulty, ask your instructor for help. And when you are finished, check your assignment with your instructor.

HOW TO HELP THE STUDENT WITH STEP TWO

For each section of text, the student should pick out a major point by asking herself two sets of questions:

- 1. What is the main thing or person that this section is about? Or Is the section about an idea?
- 2. Why is that thing or person important? Or What did that thing or person do/what was done to it? Or What is the idea?

Suggested answers (the student's sentences should resemble the following but don't need to be identical):

- I. Vesalius was curious about living things OR Vesalius was curious about how living things functioned.
- II. Dissection was not done in medical school OR Anatomy was not taught through

dissection.

III. Vesalius was known for dissection OR Vesalius learned through dissection.

- IV. Vesalius then gave lectures based on dissection OR Vesalius then gave lectures about the human body.
- V. Vesalius showed that Galen was wrong.

If the student struggles with this assignment, use the following dialogues:

Section 2

Instructor: What is the main thing this section is about?

Student: Dissection.

Instructor: What do we learn about dissection? Hint: it has to do with a negative (something *not* done).

Student: Dissection was not done.

Instructor: Dissection was not done where?

Student: Dissection was not done in medical school.

Note to Instructor: The student might answer "Anatomy" to the first question. This is acceptable, since dissection and anatomy are so closely related. If the answer is "anatomy," ask, "How was anatomy *not* taught?" ("It was not taught through dissection.") "Anatomy was taught through books" is not acceptable because it does not include dissection, which is the main theme not only of this section, but of the whole section.

Section 3

Instructor: Who is this section about? (Again?)

Student: Vesalius.

Instructor: What did Vesalius do? Hint: it's something others did *not* do.

Student: Vesalius dissected bodies OR Vesalius learned through dissection.

Note to Instructor: If the student starts to give individual details, such as "Vesalius took over dissecting at his second lecture" or "Vesalius raided graveyards for bodies," say, "What does that tell us about the single most important thing Vesalius did that others did not?"

Section 4

Instructor: What did Vesalius do after he graduated?

Student: Vesalius gave lectures.

Instructor: What were those lectures about?

Student: The lectures were about dissection OR The lectures were about the human body.

Week 5 59

Note to Instructor: If the student starts to list the specific topics of the lectures (muscles, arteries, nerves, etc.), say, "What do muscles, arteries and nerves all belong to?" ("The human body.")

Section 5

Instructor: There are two important people in this section. Who are they?

Student: Vesalius and Galen.

Instructor: What did Vesalius do to Galen?

Student: He showed that Galen was wrong.

Day Three: Analyzing the Topos



Focus: Understanding the form of a chronological narrative about a scientific event

The passage the student outlined in the last writing session is an example of this week's *topos:* a **chronological narrative about a scientific event** (Vesalius's disproving Galen's theories about anatomy).

A chronological narrative about a scientific event explains *what happened* and *in what sequence*—just like a chronological narrative about a past event (last week's *topos*). There are two major kinds of scientific events that can be narrated chronologically:

- 1. a scientific discovery or advance, and
- 2. a scientific process that happened in the past.

Vesalius's disproving of Galen's theories is an example of the first kind of scientific event. The birth of a star, the retreat of glaciers, and the fossilization of a fallen *T Rex* are examples of the second kind.

Later in the year, the student will work on chronological narratives about scientific processes. This week, the focus will be on chronological narratives about scientific *discoveries*.

The student will do today's work independently; her directions are reproduced below for your reference.

STEP ONE: Examine model passages

When you set out to write a chronological narrative about a scientific discovery, you aim to answer two questions:

What steps or events led to the discovery? In what sequence did these steps or events happen?

Look again at the outline you made of the passage from 100 Greatest Science Discoveries of All Time. The exact words you used will be different, but the outline probably looks something like this:

- I. Vesalius was curious about living things.
- II. Dissection was not done in medical school.
- III. Vesalius learned through dissection.
- IV. Vesalius then gave lectures based on dissection.
- V. Vesalius showed that Galen was wrong.

Notice that each one of these main points, except for the second, lists a step or event that led to Vesalius's contradiction of Galen. The points are also put into chronological order. First, young Vesalius was curious; because he was curious, he dissected and learned; after he learned, he lectured; finally, the lectures showed that Galen was wrong.

So what is the second point doing in the narrative?

Because a chronological narrative about a scientific discovery tells us how a scientist moves from one understanding of the world to another (in this case, from Galen's old understanding of anatomy to Vesalius's new understanding), you will often need to provide a paragraph or section that explains what the old understanding of the world was *before* the discovery. The second point in the narrative tells us about the old approach to anatomy; we need to know this so that we can appreciate just how different Vesalius's new ideas were.

So a chronological narrative about a scientific discovery usually includes a "background point" somewhere near the beginning—a paragraph that gives necessary background information.

Here is a second example of a **chronological narrative about a scientific discovery,** from *Seven African-American Scientists*, by Robert C. Hayden and Richard Loehle. You may not be familiar with the term "Far East," which generally refers to China, Japan, Korea, and other eastern Asian countries.

In this chronological narrative about a scientific discovery, the very first paragraph is the "background point"—the one that gives you the information you need to understand *why* George Washington Carver set out to discover new uses for the peanut. With your pencil, underline "George Washington Carver" once and "faced a real dilemma" twice. Carver had talked farmers into growing peanuts instead of cotton—and now, they had too many peanuts.

Each of the following sections describes, in order, the steps Carver took to discover more about peanuts.

In the second section, draw a box around the word "began." This is the beginning—the first step Carver took. Now ask yourself: What did Carver begin to do? Did he discover anything? Use your pencil to underline the following verbs twice: to shell, ground, heated, put. These verbs show you that Carver's first step was simply to *process* the peanuts—to turn them into powder, mash, and oil.

In the third section, draw a box around the word "then." This time word shows you that the third section happened, chronologically, after the second. Circle the word "oil" in the first sentence, and then circle "soap, cooking oil and rubbing oil" in the second sentence. After Carver processed the peanuts, he was able to turn the oil into three other products.

In the fourth section, draw a box around the word "remained." Then circle "dried peanut cake" in the first sentence "and "cheese" in the second sentence. Carver's next step, after he used the oil, was to make use of what was left *after* the oil was drained away; he made cheese out of the remaining peanut material.

In the fifth section, draw a box around the word "next." This time word shows you that Carver's final actions took place *after* he made cheese from the peanut cake. Circle "peanut cake left in the press" in the first sentence and "protein" in the last sentence. The last thing

Week 5 61

Carver did with the leftover peanut cake was analyze it for protein.

Now look at the summary below:

There were too many peanuts.

Carver began by processing the peanuts.

Then Carver drained off the oil and used it.

Afterwards, Carver made cheese from the peanut cake.

Next, Carver analyzed the leftover peanut cake for protein.

The original narrative has a lot more details in it—but this summary shows you exactly how the writer tells each step in Carver's discoveries in chronological order.

STEP TWO: Write down the pattern of the topos

Now copy the following onto a blank sheet of paper in the Reference section of your Composition Notebook. You will be adding to this page as you learn more about chronological narratives of scientific events, so leave plenty of room at the bottom of the page.

Chronological Narrative of a Scientific Discovery

Definition: A narrative telling what steps or events led to a discovery, and in what sequence

Procedure

- 1. Ask, What steps or events led to the discovery?
- 2. Ask, In what sequence did these steps or events happen?
- 3. Create main points by placing the answers in chronological order.

Remember

 May need a background paragraph explaining the circumstances that existed before the discovery.

Day Four: Practicing the Topos



Focus: Learning how to write a chronological narrative about a scientific discovery

Like a chronological narrative about a past event, a chronological narrative about a scientific discovery can be used as a science composition on its own, or as an introduction to a paper which then goes on to examine scientific concepts. The astronomy textbook *In Quest of the Universe* begins like this:

On the night of March 23, 1993, amateur astronomer David Levy photographed part of the sky near the planet Jupiter. His friends, fellow astronomers Carolyn Shoemaker and her husband Eugene Shoemaker, spotted something unusual in the picture: a comet that had broken up into about 20 pieces. The comet became known officially as Comet Shoemaker-Levy 9 (the ninth comet discovered by these three sky-watchers) and unofficially as the "string of pearls" comet.

When astronomers announced the news of the comet on June 1, 1993, they had traced its path closely enough to tell that it had come under the influence of Jupiter's powerful gravitational field. They had deduced that the comet was pulled apart by Jupiter's gravity in July of 1992. They predicted that the comet would crash into Jupiter on or about July 25, 1994. . . .

