Sounds are caused by back-and-forth movements called (vibrations). When (Thomas Edison) invented the phonograph in 1877, he was aware of this fact. His phonograph consisted of a cylinder with grooves etched on its surface and a stylus. The (grooves) on

the cylinder varied in depth so that when the cylinder was rotated and the (stylus) ran in the groove, the (stylus) moved up and down. This vibration of the stylus produced the (sound).

Lesson 21

Calligraphy Letters v and w

Worktext, page 26



Materials and Preparation

Have available:

- · A chisel-point pen for each student.
- · A guide sheet for each student.
- · A piece of typing paper for each student.
- · A transparency of the lowercase guide sheet.
- · An overhead projector.
- · An overhead pen.

- Lesson Content -

Introduction

Review some of the information relating to the guide sheet—Choose a student to demonstrate the terms relating to the guide sheet. (the slant lines, the x-height, and these two guidelines: the base and body lines) Ask another student to explain the reason for using the guide sheet. (to control the height and slant of each stroke)

Skill development

Review some of the terms listed in the Calligraphy Glossary—Ask a student to demonstrate the proper body position, paper position, and pen hold. Ask another student to demonstrate the correct pen angle.

Review the instruction about breath control—Explain to the students that if they either hold their breath or breathe out when they write, they will have smoother-looking letters.

Review the practice strokes—Ask a student to come to the overhead or white board and demonstrate the practice strokes. You may need to help him.

Demonstrate the formation of lowercase v and w—Write the letters on the lines on the transparency, verbalizing the direction of each stroke as you write. Point out that both letters are made with one continuous stroke and that the curves are only on the bottoms of the letters. Remind the students that the letters should not connect to the letters that follow them.



Short stroke up, Glide right, Drop and swing around and up above body line.



Short stroke up,
Glide right,
Drop and swing around
and up to body line,
Retrace and swing around
and up above body line.

Review the rules for spacing within a word—Direct the students to the Calligraphy Tips on worktext page 106. Review the three parts of the rule for spacing within a work.





See Calligraphy Tips on worktext pages 105-6.

Guided practice

Direct handwriting on worktext page 26—Direct the students to set the guide sheet and typing paper aside for practice later. Review the calligraphy tip at the top of the page. Direct attention to the practice strokes. Then refer the

students to the letter models on the lines at the bottom of the page. Remind them of the procedures for practicing the letters at the bottom of the page.

- Note the arrow that indicates the direction of each stroke.
- 2. Trace the black letter with your finger.
- 3. Trace the gray letters with your pen.

Walk around the classroom to check that the students are making the correct strokes, both for practice strokes and for letter formation. Look for common errors.

Continued practice

Direct practice with typing paper and a guide sheet—Remind the students to use the side of the guide sheet labeled "Lowercase Guide Sheet." Tell each student to write the practice strokes, new letters, and the letters that were taught in the previous calligraphy lessons (c, a, o, e, m, and n).

Write the words *vow* and *ocean* on the overhead. Tell the students that both words will provide good review and practice in word formation. Be sure to collect the pens when the students have finished.



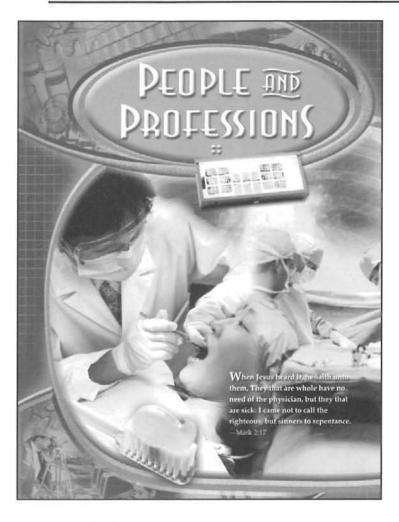


Surgeon and Dentist

In this unit the students will review letters *s* and *d* while they consider the work of the surgeon and the dentist. Many sixth-graders view surgeons and dentists with a combination of curiosity and fear. Learning about them often helps to give students a more objective viewpoint.

Remember to prepare now for the calligraphy lesson at the end of the unit. You will become more skilled at making the new strokes as you practice faithfully.