By the time of the predicted impacts, the entire world was watching, linked together by the Internet and the television. The Hubble Space Telescope was trained on Jupiter, as was the Galileo space probe then approaching the Jupiter system, as well as most major observatories around the world and untold numbers of amateur telescopes. It has been said that more telescopes were aimed at the same spot—Jupiter—than ever before or since, and the viewers were not disappointed.⁶

This is definitely a more gripping beginning than, "Comets are thought to be material that coalesced in the outer solar system, the remnants of small eddies. These objects would feel the gravitational forces of Jupiter and Saturn, and many would fall onto those planets."⁷

Today, the student will practice putting together a chronological narrative of her own.

STEP ONE: Plan the narrative

Student instructions for Step One:

Your first step is to plan out the narrative.

You'll need to approach the chronological narrative about a scientific discovery a little differently than the narrative about a past event. Because a scientific discovery is reached by a related series of steps, you can't pick and choose among the main events as easily as you did when you wrote about Alexander the Great. (You could leave out Alexander's invasion of India and still have a good historical narrative—but if you left out Vesalius's determination to find corpses and dissect them, his new discoveries about human anatomy wouldn't make sense.)

Instead, when you write the narrative of a scientific discovery, you make three choices:

- 1. Where to begin and end.
- 2. How much detail to use.
- 3. Where to put the "background paragraph," and how much information to include in it.

On the next page, you'll see a list of events, written out chronologically for you, covering Edward Jenner's discovery of the smallpox vaccine. The information for this list was taken from *Doctors and Discoveries: Lives That Created Today's Medicine* (Houghton Mifflin, 2002), by John G. Simmons, and *Diseases: Finding the Cure*, by Rober Mulcahy (The Oliver Press, 1996).

Your assignment is to write a chronological narrative based on these events. This chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.

- 1. Begin planning out your narrative by circling the events that belong in the "background information" paragraph of your composition.
- 2. Next, mark a beginning and ending place for your composition.

^{6.} Theo Koupelis, In Quest of the Universe, sixth ed. (Jones and Bartlett, 2010), pp. 1-2.

^{7.} Koupelis, p. 198.

Week 5 63

3. Each main event in bold print is followed by details about that main event. Draw a light line through the details you don't intend to include.

EVENTS LEADING TO JENNER'S DISCOVERY OF THE SMALLPOX VACCINE

Smallpox was a great danger in the eighteenth century

Killed 40 million people in the eighteenth century

Half of the people who caught smallpox died

Smallpox victims kept in "smallpox houses"

No reliable way to avoid smallpox

Many doctors gave people mild cases of smallpox to protect them

The "mild cases" sometimes killed the patients

Edward Jenner born in 1749

Inoculated against smallpox as a child

Inoculation made him sick

Kept in a smallpox house while he was sick

Jenner began to train as a doctor in 1762

Apprentice to a surgeon for eight years

Entered St. George's Hospital in 1770

Studied surgery and anatomy

Jenner began to practice medicine in his home town in 1773

Jenner noticed that milkmaids were not getting smallpox

Knew milkmaids often had cowpox

Cowpox gave cows blisters on their udders

Milkmaids sometimes got blisters on hands and arms

Cowpox gave patients a fever that lasted 4 days

Many local people believed that cowpox gave them immunity to smallpox

Jenner investigated relationship between smallpox and cowpox

Kept records of cowpox outbreaks

Discovered two forms of cowpox

Decided only one form of cowpox gave immunity to smallpox

Jenner inoculated James Phipps on May 14, 1796

James Phipps was 8 years old

Jenner used pus from a cowpox blister

Jenner scraped Phipps's arm and put pus into it

Phipps had a small fever

Jenner tried to give Phipps a mild case of smallpox

Phipps was immune

Jenner tested his vaccine on 23 other people

Did not know why vaccination worked

Believed his observations were correct

Jenner published his results

At first, other doctors skeptical

Royal Society of Medicine refused to accept his findings

Some people afraid cowpox would make them act like cows

Vaccine slowly accepted.

Parliament gave Jenner money in 1802 to continue his research

12,000 people vaccinated in 1804

British government began to give the vaccines in 1808

Deaths decreased to 600 per year

HOW TO HELP THE STUDENT WITH STEP ONE

The student should have circled the first two main events to use in her "background information" paragraph.

If she needs assistance choosing beginning and ending points, you may suggest one of the following:

Begin with Edward Jenner born in 1749 and end with Jenner inoculated James Phipps on May 14, 1796. (This allows the student to tell the story of Jenner's own experience with smallpox and then to end with Jenner's first "victory" over the disease.)

Begin with Jenner noticed that milkmaids were not getting smallpox and end with Vaccine slowly accepted. (This focuses in more narrowly on the discovery of the vaccine itself.

STEP TWO: Use time and sequence words (Student Responsibility)

Student instructions for Step Two:

You'll use time and sequence words in this composition, just as you did in last week's assignment.

Turn to the Chronological Narrative of a Scientific Discovery chart in your Composition Notebook. Add the bolded events below under the "Remember" column.

Chronological Narrative of a Scientific Discovery

Definition: A narrative telling what steps or events led to a discovery, and in what sequence

Procedure

- 1. Ask, What steps or events led to the discovery?
- 2. Ask, In what sequence did these steps or events happen?
- 3. Create main points by placing the answers in chronological order.

Remember

- May need a background paragraph explaining the circumstances that existed before the discovery.
- 2. Make use of time words

Now pull out your "Time and Sequence Words" list and keep in in view as you write. Refer to your list of time words as you construct your chronological narrative. Try to use at least three of them, without repeating any.

STEP THREE: Write the narrative

Student instructions for Step Three:

Here's a summary of your assignment:

- 1) This chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.
 - 2) You may choose where your narrative begins and ends, but the narrative must progress

Week 5 65

chronologically forward at all times.

3) The only exception is your "background paragraph," where you describe what the world was like before the smallpox vaccine. This paragraph should come early in the composition (first or second).

- 4) Do not include all of the details.
- 5) Use three or more time words in your narrative.
- 6) Try not to use the identical words of the events list. As you did last week, change the common nouns and adjectives if necessary so that your narrative is not a direct copy of the events list.

If you have difficulty, ask your instructor for help. And when you're finished, show your composition to your instructor.

HOW TO HELP THE STUDENT WITH STEP THREE

There are three possible areas of difficulty with this assignment.

1) If the student needs assistance deciding what details to leave out, refer to the following; the marked-out details add color and interest, but do not advance the narrative.

EVENTS LEADING TO JENNER'S DISCOVERY OF THE SMALLPOX VACCINE

Smallpox was a great danger in the eighteenth century

(Either use this detail Killed 40 million people in the eighteenth century

or this one; not both) Half of the people who caught smallpox died

Smallpox victims kept in "smallpox houses"

No reliable way to avoid smallpox

Many doctors gave people mild cases of smallpox to protect them

The "mild cases" sometimes killed the patients

Edward Jenner born in 1749

Inoculated against smallpox as a child

Inoculation made him sick

Kept in a smallpox house while he was sick

Jenner began to train as a doctor in 1762

Apprentice to a surgeon for eight years

Entered St. George's Hospital in 1770

Studied surgery and anatomy

Jenner began to practice medicine in his home town in 1773 Jenner noticed that milkmaids were not getting smallpox

Knew milkmaids often had cowpox

Cowpox gave cows blisters on their udders

Milkmaids sometimes got blisters on hands and arms

Cowpox gave patients a fever that lasted 4 days

Many local people believed that cowpox gave them immunity to smallpox

Jenner investigated relationship between smallpox and cowpox

Kept records of cowpox outbreaks

Discovered two forms of cowpox

Decided only one form of cowpox gave immunity to smallpox

Jenner inoculated James Phipps on May 14, 1796

James Phipps was 8 years old

Jenner used pus from a cowpox blister

Jenner scraped Phipps's arm and put pus into it

Phipps had a small fever

Jenner tried to give Phipps a mild case of smallpox

Phipps was immune

Jenner tested his vaccine on 23 other people

Did not know why vaccination worked

Believed his observations were correct

Jenner published his results

At first, other doctors skeptical

Royal Society of Medicine refused to accept his findings

Some people afraid cowpox would make them act like cows

Vaccine slowly accepted.

Parliament gave Jenner money in 1802 to continue his research

12,000 people vaccinated in 1804

British government began to give the vaccines in 1808

Deaths decreased to 600 per year

As before, use your judgment in suggesting details that can be left out; the point of this exercise is not to pick the "right" details, but to practice moving the narrative forward.

- 2) The student may need help choosing the correct time words. If necessary, go over the "Time and Sequence Words" reference list with him and suggest six or seven appropriate words for him to choose from.
- 3) The student may have trouble using his own phrasing. If necessary, help him find synonyms for the nouns and adjectives in the event list. Don't be afraid to give him two or three alternatives to choose from.