Word "Searchery" Surgeons treat disease and injury by operating on the affected parts of a person's body. A surgeon never operates alone but is part of a surgical team that includes a first assistant, an anesthesiologist, and a Circle the surgeon's supplies and the anesthesiologist's supplies On handwriting paper, write the surgeon's supplies in one column and the anesthesiologist's supplies in another column. DOWN-Surgeon's Supplies ACROSS-Anesthesiologist's Supplies anesthetics scalpels needles drugs. masks syringes sutures Н 0 0 E) A E I C 1 U Y В P F J R 0 X Y O E H G U C X X 5 Y G E G X T E X C D V L C M L E W D Q (M A S T A C L Z V U P V Q S R H R R (A N E 5 H E M L J G (5) R U 28

Materials and Preparation

Prepare:

· Handwriting lines on the chalkboard.

Lesson Content

Introduction

Introduce the unit—Direct attention to worktext page 27. Explain that this unit discusses some interesting facts about surgeons and dentists. Ask a student to read the unit verse.

Relate the following information.

One thing that a surgeon has to be very careful about is keeping germs from infecting his patient during and after an operation. Years ago, many patients in hospitals died because of infection. In 1865 Joseph Lister introduced the use of antiseptics, thereby saving the lives of hundreds of people. Surgeons today make sure that every piece of

equipment used in an operation is sterile, including their hands, so that there will be no danger of infection.

Direct attention to worktext page 28—Ask a student to read the information at the top of the page.

Skill development

Review the formation of *s*—Verbalize the direction of each stroke as you write the letters on the chalkboard. Point out that the letter *s* connects to letters that follow.

 \square

Swing up, Curve left and loop, Swing around to lock, Sweep out.



Swing up, Then down and around to lock, Sweep out. **Demonstrate the writing of the letter** *s*—Tell the students to air-trace the letters, and then allow volunteers to write the following words on the chalkboard.

sutures

stethoscope

sponges

Demonstrate the writing of lowercase *s* **in pairs**—Point out that the pencil is not lifted between letters. Tell the class to air-trace the letters, and then allow several volunteers to write the following words on the chalkboard.

scissors

witness

Russia

Demonstrate alternate styles of writing the letter s (optional).



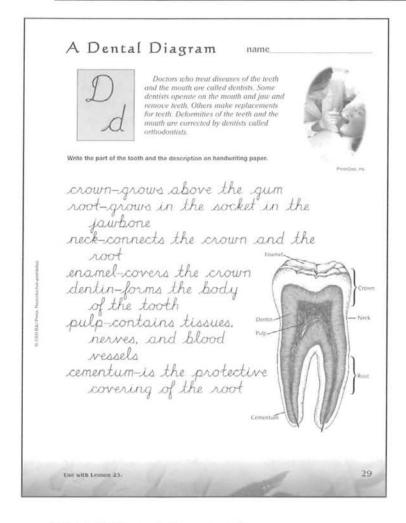
Guided practice

Guide the completion of worktext page 28—Ask a volunteer to read the instructions. Tell the students to complete the page independently.

Optional activity

Direct a writing activity—Direct each student to write the following surgery discoveries in the order that he thinks the discoveries occurred. Then give the students the correct order as indicated by the numbers in the parentheses.

- (4) x-rays
- (2) identification of micro-organisms as the cause of infection in wounds
- (1) ether anesthesia
- (5) blood typing
- (3) antiseptics



Materials and Preparation

Prepare:

· Handwriting lines on the chalkboard.

Lesson Content

Introduction

Direct a spelling bee—Divide the class into two teams. Have the two teams line up at the chalkboard. Call out the following words one at a time.

cavity	enamel	painless
x-ray	braces	anesthetic
prevention	extraction	deformity
orthodontics	filling	dentistry

Direct the first team members in each line to write the word on the chalkboard. The first to spell the word correctly wins a point for his team. The team with the most points at the end of the spelling bee wins. **Direct attention to worktext page 29—**Ask a student to read the information at the top of the page.

Skill development

Review the formation of d—Verbalize the direction of each stroke as you write the letters on the chalkboard. Point out that the uppercase d does not connect to letters that follow but that lowercase d does.