When the narrative is finished, check it using the following rubric.

Week 5 67

Week Five Rubric Chronological Narrative of Scientific Discovery

Organization

- 1 Events should be in chronological order.
- 2 The paragraph giving "background information" should be the first or second paragraph in the composition.
- **3** Three or more time words should be used.
- 4 The composition should use more than 150 but fewer than 300 words.

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.
- **3** Possessive forms should be written properly. (Note that the possessive of Phipps is "Phipps's.")
- 4 The exact words of the source material should not be used in every sentence.

WEEK 6

Day One: Original Narration Exercise



Focus: Summarizing a narrative by choosing the main events and listing them chronologically

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from *The Once and Future King*, by T. H. White. The "Once and Future King" is King Arthur; the first half of the novel describes Arthur's boyhood. White imagines that young Arthur (known as "the Wart" by his adoptive family) was tutored by the magician Merlin, who taught him about the natural world by turning him into different animals. Archimedes is Merlin's pet owl.

STEP TWO: Note important events

Student instructions for Step Two:

On your scratch paper, write down four or five phrases or short sentences that will remind you of the things that happened in the story. *Do not use more than five phrases or short sentences!* Remember, you're not supposed to write down *everything* that happens in the story—just the most important events. The most important events are the ones that help the story make sense; if you took them out of the original passage, you wouldn't understand the rest of the story. (For example, if you left out the fact that the Wart turned into an owl, would the flying scenes make sense to you?)

Be sure to write the events down in the same order that they happen in the story. If you have trouble with this assignment, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP TWO

The student should have written down on scratch paper four or five short phrases or sentences that summarize the main events. The phrases/sentences should resemble four or five of the following (these are given only as a guide):

Wart turned into a bird.

Ate a magic mouse

Magic mouse turned Wart into an owl.

Archimedes the owl came to get Wart.

Wart practiced flying

Archimedes told Wart how to fly.

World looked strange to Wart

Saw like an owl

Saw everything as the same colour

Archimedes told Wart how to land.

Wart managed to land on a branch.

Landing—going upward and then sitting down.

(Remember, the student should not provide more than four or five phrases/sentences.)

Watch the student as she writes down her phrases. If she's writing too many phrases, or the sentences are long and complex, stop her before she goes on.

In this excerpt, the student may be tempted to write down too many details about exactly how birds fly and land. Remind her that it isn't necessary to include all of the details in the speeches made by Archimedes and the Wart; the summary should focus on what *happens* in the story, not on what is said.

You may ask the following questions to help distinguish between main events and supporting details:

What happened to the Wart?

(He turned into a bird.)

After he turned into a bird, what did he and Archimedes

(They practiced flying.)

do together?

What did the Wart notice about the world?

(He could see in the dark OR The world all

looked like shades of the same color.)

What did the Wart do successfully at the end of the story?

(He was able to sit on the

branch.)

STEP THREE: Write summary sentences

Student instructions for Step Three:

After you've written down your four or five phrases or sentences, try to combine them into three or four sentences. You can do this by putting two phrases in the same sentence (for example, "Wart ate a magic mouse" and "Wart turned into an owl" could be combined into "Wart ate a magic mouse that turned him into an owl"). Or you may find that one or more of your jotted notes turns out to be unnecessary. (If you wrote down, "Wart saw like an owl" and "Wart could see in the dark," you don't really need one of those sentences; both describe the same change.

Try to avoid listing minor details; instead, stick to main events. Minor details don't change the sense of the story. (It doesn't really matter that the Wart learned to flick his wings and stall—without that detail, we can still understand the story.

Say your three or four sentences out loud several times before writing them down. After

Week 6 71

you've written the sentences down, ask your instructor to check them. If you have trouble, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP THREE

In this step, the student practices turning the jotted phrases and sentences into three or four coherent, smooth sentences. She should say her three or four sentences out loud several times before she writes; listen to make sure that you hear her talking out loud, and if necessary remind her that she should be speaking before she writes.

You may need to help her combine two phrases into one sentence. (For example, "Wart practiced flying" and "Archimedes told Wart how to fly" could be combined into "Archimides helped Wart practice his flying").

When the summary is finished, check it using the following rubric.

Week Six Narration Rubric

Organization

- 1 Events should be in chronological order.
- **2** If two or more events are listed in a single sentence, they should have a cause and effect relationship.

For example:

Wart ate a magic mouse and turned into an owl

is acceptable, because the mouse turned Wart into the owl.

Archimedes taught the Wart to fly and the Wart could see like an owl

is not acceptable. There is no causal relationship between the two sentences.

3 Each event of major importance should be in the summary (if it were missing from the original passage, the narrative would no longer make sense.)

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized. (Note that "Wart" is a proper name in this context. It may be written either as "Wart" or "the Wart," since White uses both.)
- **3** Personal pronouns should have clear antecedents and be of the proper gender (Archimedes and the Wart are "he," while the mouse is "it").

Day Two: Outlining Exercise



Focus: Finding the main idea in each paragraph of a historical narrative

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from *Historical Catastrophes: Hurricanes and Tornadoes* by Billye Walker Brown and Walter R. Brown.



STEP TWO: Construct a one-level outline

Student instructions for Step Two:

Begin to outline this passage by looking for the main idea in each section of text. You'll see that the passage above is divided into five sections (there's an extra space between each section). For each section, try to come up with a single sentence that states the main idea.

Remember: don't try to include as much information as possible in this single sentence. Ask yourself two sets of questions:

- 1. What is the main thing or person that this section is about? Or Is the section about an idea?
- 2. Why is that thing or person important? Or What did that thing or person do/what was done to it? Or What is the idea?

You'll notice that this passage, unlike the others you've outlined, has dialogue in it; some parts of the passage are written more like a story. This dialogue makes the passage more interesting to read, but it shouldn't affect the answers to these questions.

Try asking the first question about the first section now. What is the main thing or person that this section is about?

The answer should be obvious:



Joseph Duckworth

Now look at everything else in the passage. There are many details about Joseph Duckworth's life—but you're not trying to include all of the information about Joseph Duckworth in a single sentence. Remember, you're trying to find the *main idea only*.

You may remember that you had a similar challenge in the first passage you outlined from *The Story of* Mankind; the passage contained a whole list of inventions and discoveries made by the Egyptians, and you summarized by saying something like, "The Egyptians invented many things." In this passage, you need to take a similar approach. What important, single idea can you draw from all of these details about Joseph Duckworth?

If you're still puzzled, try finishing this sentence: "Joseph Duckworth was a very. . . ."

Week 6 73



What did you come up with? Your sentence should sound like one of these:

I. Joseph Duckworth was a very experienced pilot or

I. Colonel Joseph Duckworth knew how to fly in many different situations.

Now work on coming up with a summary sentence or phrase for each one of the remaining sections. Don't worry about sticking to either sentences or phrases exclusively—use whichever form seems most natural. Remember to use Roman numerals.

If you have difficulty, ask your instructor for help. And when you are finished, check your assignment with your instructor.

HOW TO HELP THE STUDENT WITH STEP TWO

For each section of text, the student should pick out a major point by asking herself two sets of questions:

- 1. What is the main thing or person that this section is about? Or Is the section about an idea?
- 2. Why is that thing or person important? Or What did that thing or person do/what was done to it? Or What is the idea?

Suggested answers (the student's sentences should resemble the following but don't need to be identical):

- I. Joseph Duckworth was a very experienced pilot OR Colonel Joseph Duckworth knew how to fly in many different situations.
- II. The morning of the flight OR A hurricane moves inland OR Duckworth decides to fly into a hurricane.
- III. The flight into the hurricane OR Duckworth and O'Hair fly into the hurricane.
- IV. The second flight with a meteorologist on board OR They make a second flight with a meteorologist.
- V. Flights into other hurricanes OR More hurricane air reconnaissance

Note to Instructor: Although many guides to outlining will insist that outlines be in the form of either phrases or sentences, this requirement often pushes students into forming unnatural and awkward sentences or phrases. The student is learning to outline as a *tool*: the outline should help him organize his thoughts so that he can become a better writer. Since the outline is a tool, not an end in itself, you should let the student mix phrases and sentences and use whichever form seems most natural.

If the student struggles with this assignment, use the following dialogues:

Section 2

Instructor: What's the single most important thing that happens in the second section? Hint: it's a decision that Duckworth makes.

Student: Duckworth decides to fly into the hurricane

Note to Instructor: Since the entire section describes the scene of Duckworth's decision, rather than just telling about the decision itself, "The morning of the flight" is acceptable. The student could also argue that the most important thing in the second section is the arrival of the hurricane, since the flight wouldn't have taken place unless the hurrican had moved inland. "A hurricane moves inland" is also acceptable.