Drop low and loop left, Swing around and over to lock.



Swing up and around to one, Retrace and swing around and up, Climb high, Retrace and curve.

Demonstrate the writing of lowercase *d* **in pairs**—Point out that the pencil is not lifted between letters. Tell the class to air-trace the letters, and then allow several volunteers to write the following words on the chalkboard.

shredded meddle reddish ladder

Demonstrate alternate styles of writing the letter d (optional).







Guided practice

Guide the completion of worktext page 29—Instruct the students to locate the seven parts of the tooth on the diagram as volunteers read the seven words and their definitions. Check letter formation, slant, alignment, and overall neatness as the students write the phrases that describe the parts of the teeth.

Optional activity

Direct a writing activity—Prepare a copy of the following lists of dental firsts. Instruct each student to choose one interesting fact and to write it on handwriting paper.

- In his book written in 1728, Pierre Fauchard described the first dental drill as a hand-held drill operated by twisting it in alternate directions.
- The first dental practitioner in Britain was Peter de la Roche. He practiced in London in 1661.

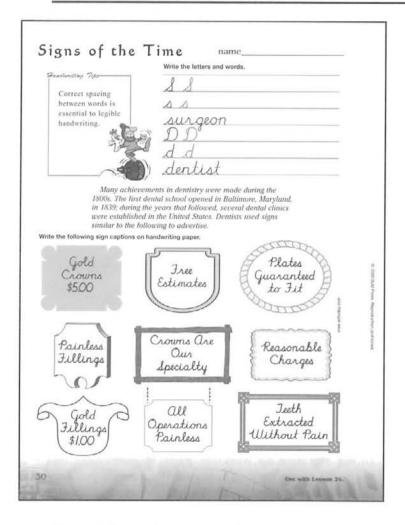
- An edict of Louis XIV in 1699 was the first list of professional qualifications for dental practitioners.
- 4. The earliest known set of dentures composed of both upper and lower rows of false teeth is believed to date from the late 1400s. They are composed of teeth carved from bone attached to hinged side-pieces with gut.

Direct an art activity—Direct each student to design and make his own toothpaste box. Encourage him to use his best handwriting when writing the name of the toothpaste and its contents on the box.

Lesson 24

Signs of the Time

Worktext, page 30



Materials and Preparation

Have available:

Handwriting paper for each student.

Prepare:

- Handwriting lines on the chalkboard.
- The following words on the chalkboard.

quarrier geologist civil engineer judge oceanographer inventor calligrapher astronomer

- Lesson Content

Introduction

Play a review game—As you read the words below, tell the students to match each one with an occupation listed on the chalkboard.

swash (calligrapher); refractor (astronomer); tides (oceanographer); feathers (quarrier); streak plate (geologist); pyramid (civil engineer); bailiff (judge); telephone (inventor).

To make it a more challenging game, put the clue words on the chalkboard instead of the occupation and have the class guess which occupation they match.

Direct attention to worktext page 30—Ask a student to read the paragraph about dentistry.

Skill development

Focus on the handwriting tip on worktext page 30— Point out the handwriting tip at the top of the page. Dictate the following sentences and allow several students to write them on the chalkboard.

Dr. Smith is a surgeon.

My dentist's name is Dr. Darry.

Remind the students to use correct spacing.

Guided practice

Focus on writing the letters s and d—Direct the students to write the letters and words at the top of worktext page 30.

Guide the completion of worktext page 30—Instruct the students to complete the page independently.

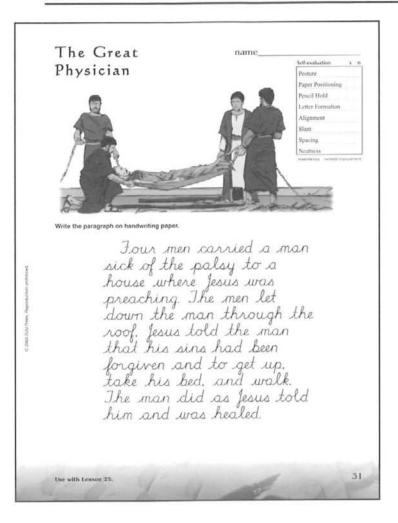
Optional activity

Complete a poem—Provide a copy of the following poem for each student. Direct him to write on handwriting paper a final verse to complete the poem.