Outlining is not an exact science; as noted before, it is a *tool* that helps the student organize thoughts. Don't get stalled on trying to find an exact or "correct" answer for any one section, as long as the student can make a reasonable argument for the main point he has selected.

Section 3

Instructor: There are a lot of details in this third section, but there's one thing that happens that ties the whole section together. Without this one act, the details in the section wouldn't make any sense.

Note to Instructor: If the student is still puzzled, say, "What did Duckworth and O'Hair do?"

Student: The two men flew into the hurricane.

Section 4

Instructor: What happens for the second time in this section?

Student: They fly into the hurricane.

Instructor: How is this flight different? What makes it worth mentioning?

Student: A meteorologist was aboard

Note to Instructor: "A meteorologist measured the hurricane" should not be listed as the main point; this is a detail about what happens on the flight. The existence and importance of the flight must be established before we can find out details about what happened on it.

Section 5

Instructor: What was the result of Duckworth's flights into the hurricane? Hint: it was something that happened three more times in 1943.

Students: There were more flights into hurricanes.

Note to Instructor: The student could argue that the result was "hurricane air reconnaisance"; this is acceptable.

Week 6 **75**

Day Three: Analyzing the Topos



Focus: Understanding the form of a chronological narrative about a past event

The passage outlined in the last writing session was a **chronological narrative about a past event.** The student studied and practiced this form in the first week of this program; in this week, he will review and practice some more.

STEP ONE: Review time and sequence words

Student instructions for Step One:

Remember, a chronological narrative about a past event explains *what happened in the past* and *in what sequence*. Each one of the main points in your outline describes something that happened, and the passage itself presents these happenings in chronological order.

Your points probably sound something like the points below (although your exact words will be different):

I	Joseph Duckworth was a very experienced pilot
II	A hurricane moves inland.
III	Duckworth and O'Hair fly into the hurricane.
IV	They make a second flight with a meteorologist
V	Flights are made into other hurricanes

Pull out your Time and Sequence Words sheet. Using your pencil, write an appropriate time word on the blank in front of each point. When you are finished, check your work with your instructor.

HOW TO HELP THE STUDENT WITH STEP ONE

The student may need assistance choosing the correct time and sequence words from his list. If necessary, you may give the following hints:

- I. Choose a word from the "events that happen before any others" category on the list.
- II. Choose a word from the "event that happens after a previous event—but you're not exactly sure whether a long or short period of time elapsed first" category.
- III. and IV. Choose a word from the "event that happens very soon after a previous event" category.
- V. Choose a word from the "event that happened after another event—AND was caused by the previous event" category.

Encourage the student to read the time and sequence word and then the entire sentence out loud to see whether the word fits the sentence.

The following answers are the most natural:

- I. At first, in the beginning
- II. Next, after some time, subsequently
- III. and IV. Shortly afterwards, before long, not long after, immediately
- V. As a result, as a consequence

STEP TWO: Adding dialogue and actions (Student Responsibility)

Student instructions for Step Two:

In this passage, the authors *dramatize*—use dialogue (the words characters actually speak) and actions to move the narrative forward. First, they tell you about Duckworth's past. Then, when the narrative reaches the morning of the flight, the authors change techniques. Rather than simply listing events, they begin to tell a story.

Dialogue can make chronological narratives more interesting. Look at the following example from Harold Lamb's history of the Mongol invasions, *Genghis Khan and the Mongol Hordes*. In this section, Genghis Khan's warriors are pursuing the defeated king Muhammad Shah, who has been driven from his country by the Mongol armies.

You will notice ellipses (. . .) in the passage below. Remember, ellipses show that words in the original have been left out of the excerpt.

The author could have written, "Muhammad Shah wondered if he would be safe anywhere." But instead, he gave Muhammad Shah dialogue—an actual speech that moves the narrative forward by showing why Muhammad Shah took sail to an island in the Caspian Sea (where he would die—although you should read the book if you want to find out how).

STEP THREE: Adding to the pattern of the topos (Student Responsibility)

Student instructions for Step Three:

Turn to the Chronological Narrative of a Past Event chart in your Composition Notebook. Add the bolded point below under the "Remember" column.

Chronological Narrative of a Past Event

Definition: A narrative telling what happened in the past and in what sequence

Procedure

- 1. Ask Who did what to whom? (Or, What was done to what?)
- 2. Create main points by placing the answers in chronological order.

Remember

- 1. Select your main events to go with your theme
- 2. Make use of time words
- 3. Consider using dialogue to hold the reader's interest.

Week 6 77

Day Four: Practicing the Topos



Focus: Learning how to write a chronological narrative about a past event

Today, the student will practice putting together another chronological narrative about a past

STEP ONE: Plan the narrative

Student instructions for Step One:

On the next page, you'll see a list of events, written out chronologically for you, about the sinking of the *Titanic*. The bolded entries are main events; the indented entries are further details about those main events. (Those details are taken from Logan Marshall's 1922 account, *The Sinking of the Titanic*, and Jack Winocour's *The Story of the Titanic: As Told by its Survivors*.)

Your assignment is to write a chronological narrative based on these events. This chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.

Remember that you should not try to include every event. For example, you could construct a narrative with only the following events:

Collision with the iceberg

Captain realized ship was sinking

Lifeboats launched

Ship sank between 2:05 and 2:20 AM

Leaving out the ice sightings, the initial flooding of the ship, and the sending of distress signals doesn't confuse the narrative at all; it is still clear that the ship collided with the iceberg, began to sink, and then sank after lifeboats were launched.

Look over the following events now, and mark three or four main (bolded) events to include in your narrative. If you have difficulty, ask your instructor for help.

EVENTS IN THE SINKING OF THE TITANIC

Ice sightings on April 14, 1912

Captain Edward Smith received six ice warnings earlier

Icebergs reported in Titanic's path at 9:30 PM

Report never reached captain

Titanic continued at top speed

Night was moonless and dark

Lookouts had no binoculars

Ice warning sent to Titanic from nearby ship Californian

Titanic radio operator Jack Phillips ignored warning

"Shut up! Shut up! I am busy!" (Reported by Californian)

Collision with the iceberg

Iceberg sighted straight ahead at 11:40 PM

Lookouts telephoned first officer on the bridge

First officer (William Murdoch) ordered ship turned to port (left)

Ship collided with iceberg 37 seconds after sighting

Sharp edge of berg cut starboard (right) side of ship open

Passengers on deck played with ice chunks from berg

Ship began to flood

Officers told passengers there was no danger.

"Oh, no, nothing at all, nothing at all. Just a mere nothing. We just hit an iceberg." (Reported by survivor Edith Louise Rosenbaum Russell)

Five separate compartments filled with water

Sixth compartment began to flood

Pumps in sixth compartment began to work

Pumps could remove 2,000 tons of water per hour

24,000 tons of water flooding into ship per hour

Captain realized ship was sinking

Shipbuilder Thomas Andrews told captain ship would sink in 1 1/2 hours

Captain Smith: "Give the command for all passengers to be on deck with life-belts on." (Reported by Logan Marshall)

Lifeboats readied just after midnight, in early hours of April 15

Lifeboats could only carry half the passengers on *Titanic*

Second officer Charles Lightoller asked captain for permission to fill boats

"Hadn't we better get the women and children into the boats,

sir?" (Reported by Lightoller himself)

Lifeboats filled with women and children beginning 12:25 AM

Distress signals sent

White distress rocket launched 12:50 AM

Wireless operators sent out old distress signal CQD

"We have struck an iceberg. Badly damaged. Rush aid." (Reported by Logan Marshall)

Later also began to send new SOS signal as well

"Sinking by the head." (Reported by Jack Winocour)

Other ships received signal but were far away

Closest ship, Carpathia, responded but was four hours away

Signal transmitted to New York (*Titanic* destination)

Shipline official announced, "We are confident that there will be no loss of life." (Reported by Logan Marshall)

Lifeboats launched

First lifeboats launched beginning 1:10 AM

Passengers reluctant to leave ship

Many said, "This ship cannot sink; it is only a question of waiting until another ship comes up and takes us off." (Reported by Jack Winocour)

First lifeboats only 1/4 full

Deck began to tilt, more passengers left ship

Later lifeboats overloaded

Last lifeboat launched 2:05 PM

Captain Smith went down with ship but told officers to save themselves.

"You have done your duty, boys. Now every man for himself." (Reported by survivor W. J. Mellers)

Ship sank between 2:05 and 2:20 AM

Propellers rose above water 2:05 PM

First funnel of ship fell into water

Water broke windows and flooded into bridge

Stern (rear) of ship rose above water

Electricity failed 2:18 PM

Second funnel fell

Week 6 79

Ship split in half Bow (front) section sank Stern rose back up in water Stern sank 2:20 PM

Only one lifeboat returned for people in water

Rescue arrived 4:10 AM

711 of 2,222 people in lifeboats

Carpathia arrived 4:10 AM

Carpathia picked up passengers until 8:50 AM

Five passengers died on board Carpathia

Carpathia set out for New York 8:50 AM

Survivors reached New York April 18

HOW TO HELP THE STUDENT WITH STEP ONE

You may need to help the student select which events to include. Encourage him to include three or four main (bolded) events but no more.

If necessary, point out to the student that as long as two main events make sense when put together, events between them can be eliminated. For example, the following sequences make sense:

Ice sightings on April 14, 1912 Collision with the iceberg Lifeboats launched Ship sank between 2:05 and 2:20 AM

and

Collision with the iceberg Ship sank between 2:05 and 2:20 AM Rescue arrived 4:10 AM Survivors reached New York April 18

However, going from

Ice sightings on April 14, 1912 to **Ship began to flood**

doesn't make sense, because the collision has to happen in order for the ship to flood; in the same way, the student cannot go from

Lifeboats launched to Rescue arrived 4:10 AM

because unless the ship sinks, rescue isn't needed.

STEP TWO: Choose details and dialogue (Student Responsibility)

Student instructions for Step Two:

When you write your chronological narrative, you won't include every detail listed under the main events; this would make your narrative too long and complicated. Instead, choose the details you want to highlight, and leave others out. Be sure that you include at least one line of dialogue.

For example, if you chose the following events:

Captain realized ship was sinking

Shipbuilder Thomas Andrews told captain ship would sink in 1 1/2 hours

Captain Smith: "Give the command for all passengers to be on deck with life-belts on." (Reported by Logan Marshall)

Lifeboats readied just after midnight, in early hours of April 15

Lifeboats could only carry half the passengers on *Titanic*

Second officer Charles Lightoller asked captain for permission to fill boats

"Hadn't we better get the women and children into the boats,

sir?" (Reported by Lightoller himself)

Lifeboats filled with women and children beginning 12:25 AM

Lifeboats launched

First lifeboats launched beginning 1:10 AM

Passengers reluctant to leave ship

Many said, "This ship cannot sink; it is only a question of waiting until another ship comes up and takes us off." (Reported by Jack Winocour)

First lifeboats only 1/4 full

Deck began to tilt, more passengers left ship

Later lifeboats overloaded

Last lifeboat launched 2:05 PM

Captain Smith went down with ship but told officers to save themselves.

"You have done your duty, boys. Now every man for himself." (Reported by survivor W. J. Mellers)

you might write:

Captain Smith realized that the ship was sinking. The first lifeboats were launched at 1:10 AM, but many passengers refused to leave the ship. They said,

"This ship cannot sink; it is only a question of waiting until another ship comes up and takes us off."

Or, you might write,

The captain realized the Titanic was doomed when the shipbuilder told him that the ship would sink in an hour and half. "Give the command for all passengers to be on deck with life-belts on," he ordered. The lifeboats were filled with women and children, and then were launched.

Notice that only two or three details were included for one main event—and that another main event was simply stated with no details at all.

Read through your selected main events and mark which details and dialogue you intend to include. (You may find that you need to adjust your choices when you begin to write.)

STEP THREE: Write the narrative

Student instructions for Step Three:

As you begin to write, don't forget to include time and sequence words (as you learned in the first week's lesson).

Here's a summary of your assignment:

1) This chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.

Week 6 81

- 2) The narrative must progress chronologically forward at all times.
- 3) Include at least one line of dialogue, but do not try to include all of the details!
- 4) Use two or more time words in your narrative.

If necessary, review the following rules about how to write dialogue:

Use quotation marks to surround a speaker's exact words.

If a dialogue tag ("he said," "Captain Smith said") comes before a speech, use a comma after the dialogue tag. The punctuation at the end of the speech itself goes *inside* the closing quotation mark.

Captain Smith said, "Put on your life jackets."

If the dialogue tag comes after the speech, place a comma, question mark, or exclamation point (but *not* a period) before the closing quotation marks.

"Put on your life jackets," Captain Smith said.

"Put on your life jackets!" Captain Smith said.

"Should we put on our life jackets?" Captain Smith said.

NEVER

"Put on your life jackets." Captain Smith said.

If you have difficulty, ask your instructor for help. And when you're finished, show your composition to your instructor.

HOW TO HELP THE STUDENT WITH STEP THREE

There are three possible areas of difficulty with this assignment.

1. The student may need help choosing which details to leave out. Remind him if necessary that if he's writing a narrative with three or four main events, he can leave out most of the details for all of the events except for one. A sample composition based on these main events:

Collision with the iceberg Ship began to flood Ship sank between 2:05 and 2:20 AM Rescue arrived 4:10 AM

might sound like this:

The Titanic collided with an iceberg at 11:40 PM. **Immediately**, the ship started to flood, but officers told the passengers that there was no danger. One survivor reported that officers said, "Just a mere nothing. We just hit an iceberg." But five compartments were already filling with water. A sixth compartment began to flood as well. The pumps in that compartment started to work, but they could not remove the water in time. They could only remove 2,000 tons of water every hour, and twelve times that much water was pouring into the ship.

Before long, the ship began to sink. Between 2:50 and 2:20 AM, the Titanic split in half. The bow sank **first**, and **then** the stern.

The rescue ship Carpathia did not arrive until 4:10 PM. Only 711 of the 2,222 people on board made it into the lifeboats. The Carpathia picked them up until 8:50 AM and **then** set out for New York.

This is an acceptable length, but more details could be included to bring the composition closer to the 300 word maximum.

- 2. The student may need help choosing the correct time words (examples are bolded in the sample composition above). If necessary, go over the "Time and Sequence Words" reference list with him and suggest five or six appropriate words for him to choose from.
- 3. If the student has not studied the proper punctuation for direct dialogue, he may need your help understanding the dialogue rules given in his instructions.

Note to Instructor: This assignment introduces a new skill (using dialogue). To avoid overwhelming the student with instructions, the directions do not specifically tell the student to avoid using the direct words of the events list. If the student seems to be completing the assignment with ease, however, you may choose to add this to the requirements. In that case, help him find synonyms for the nouns and adjectives in the events list, as in previous assignments.

Week Six Rubric Chronological Narrative of Past Events

Organization

- 1 Events should be in chronological order.
- **2** Two or more time words should be used.
- **3** The composition should use more than 150 but fewer than 300 words.

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.
- **3** At least one line of dialogue should be included; dialogue and dialogue tags should be properly punctuated.

WEEK 7

Day One: Original Narration Exercise



Focus: Summarizing a narrative by choosing the main events and listing them chronologically.

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from Tik-Tok of Oz, by L.

Frank Baum. Baum wrote a whole series of books set in the magical land of Oz. In this chapter, Betsy Bobbin and her friend the Shaggy Man have joined up with the sky fairy Polychrome, daughter of the Rainbow (in Oz, the Rainbow is a person!), and the Princess Rose, who has been driven from her throne in the Rose Kingdom and is now in exile. Travelling together, the four find an old well. The Shaggy Mantries to draw water out of it using a windlass (a mechanism for cranking a bucket up out of a well), but the hook on the end of the windlass doesn't hold a bucket. Instead, the hook creaks up out of the well with a pile of copper junk on the end of it.

STEP TWO: Note important events

Student instructions for Step Two:

On your scratch paper, write down five or six phrases or short sentences that will remind you of the things that happened in the story. *Do not use more than six phrases or short sentences!* Remember, you're not supposed to write down *everything* that happens in the story—just the most important events. The most important events are the ones that help the story make sense; if you took them out of the original passage, you wouldn't understand the rest of the story.

Be sure to write the events down in the same order that they happen in the story. If you have trouble with this assignment, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP TWO

The student should have written down on scratch paper five or six short phrases or sentences that summarize the main events. The phrases/sentences should resemble five or six of the following (these are given only as a guide):

Shaggy Man pulled up a bundle of copper

Shaggy pulled a copper man from the well

Shaggy, Betsy, Polychrome, Rose Princess

Copper bundle was a man

Sign on the back of the copper man

Mechanical man pulled up out of well

Copper man had clockwork mechanism

Engraved plate with directions

Directions for winding clockwork man

Guaranteed for thousand years

Had to be propped up

Shaggy's old friend Tik-Tok

Copper man was Tik-Tok

Wound him up with key

Wound up thoughts first

Flashes of light showed when he started to think.