Lesson 25

The Great Physician

Worktext, page 31



Materials and Preparation

Have available:

· Handwriting paper for each student.

Prepare:

- Handwriting lines on the chalkboard.
- · The following words on the chalkboard.

scalpel x-ray stethoscope mask retractor gloves sutures sphygmomanometer

Lesson Content

Introduction

Create interest with a game—Tell the class that today they must take a test in order to see if they are qualified to enter a famous medical college. (Insert the name of a local medical school if you have one in your area.) As you read the definitions below, ask the students to match them with the list of surgical equipment on the chalkboard.

- This is used to listen to sounds produced by the heart. (stethoscope)
- 2. This allows the surgeon to breathe without contaminating the patient. (mask)
- 3. These are made of thread and are used to close an open wound. (sutures)
- 4. This is a small knife with a thin, sharp blade. *(scalpel)*
- 5. This is an important tool for diagnosis. (x-ray)
- 6. This instrument holds back the edges of a wound. *(retractor)*
- 7. These help keep the surgeon's hands sterile. (gloves)
- This instrument measures blood pressure. (sphygmomanometer)

Direct attention to worktext page 31—Comment that Jesus, the Great Physician, healed His patients perfectly and did not need the complicated equipment that doctors use today.

Skill development

Review the formation of s and d—Allow several students to write the letters on the chalkboard as you verbalize each stroke. Ask how these lowercase letters are alike. (They connect to letters that follow.) Ask how the uppercase letters s and d are different. (Uppercase s connects to letters that follow; uppercase d does not.)

Review alignment and spacing—Write the word alignment on the chalkboard. Explain that each letter should rest on the base line; each ascender (tall letter) should extend from the base line to within 1/16" of the top line. Point out that the tall letters need to be the same height. The short letters also need to be the same height, touching the

imaginary mid-line. Emphasize that correct spacing is essential for neat, legible writing. Students should leave approximately 1/8" of space between each word.

Assessment

Guide the completion of worktext page 31—Direct a student to read the paragraph. Discuss the criteria for the self-evaluation, and then instruct the students to write the paragraph neatly on handwriting paper.



You may want to use the evaluation form in the Appendix with this lesson. Be aware that the back of this page will be used in the next lesson on calligraphy.

Optional activities

Direct a Bible study—Give the following information to the students.

A physician can be defined as one who practices the healing art—including medicine and surgery. He practices medicine in the sense that he uses preparations (medicines) to treat diseases, and surgery in the sense that he operates or uses manual (with the hand) procedures to treat disease. The Scripture does not mention the surgical aspect of a physician, but it does mention the medicinal aspect.

Direct each student to look up the following Bible references and to write the name of the substance used as a medicine beside its reference.

Genesis 37:25 (balm)
Isaiah 1:6 (ointment)
Jeremiah 51:8 (balm)
II Kings 20:7 (lump of figs, i.e., a plaster poultice)
Luke 10:34 (oil and wine)

Next direct each student to look up the following references and to write the name of the disease known in bibli-

cal times beside its reference.

Deuteronomy 28:28 (blindness)
Job 2:7 (boils)
Exodus 9:9 (blains—a swelling)
II Timothy 2:17 (canker—a consumption, gangrene)
Mark 5:25 (issue—to run with blood)

Direct a Bible study—Read Song of Solomon 1:3 to the students. Point out the portion that says "Thy name (referring to Christ) is as ointment poured forth." Tell them that the Scripture has many things to say about ointment, and in looking at some of these references we can find out some things about Christ's name and therefore about Christ Himself. Write the following Bible references on the chalkboard; then mix up the order of the statements about ointment and give a copy of them to each student. Direct each student to look up the verses and to write the references next to the statement that they apply to. You may want to use the information following each statement for discussion.

John 12:3—Ointment was very costly; and when poured forth, it filled the house with its odor. (Christ is our precious Savior; and when His blood was poured forth, it was as a sweet-smelling sacrifice to God in heaven.)

Exodus 30:35-36—Ointment was beaten to make a perfume. (See the explanation for John 12:3.)

Exodus 30:25-27—Holy ointment was used to purify the instruments in the temple. (It is through Christ that we are made pure.)

Exodus 30:30—Holy ointment was used to anoint priests. (In I Peter 2:9 we are called "a chosen generation, a royal priesthood." Because of Christ's sufferings on the cross—like the beaten ointment—we are anointed as royal priests.)



Skill development

Review some of the terms listed in the Calligraphy Glossary—Ask a student to demonstrate the proper body position, paper position, and pen hold. Ask another student to demonstrate the correct pen angle.

Review the instruction about breath control—Explain to the students that if they either hold their breath or breathe out when they write, they will have smoother-looking letters.

Review the practice strokes—Ask a student to come to the overhead or white board and demonstrate the practice strokes. You may need to help him.

Demonstrate the formation of lowercase u, i, and r—Write the letters on the lines on the transparency, verbalizing the direction of each stroke as you write. Remind the students that these letters should not connect to other letters that follow. Point out that the u is basically an upside down n, the r is a short-legged n, and the i is the same basic stroke as the first part of n.

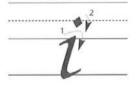


Short diagonal right, Drop and swing right, Push up to the body line, Retrace and curve.

Materials and Preparation

Have available:

- · A chisel-point pen for each student.
- · A guide sheet for each student.
- · A piece of typing paper for each student.
- · A transparency of the lowercase guide sheet.
- · An overhead projector.
- · An overhead pen.



- Short diagonal right, Drop and curve.
- (2) Dot.

Lesson Content

Introduction

Review some of the information relating to the guide sheet—Choose a student to demonstrate the terms relating to the guide sheet. (the slant lines, the x-height, and these two guidelines: the base and body lines) Ask another student to explain the reason for using the guide sheet. (to control the height and slant of each stroke)



Short diagonal right and drop, Retrace and swing right.

Guided practice

Direct handwriting on worktext page 32—Review the calligraphy tip at the top of the page. Direct attention to the practice strokes. Then refer the students to the letter models on the lines at the bottom of the page. Remind them of the procedures for practicing the letters at the bottom of the page.

- Note the arrow that indicates the direction of each stroke.
- 2. Trace the black letter with your finger.
- 3. Trace the gray letters with your pen.

Walk around the classroom to check that the students are making the correct strokes, both for practice strokes and for letter formation. Look for common errors.

Continued practice

Direct practice with typing paper and a guide sheet—Remind the students to use the side of the guide sheet labeled "Lowercase Guide Sheet." Tell each student to write the practice strokes, new letters, and the letters that were taught in the previous lessons (c, a, o, e, m, n, v, and w). Write the word crime on the overhead for the students to see. Point out that this word will provide good review and practice in word formation. Be sure to collect the pens when the students have finished.



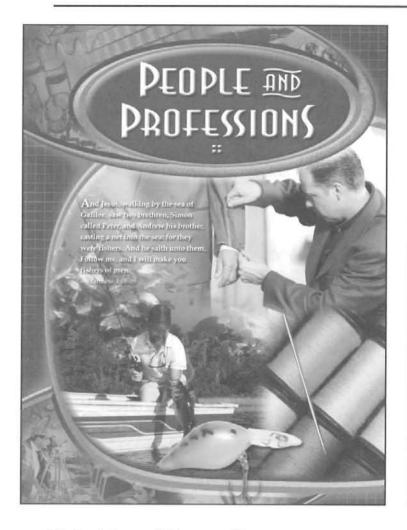


Tailor and Fisherman

The letters *t* and *f*, which have similar beginning strokes, are reviewed in this unit; the corresponding occupations are tailor and fisherman. The students will have a chance to do some creative thinking during the activities in these lessons.

Please read the entire unit, paying particular attention to the calligraphy lesson. Allow yourself plenty of time to practice new strokes before teaching the calligraphy letters.