Wound up phonograph

Copper man talked

Still fell over until action wound

Wound up action clockwork

Man could think, talk, walk

Remember, the student should not provide more than five or six phrases/sentences.

Watch the student as she writes down her phrases. If she's writing too many phrases, or the sentences are long and complex, stop her before she goes on.

In this excerpt, the student may be tempted to write down too many details about the labels on the clockwork man. Remind her that it isn't necessary to include all of the details; instead, she can focus on what *happens* in the story (once Tik-Tok is wound up, he can think, talk, and walk) or simply summarize the *type* of information on the labels ("The labels described Tik-Tok and told how to wind him").

STEP THREE: Write summary sentences

Student instructions for Step Three:

After you've written down your five or six phrases or sentences, try to combine them into three or four sentences. You can do this by putting two phrases in the same sentence, or you may find that one or more of your jotted notes turns out to be unnecessary.

Try to avoid listing minor details; instead, stick to main events. Minor details don't

Week 7 85

change the sense of the story. (It doesn't really matter when Tik-Tok first walked, he went in a circle; without that detail, we can still understand the story.)

Say your three or four sentences out loud several times before writing them down. After you've written the sentences down, ask your instructor to check them.

If you have trouble, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP THREE

In this step, the student practices turning the jotted phrases and sentences into three or four coherent, smooth sentences. She should say her three or four sentences out loud several times before she writes; listen to make sure that you hear her talking out loud, and if necessary remind her that she should be speaking before she writes.

You may need to help her combine two phrases into one sentence.

When the summary is finished, check it using the following rubric.

Week Seven Narration Rubric

Organization

- 1 Events should be in chronological order.
- 2 If two or more events are listed in a single sentence, they should have a cause and effect relationship.

For example:

After he was wound up, Tik-Tok could think, talk, and walk is acceptable.

The Shaggy Man recognized Tik-Tok, and Betsy wound him up.

is not acceptable. There is no causal relationship between the two sentences.

3 Each event of major importance should be in the summary (if it were missing from the original passage, the narrative would no longer make sense.)

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.
- **3** Personal pronouns should have clear antecedents and be of the proper gender (Tik-Tok is "he," while Polychrome and the Rose Princess are both "she").

Day Two: Outlining Exercise



Focus: Finding the main idea in each paragraph of a scientific narrative

STEP ONE: Read (Student Responsibility)

Student instructions for Step One:

Read the following excerpt from *Discoverer of the Unseen World: A Biography of Antoni van Leeuwenhoek*, by Alma Smith Payne. In this passage, Payne explains how Leeuwenhoek became the first scientist to see single-celled organisms. The "new contrivance" Leeuwenhoek wanted to test was a tiny, clear tube of glass that would allow him to examine a drop of water underneath the lens of his microscope.

STEP TWO: Construct a one-level outline

Student instructions for Step Two:

Begin to outline this passage by looking for the main idea in each section of text. You'll see that the passage above is divided into four sections (there's an extra space between each section). For each section, try to come up with a single sentence that states the main idea.

Remember, you shouldn't try to include as much information as possible in this single sentence. Ask yourself two sets of questions:

- 1. What is the main thing or person that this section is about? Or Is the section about an idea?
- 2. Why is that thing or person important? *Or* What did that thing or person do/ what was done to it? *Or* What is the idea?

Try that for the first section. What is the main thing or person that this section is about?



If your answer was "Leeuwenhoek," look again. The details in the section don't tell you about Leeuwenhoek. What do they tell you about?

Once you've answered that question, answer the second: Why is it important?

Use the same strategies to come up with summary sentences for each of the remaining three sections. Remember to use Roman numerals for the summary sentences, like this.

For this assignment, try to use complete sentences (although this isn't always necessary in an outline).

If you have difficulty, ask your instructor for help. And when you are finished, check your assignment with your instructor.

Week 7 87

HOW TO HELP THE STUDENT WITH STEP TWO

Note to Instructor: "Leeuwenhoek" is pronounced "leh-ven-hook."

For each section of text, the student should pick out a major point by asking herself two sets of questions:

- 1. What is the main thing or person that this section is about? Or Is the section about an idea?
- 2. Why is that thing or person important? Or What did that thing or person do/what was done to it? Or What is the idea?

Suggested answers (the student's sentences should resemble the following but don't need to be identical):

- I. Berkelse Mere was a lake that changed color in the summer OR The inland lake Berkelse Mere became white and green in the summer.
- II. Leeuwenhoek decided to test the lake OR Leeuwenhoek wanted to know why.
- III. He scooped up water to test it OR He collected a water sample to observe.
- IV. He saw animalcules OR He saw figures the size of a strand of hair OR He saw microscopic life forms OR Microscopic creatures were in the water.

If the student struggles with this assignment, use the following dialogues:

Section 1

Instructor: What did Leeuwehoek think of, in this section?

Student: He thought of the inland lake.

Instructor: What was the lake like in winter?

Student: It was clear.

Instructor: What was the lake like in summer?

Student: It became cloudy OR It became whitish with green clouds.

Instructor: So what is the most important thing in this passage?

Student: The lake.

Instructor: What was strange about the lake?

Student: It changed during the summer.

Section 2

Instructor: What did Leeuwenhoek decide to do about the lake?

Student: He decided to test it OR He was curious about it.

Section 3

Instructor: What did Leeuwenhoek do, once he got to the lake?

Student: He scooped up water to test OR He collected a water sample to observe.

Instructor: The rest of the section contains details about *how* Leeuwenhoek observed the water sample. That information would go into subpoints supporting this main point.

Note to Instructor: If the student simply says, "He scooped up water" or "He collected a water sample," ask, "Why did he collect the water sample?"

Section 4

Instructor: What did Leeuwenhoek see?

Student: He saw microscopic creatures OR Microscopic creatures were in the water.

Instructor: The rest of the section contains details about the creatures Leeuwenhoek saw. That information would go into subpoints supporting this main point.

Note to Instructor: The answer to the question, "What is the most important thing in this section?" is "Microscopic creatures." The answer to "Why are they important?" can either be, "Because Leeuwenhoek saw them" or "Because they were there."

Day Three: Analyzing the Topos



Focus: Understanding the form of a chronological narrative about a scientific discovery

The passage the student outlined in the last writing session is an example of this week's *topos:* a **chronological narrative about a scientific discovery or advance**. The student has already studied several examples of this (Vesalius's discoveries in anatomy, George Washington Carver's work with the peanut, the sighting of Comet Shoemaker-Levy 9). Today, she'll expand her knowledge of this form.

The student will do all of today's work independently; her directions are reproduced below for your reference.

STEP ONE: Review the pattern of the topos

Turn to the "Chronological Narrative of a Scientific Discovery" page in your composition notebook. Read through the pattern of the narrative again.

Week 7

STEP TWO: Examine the model (Student Responsibility)

Your chart should have reminded you that a chronological narrative about a scientific discovery answers two questions:

What steps or events led to the discovery?

In what sequence did these steps or events happen?

and puts those answers in chronological order.

Look again at the outline you made of the passage from *Discoverer of the Unseen World*. The exact words you used will be different, but the outline probably looks something like this:

- I. Berkelse Mere was a lake that changed color in the summer.
- II. Leeuwenhoek decided to test the lake.
- III. He collected a water sample to observe.
- IV. He saw microscopic life forms.

Points II, III, and IV list, in chronological order, steps that led to the discovery of microscopic life forms.

Your chart should also have reminded you that you may need a paragraph giving background information. Point I gives you necessary background information; it describes an existing phenomenon (the cloudy lake) that no one in Leeuwenhoek's day understood.

Finally, your chart reminded you to make use of time and sequence words.

Below, you will see an expanded version of the passage about Leeuwenhoek's discovery. Read through the passage one more time and follow these simple instructions:

- 1. Look for the time and sequence words, which have been bolded.
- 2. When you read the additional paragraphs, ask yourself, "What new element do these paragraphs bring into the narrative?"

You will notice that most of the time and sequence words occur in the middle of the passage, where Leeuwenhoek is actually going through the steps of the discovery.

What do you think the additional paragraphs add to the narrative?

They do add to the description of the microscopic world Leeuwenhoek discovered. But you should have noticed a new element in the final paragraph. It is bolded below:

These "animalcules," as he referred to bacteria and Protozoa in all his observations, were of several colors, some being white and transparent, while others were green in the middle, banded by white (probably Euglena viridis); others sparkled with green scales, and still others were a kind of dove-gray. He wrote: "The motion of most of these animalcules in the water was so swift, and so various, upwards, downwards, and round about, that 'twas wonderful to see: and I judge that these little creatures were above a thousand times smaller [in volume, not in linear dimensions] than the smallest ones I have ever seen, upon the rind of cheese, in wheaten flour, mould and the like" (mites).