			-
J	Tailors make, repair, and alter clothing. Most tailors measure customers, fit ar make patterns, and then sew garments. Once tailoring was a common profession: but with the invention of sewing machines and mass production of clothing, it has decreased in popularity. However, some people still earn their living making hand tailored clothes.		en sew sion; mass larity:
tailor uses many sewing tools	s. Write the names of the tools		
the handwriting lines.	3100		
ewing mach reedles			
himble			
ape measur			
oins ron			
ron hread	_		
cissors	-		
ilors must also use fastening rite the name of the fastener	s on the garments they make. below each picture.		
button ho	ok and eye	pipper	MAAA
19		8-7-7-	33.337
	9	(ED)	2
	,		
-6		621 0	la constant
ales	8	63 (3)	b)

Materials and Preparation

Have available:

· A dress or suit pattern with its instruction sheet.

Prepare:

· Handwriting lines on the chalkboard.

----- Lesson Content -

Introduction

Introduce the unit—Direct attention to worktext page 33 and ask what occupations are represented. If anyone seems unsure of what a tailor does, explain that he makes and repairs clothes. Ask a student to read the unit verse aloud and tell what Jesus meant by saying that He would make them fishers of men. (They would win men to Him.) Ask the class if they can think of one characteristic that tailors and fishermen and soulwinners need. (Answers will vary but may include patience.)

Display the pattern and instruction sheet—Point out to the class that the pattern looks complicated unless you know what to do with it. Explain that a dress (or a suit) is hard to complete successfully without referring to the instruction sheet. Add any anecdotes from your personal sewing experiences that apply. Remind the students that God has a plan or a pattern for our lives. Mention that it is sometimes hard to trust that His plan will work out well and that we need to read our instructions in the Bible. (BAT: 6a Bible study)

Direct attention to worktext page 34—Ask a student to read the information at the top of the page.

Skill development

Review the formation of *t*—Verbalize the direction of each stroke as you write the letters on the chalkboard. Remind the students that lowercase *t* is crossed after the entire word is written. Point out that uppercase *t* does not connect to letters that follow but that lowercase *t* does.



Swing over and up, Drop and swing left.



(1) Swing up, Retrace and curve right. (2) Cross.

Demonstrate the writing of lowercase *t* in pairs—Point out that the pencil is not lifted between letters. Tell the class to air-trace the letters, and then allow volunteers to write the following words on the chalkboard.

written

tatter

button

mitt

Demonstrate alternate styles of writing the letter t (optional).



Guided practice

Guide the completion of worktext page 34—Ask a volunteer to read the instructions. Direct the students to complete the page using their best cursive writing.

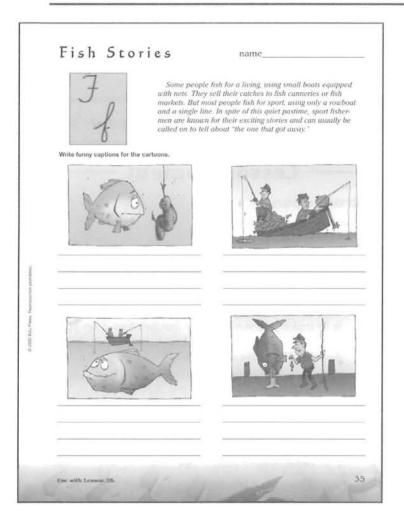
Optional activity

Direct a writing activity—Direct each student to look up the following verses about sewing. Ask him to write the name of the item being sewn next to each reference.

Genesis 3:7 (fig leaves)

Exodus 36:37 (hanging for the tabernacle)

Acts 18:3 (tents)



Materials and Preparation

Prepare:

- Handwriting lines on the chalkboard.
- The following words on the chalkboard.

Fred

fisherman

- Lesson Content

Introduction

Lead a discussion—Instruct the students to turn to worktext page 35. Ask them to read the paragraph at the top of the page silently and to think of any interesting fishing experiences they have had. Allow several students to tell their fishing stories.

Skill development

Review the formation of f—Verbalize the direction of each stroke as you write the letters on the chalkboard. Remind the students that uppercase f is crossed after the entire word is written. Point out that uppercase f does not connect to the

letters that follow but that lowercase f does. Point out the words on the chalkboard.



- Swing over and up, Drop and swing left.
- (2) Cross.