The writer of this narrative has decided to use Leeuwenhoek's exact words, found in a letter Leeuwenhoek wrote to the scientists of the Royal Society.

Last week, you learned that dialogue—the words characters actually speak—can add interest to a chronological narrative about a past event. A chronological narrative about a scientific discovery can also become more vivid and real when dialogue is used.

Many scientists wrote letters, essays, and even books about their discoveries, so often you can find the exact words that scientists have used about their own work. Introducing a sentence

or two from the scientist herself *about* her discovery adds color and interest to a chronological narrative about a scientific discovery.

Now add the bolded point below under the "Remember" column on your Chronolgoical Narrative of a Scientific Discovery chart:

Chronological Narrative of a Scientific Discovery

Definition: A narrative telling what steps or events

led to a discovery, and in what sequence

Procedure

- 1. Ask, What steps or events led to the discovery?
- 2. Ask, In what sequence did these steps or events happen?
- 3. Create main points by placing the answers in chronological order.

Remember

- May need a background paragraph explaining the circumstances that existed before the discovery.
- 2. Make use of time words
- 3. If possible, quote directly from the scientist's own words.

Note to Instructor: In the next lesson, the student will practice quoting directly from a scientist as she constructs her chronological narrative. The quotes are provided. The student has not yet been taught how to find primary sources, and it is important not to overwhelm her with too many new skills simultaneously.

The following directions are provided for you, in case you wish to assign another topic for the composition—or feel that your student is ready to find primary sources on her own.

FINDING PRIMARY SOURCES IN SCIENCE FOR MIDDLE-GRADE WRITERS

1. Anthologies

The following anthologies contain multiple excerpts from the writings of scientists in different disciplines. Although they are designed for older readers, they may be useful references to have on hand.

Bynum, W. F. and Roy Porter. Oxford Dictionary of Scientific Quotations. New York: Oxford University Press, 2006.

Carey, John. Eyewitness to Science: Scientists and Writers Illuminate Natural Phenomena from Fossils to Fractals. Cambridge, Mass.: Harvard University Press, 1997.

Mackay, Alan L. A Dictionary of Scientific Quotations, second expanded ed. Bristol: Institute of Physics, 1992.

Oster, Malcolm. Science in Europe, 1500–1800: A Primary Sources Reader. New York: Palgrave Macmillan, 2002.

2. Internet resources

a. Websites

Dictionary of Science Quotations at

http://www.todayinsci.com/Quotations/QuotationsIndex.htm

This website, sponsored by Today in Science, can be searched for direct

Week 7 91

quotes by topic or by scientist name.

A Short Dictionary of Scientific Quotations at

http://naturalscience.com/dsqhome.html

Briefer than the website listed above, but useful.

b. Google Books

Search print books for letters, essays, and translations.

- 1. Go to http://books.google.com
- 2. Click on the "Advanced Book Search" link.
- 3. On the Advanced Book Search screen, enter the name of the scientist and the scientific topic in the "with all the words" field.

For example, entering Antoni van Leeuwenhoek and microscopic brought up, among other titles, The Select Works of Antony van Leeuwenhoek, containing his letters about his discoveries. Although you can also enter the scientist's name in the "Return books written by" blank, this will limit your search and only bring up books authored by the scientist; often, the most accessible quotes are found in books authored or edited by someone else.

- 4. Click on the Google Search button.
- 5. When the search results appear, look down the left-hand side of the page and click on "Preview and full view." (The default, "Any view," lists books that can't be accessed online.)

Day Four: Practicing the Topos



Focus: Learning how to write a chronological narrative about a scientific discovery

In the last lesson, the student saw an example of a chronological narrative about a scientific discovery that made use of the scientist's own words. Here is another, from *Doctors and Discoveries: Lives That Created Today's Medicine*, by John G. Simmons. This narrative tells how the sixteenth-century French surgeon Ambroise Pare learned to use antiseptic on wounds to keep them from getting infected. (The first paragraph gives background information.)

The years of Pare's youth were marked by the ascendancy of Francis I, who, four years after becoming king in 1515, lost his bid to become emperor of the Holy Roman Empire. This led him into a series of wars with Charles of Hapsburg that were fought largely on the Italian peninsula. There, at the siege of Turin in 1537, Pare made his first and most famous innovation.

As was customary, Pare and his fellow surgeons treated gunshot wounds by

cauterizing⁸ them with boiling oil of elder, which was thought to prevent death from "gunpowder poisoning." This method caused terrible agony and more damage to the flesh than the projectile had. At Turin, the oil ran out. As a stopgap, Pare covered the wounds with a salve composed of egg yolk, turpentine, and oil of roses. One night he wrote, "I could not sleep . . . for I was troubled in minde, and the dressing of the precedent day, (which I judged unfit) troubled my thoughts; and I feared that the next day I should finde them dead, or at the point of death by the poyson of the wound, whom I had not dressed with the scalding oyle." In fact, these patients were still alive and in better condition than the men who had been treated with cauterization. Pare continued to treat casualties in this way, he added, and "When I had many times tryed this in divers others I thought this much, that neither I nor any other should ever cauterize any wounded with Gun-shot."

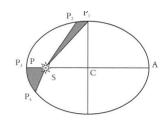
Today, the student will practice putting together a chronological narrative of her own, making use of direct quotes.

If necessary, review last week's rules for writing dialogue with the student.

STEP ONE: Plan the narrative

Student instructions for Step One:

Your first step is to plan out the narrative. On the next page, you'll see a list of events, written out chronologically for you, covering Johannes Kepler's discovery that planets move in elliptical orbits. This information was taken from *Star Maps: History, Artistry, and Cartography* by Nick Kanas (Praxis, 2007); *Johannes Kepler and the New Astronomy*, by James R. Voelkel; and *Tycho & Kepler: The Unlikely Partnership*, by Kitty Ferguson (Bloomsbury, 2002).



You'll need to make three choices:

- 1. Which main events and details to use in your narrative.
- 2. Where to put the "background paragraph," and how much information to include in it.
- 3. Which time and sequence words to use.

Your chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.

Begin to plan out your narrative now by following these three instructions:

- 1. Circle the events that belong in the "background information" paragraph of your composition.
- 2. Draw a light line through the main events and details you do not intend to include. (Remember, you can eliminate an entire main event plus all its details. If you want to include a main event, you can also include only one of its details—or all of them.)
- 3. Consult your chart of Time and Sequence Words. Make an initial selection of

^{8.} Cauterization is the burning of tissue in order to seal off a wound and prevent infection.

^{9.} John G. Simmons, Doctors and Discoveries: Lives That Created Today's Medicine (Houghton Mifflin, 2002), p. 120.

Week 7 93

four or five words that you might be able to use in your narrative (you'll only need to use two or three in your actual draft).

EVENTS LEADING TO KEPLER'S DISCOVERY OF ELLIPTICAL PLANETARY ORBITS

Johannes Kepler studied at university in the 1590s.

He studied heliocentrism.

One of his teachers was a follower of Copernicus.

Heliocentric world view of Copernicus vs. geocentric world view

Heliocentrism=sun at center of solar system

Copernicus said sun at exact center of solar system

Copernicus said all orbits completely circular

Geocentrism=earth at center of solar system

Geocentric world view still popular

Copernicus's theory still rejected by many

Most astronomers believed earth at center of solar system

Geocentrism=Earth had no orbit because it remained still

Worked as assistant to astronomer Tycho Brahe 1600-1601

Helped Brahe observe orbits for planets

Assumed all orbits were circles

Observed Mars at different times

Mars seemed to speed up and slow down

Could not explain why the planet Mars moved as it did

Tycho Brahe died in 1601

Told Kepler to keep on trying to understand orbit

Kepler tried to find mathematical explanation for movement of Mars

Failed 40 times to find formula that explained Mars orbit

Struggled with Mars orbit for five years

In 1605, Kepler realized orbit must be an ellipse

Formulated "Kepler's first law of planetary motion"

Law: Planets move in elliptical orbits, sun is one focal point of orbit

Published findings in Astronomia Nova in 1609

Contained theory that all planets move in elliptical orbits

Planets move faster when close to sun, slower when further away

Argued that sun pulls on planets

Intended to prove heliocentrism once and for all

Argued that Earth behaved like other planets

HOW TO HELP THE STUDENT WITH STEP ONE

The student should have circled the first two main events to use in her "background information" paragraph.

The student may need assistance identifying unnecessary events and details. In the list below, everything that can be left out of the composition is marked through for your reference.

Johannes Kepler studied at university in the 1590s.

He studied heliocentrism.

One of his teachers was a follower of Copernicus.