Swing up, Curve left and drop low, Curve right and up to lock, Bounce.

Demonstrate the writing of lowercase *f* **in pairs**—Point out that the pencil is not lifted between letters. Write the following words on the chalkboard.

staff

traffic

fluff

Allow several students to write them, using your examples as models

Demonstrate alternate styles of writing the letter f (optional).



Guided practice

Guide the completion of worktext page 35—Elicit several possible captions for the cartoons and write them on the chalkboard. Check paper position, pencil hold, and posture as students write original captions.

Optional activity

Direct a writing activity—Give the following information to the students.

Fish have been important to man since the early times. In fact, the symbol of Christianity for two hundred years after Christ's ascension was the fish. The Greek word for "fish" was used as an acrostic; that is, each letter in the word fish stood for a word in the Greek phrase—Jesus Christ God's Son Savior. The Christians continued to use the fish as a symbol for Christianity until crucifixion became illegal in the Roman Empire; then they used the cross.

Write the following Bible references on the chalkboard. Instruct each student to look up these references of fish stories. Direct him to write on handwriting paper the characters involved in each story next to its reference. Matthew 14:15-21 (five thousand men, women, and children; the disciples; Christ)

Matthew 15:32-39 (four thousand men, women, and

children; the disciples; Christ)

Matthew 17:24-27 (the tribute collectors, Peter, Christ)

Luke 5:4-11 (Simon Peter, James and John, the fishermen in the other boat, Christ)

John 21:1-14 (Simon Peter, Thomas, Nathanael, the sons of Zebedee [James and John], two other disciples, Christ)

Lesson 29

Seven at One Blow

Worktext, page 36

1	rendurating 7ips	
	Margins are imaginary lines on both sides of your paper.	
L	Jisherman	
ite t	e the sentences in sequential order on handwriting paper.	
6	□ The clever tailor caused a fight to	
	start between two giants.)
2	 The tailor sewed the words "seven 	at
1	one blow on his belt. — Iwo giants beat the tailor's bed.	
	 The giant squeezed water out of a 	rock
	□ The tailor killed seven flies at one	
	. Ihe king's daughter and the	
	tailor married and lived	
	happily ever after.	7
5	Dhe king told the tailor De	
	to prove his bravery by	
	killing the giants.	P 1
	413	City.
		262
	2	
	water to the state of the	AND

Materials and Preparation

Prepare:

· The following words on the chalkboard.

mousetrap	gun
book	plate
spoon	button
pop-up tissues	paper clip

Lesson Content -

Introduction

Create interest in the lesson.

Part of today's lesson is a story you may recognize. It is about a tailor who made rather grand claims about what he could do. In advertisements today, you often hear exaggerated and flowery language used to describe a product. The purpose, of course, is to make you want to buy that product. Can you tell which of the items listed on the chalkboard are described by these sentences?

- This is an ingenious device of steel and hardwood that is guaranteed to rid your household of unwanted intruders. (mousetrap)
- This tiny, silver-colored implement performs the valuable task of keeping your papers in order. (paper clip)
- There are a hundred uses for these soft, pliable layers of paper that emerge from their container at a flick of your hand. (pop-up tissues)
- This is a most useful object that comes in a variety of sizes, shapes, and colors. It is found in elevators, on shirts, and is used to describe noses. (button)

Skill development

Focus on the handwriting tip on worktext page 36—Call attention to the handwriting tip at the top of the page. Direct the students to leave a margin on both sides of their papers.

Guided practice

Focus on writing the letter t and f—Call attention to the model letters at the top of worktext page 36. Remind the students that lowercase t and uppercase f are crossed after the entire word is written. Point out that lowercase t and f connect to letters that follow but that uppercase t and f do not. Instruct the students to write the letters and words on the lines provided.

Discuss a fairy tale—Ask the students if anyone has heard the story of "The Brave Little Tailor." If someone knows the story, allow him to tell it. If not, relate the following story to the students. Explain that this is from *Grimm's Fairy Tales*.