Heliocentric world view of Copernicus vs. geocentric world view

Heliocentrism=sun at center of solar system

Copernicus said sun at exact center of solar system

Copernicus said all orbits completely circular

Geocentrism=earth at center of solar system

Geocentric world view still popular

Copernicus's theory still rejected by many

Most astronomers believed earth at center of solar system

Geocentrism=Earth had no orbit because it remained still

Worked as assistant to astronomer Tycho Brahe 1600-1601

Helped Brahe observe orbits for planets

Assumed all orbits were circles

Observed Mars at different times

Mars seemed to speed up and slow down

Could not explain why the planet Mars moved as it did

Tycho Brahe died in 1601

Told Kepler to keep on trying to understand orbit

Kepler tried to find mathematical explanation for movement of Mars

Failed 40 times to find formula that explained Mars orbit

Struggled with Mars orbit for five years

In 1605, Kepler realized orbit must be an ellipse

Formulated "Kepler's first law of planetary motion"

Law: Planets move in elliptical orbits, sun is one focal point of orbit

Published findings in Astronomia Nova in 1609

Contained theory that all planets move in elliptical orbits

Planets move faster when close to sun, slower when further away

Argued that sun pulls on planets

Intended to prove heliocentrism once and for all

Argued that Earth behaved like other planets

STEP TWO: Write a draft of your narrative

Student instructions for Step Two:

Your next step is to write a first draft of your narrative. Here's a summary of your assignment:

- 1) This chronological narrative can be one paragraph or several paragraphs, but it must be at least 150 words long and no longer than 300 words.
- 2) The narrative must progress chronologically forward at all times. The only exception is your "background paragraph," where you describe what most people believed about the earth and sun during Kepler's day. This paragraph should come early in the composition (first or second).
 - 3) Do not include all of the main events and details.
 - 4) Use two or more time words in your narrative.
- 5) Try not to use the identical words of the events list. In previous lessons, you were told to look at concrete nouns and adjectives and to change them if possible. This events list contains a number of verbs; when you write this narrative, concentrate on changing the verbs. For

Week 7 95

example, if you are writing a paragraph based on the following events:

Worked as assistant to astronomer Tycho Brahe 1600-1601

Helped Brahe observe orbits for planets

Assumed all orbits were circles

try not to write:

Kepler worked as an assistant to the astronomer Tycho Brahe from 1600–1601. He helped Brahe observe orbits for planets. Both men assumed all orbits were circles.

Instead try to use original verbs in place of the verbs (bolded) in the events list.

Kepler **became** the assistant of the astronomer Tycho Brahe in 1600 and worked with Brahe for a year. His job was to **track** the orbits of the planets. Both men **believed** that all planets **orbited** the sun in a perfect circle.

If you have difficulty, ask your instructor for help.

HOW TO HELP THE STUDENT WITH STEP TWO:

There are two possible areas of difficulty with this step:

- 1) The student may need help choosing the correct time words. If necessary, go over the "Time and Sequence Words" reference list with him and suggest four or five appropriate words.
- 2) The student may have trouble using his own phrasing. If necessary, help him find synonyms for the verbs in the event list. Don't be afraid to give him two or three alternatives to choose from.

STEP THREE: Adding dialogue to a scientific narrative

Student instructions for Step Three:

Now that you've completed a rough draft of your narrative, consider how you might use Johannes Kepler's actual words to make some part of it more vivid.

Read through these five direct quotes from Kepler himself.

DIRECT QUOTES FROM KEPLER

"First, therefore, let my readers grasp that today it is absolutely certain . . . that all the planets revolve around the sun, with the exception of the moon, which alone has the Earth as its centre." 10

"The planetary orbit is elliptical and the sun, the source of movement, is at one of the foci of this ellipse."

"I was almost driven to madness considering and calculating this matter. I could not find out why the planet would rather go on an elliptical orbit." ¹²

"I am moved by an exceedingly powerful desire for knowledge of the heavens." ¹³

"If God is concerned with astronomy, which piety desires to believe, then I hope that I shall achieve something in this domain." 14

^{10.} Johannes Kepler and Charles G. Wallis, The Harmonies of the World (BiblioBazaar, 2008), p. 22.

^{11.} Kepler and Wallis, p. 25.

^{12.} Quoted in Owen Gingerich, The Eye of Heaven: Ptolemy, Copernicus, Kepler (American Institute of Physics, 1993), p. 344.

^{13.} Quoted in Max Caspar and Clarisse Doris Hellman, Kepler (Dover, 1993) pp. 120-121.

^{14.} Caspar and Hellman, p. 123.

Now look over your list of main events, and try to decide which main events each of these quotes belong to. (Some of the quotes might be usable in more than one part of the composition.)

For example, consider this quote: "I am moved by an exceedingly powerful desire for knowledge of the heavens." The quote tells you why Kepler spent his life studying the sky. So it might fit into a paragraph based on the following events:

Johannes Kepler studied at university in the 1590s

Worked as assistant to astronomer Tycho Brahe 1600-1601

Kepler tried to find mathematical explanation for movement of Mars

If the draft of your paragraph based on the first event read like this:

Johannes Kepler became a university student in the 1590s. He was taught heliocentrism, because one of his teachers believed Copernicus's theories of the universe.

you could add the quote as follows:

Johannes Kepler became a university student in the 1590s and studied astronomy. He said of his own studies, "I am moved by an exceedingly powerful desire for knowledge of the heavens." He was taught heliocentrism, because one of his teachers believed Copernicus's theories of the universe.

Now decide which quote you want to use and add it in to the appropriate paragraph. If you have difficulty, ask your instructor for help.

When you are finished, check your work with your instructor.

HOW TO HELP THE STUDENT WITH STEP THREE

The student should begin by deciding which main events each quote illustrates. For your reference, the answers are:

QUOTE	EVENTS	REASONS
"First, therefore, let my readers grasp"	Johannes Kepler studied at university in the 1590s	He learned this at university
	Heliocentric world view of Copernicus vs. geocentric world view	Describes the heliocentric world view
	Worked as assistant to astronomer Tycho Brahe 1600-1601	His work was based on this assumption
"The planetary orbit is elliptical"	In 1605, Kepler realized orbit must be an ellipse	This theory explained the orbit
	Formulated "Kepler's first law of planetary motion"	This realization led him to formulate the law
	Published findings in <i>Astro-</i> nomia Nova in 1609	This was the finding he published

Week 7 97

QUOTE	EVENTS	REASONS
"I was almost driven to madness"	Worked as assistant to astronomer Tycho Brahe 1600-1601	This was his reaction to the observations he made of Mars while working for Brahe
	Tycho Brahe died in 1601	This continued to be his experience as he worked on the orbits after Brahe's death
	Kepler tried to find math- ematical explanation for movement of Mars	This was his experi- ence as he looked for the explanation
"I am moved by an exceed- ingly powerful desire"	Johannes Kepler studied at university in the 1590s	This motivated his studies
	Worked as assistant to astronomer Tycho Brahe 1600-1601	This motivated his work
	Tycho Brahe died in 1601	This motivated his continued work after Brahe's death
	Kepler tried to find math- ematical explanation for movement of Mars	This continued to motivate him
	Published findings in <i>Astro-</i> nomia Nova in 1609	This lay behind his desire to share his findings

QUOTE	EVENTS	REASONS
"If God is concerned with astronomy"	Johannes Kepler studied at university in the 1590s	He believed this about his studies
	Worked as assistant to astronomer Tycho Brahe 1600–1601	He believed this about his work
	Tycho Brahe died in 1601	He continued to believe this about his work
	Kepler tried to find math- ematical explanation for movement of Mars	He continued to believe this about his work
	Published findings in <i>Astro-</i> nomia Nova in 1609	This lay behind his desire to share his findings

You may need to remind the student to add a dialogue tag (see Rules for Writing Dialogue in Week 3, page #). All of these quotes are drawn from Kepler's writings, so it is appropriate to use "He thought," "he said," "he believed," or "he wrote."

When the narrative is finished, check it using the following rubric.

Week Seven Rubric Chronological Narrative of Scientific Discovery

Organization

- 1 Events should be in chronological order.
- **2** The paragraph giving "background information" (heliocentric vs. geocentric world view) should be the first or second paragraph in the composition.
- **3** Two or more time words should be used.
- **4** The composition should use more than 150 but fewer than 300 words.

Mechanics

- 1 Each sentence should make sense on its own when read aloud.
- **2** Each proper name should be capitalized.
- **3** Possessive forms should be written properly.
- 4 The exact words of the source material should not be used in every sentence.
- **5** At least one direct quote should be included; quote and accompanying dialogue tags should be properly punctuated.