One morning a little tailor was stitching merrily in his shop. On his table was a piece of bread covered with delicious jam. The jam was so sweet that soon a great many flies were attracted to it. The tailor shooed them away, but they came back in only greater number. Finally, he grabbed a flyswatter and swung it back and forth. When he stopped, seven flies lay dead. "Seven at one blow," said the tailor and quickly sewed himself a belt with the words "seven at one blow" embroidered on it. Then he went out to see the world.

He soon encountered a giant who was impressed with the tailor's bravery (though, of course, he thought the "seven at one blow" meant men and not flies). To test the tailor, he squeezed water out of a rock and challenged the tailor to do the same. The tailor tricked the giant by squeezing the whey out of a piece of old cheese that he had brought with him.

The giant invited the tailor to spend the night in a cave with other giants. The bed, however, was so big that the tailor crawled up in the corner of the room to sleep instead. During the night the giant came in and beat the bed, thinking he was killing the tailor. When the giants saw the tailor the next day, they thought he was a spirit and ran away.

The tailor continued on his merry way until he came to the palace. The king and all his court were amazed at the tailor's great claim. The king promised the tailor his daughter in marriage and half the kingdom if he could rid the land of two giants that were continually bothering his realm.

"Just the thing for someone brave like me," said the tailor, and he set out. In the woods he spied the two giants lying asleep under a tree. He filled his pockets with stones and climbed to a branch over the giants. The tailor threw a stone down and hit one of the giants.

The giant woke up and asked his companion why he had hit him. Of course the second giant denied hitting the first. Soon they were both asleep again. The tailor hit the second giant with a stone. When he awoke, he accused the first giant of hitting him. Soon they were fighting and beating up on each other until they were both quite dead.

The little tailor went back to the king and claimed his prize. He married the princess, and they lived happily ever after.

Guide the completion of worktext page 36—Help the students to put the sentences in the correct order. Remind them to leave a margin on both sides of their papers as they write the sentences in sequential order.

Optional activity

Direct a listening activity—Read "The Emperor's New Clothes" to the students. Direct each student to write on handwriting paper the moral of the story.

Lesson 30

There Were Twelve Disciples

Worktext, page 37

	Self-evaluation
Twelve Disciples	Posture
Refore they became fishers of men, some of Jesus' disciples fished along the Sea of Galilee. When Jesus called Simon Peter and Andrew, they were at work fishing in the sea. James and John, the	
sons of Zebedee, were mending their i	
to follow Him. These men left everythi	
with Christ.	Slant
- +	Spacing
	Nestness and delay investi
fames John Philip Jhomas Mattheur	
James	
James Jhaddeus Jhaddeus Simon Judas Iscariot Bartholomew Write the names of the four disciples who were	
fames Jhaddeus Limon Judas Iscariot	o fishermen. James Andrew

Materials and Preparation

Prepare:

· The following words on the chalkboard.

still fishing

trolling

casting

ice fishing

· Handwriting lines on the chalkboard.

- Lesson Content

Introduction

Lead a guessing game—Direct the students' attention to the words on the chalkboard. Tell them to guess the different methods of fishing as you read the following clues.

- A fish is pulled in by cranking a reel handle. (casting)
- 2. A tip-up device signals that a fish is caught. (ice fishing)

- The fisherman throws in a baited hook and waits for a bite. (still fishing)
- 4. A moving boat tows the bait or lure. (trolling)

Direct attention to worktext page 37—Ask a student to read the paragraph about the disciples.

Skill development

Review the formation of t and f—Direct several students to write the letters on the chalkboard as you verbalize the stroke descriptions. Ask how these uppercase letters are alike. (They do not connect to letters that follow.) Point out that these lowercase letters connect to letters that follow. Remind the students that uppercase f and lowercase t are not crossed until the entire word is written. Allow volunteers to write the following verse phrases on the chalkboard.

Follow me.

Be ye therefore followers of God.

Teach me thy paths.

Assessment

Guide the completion of worktext page 37—Instruct a student to read the directions. Direct the students to complete the page independently.



You may want to use the evaluation form in the Appendix with this lesson. Be aware that the back of this page will be used in the next lesson on calligraphy.

Optional activity

Direct a writing activity—Direct the students to look up the following references and to write on handwriting paper the fishing method mentioned next to its reference.

Mark 1:16 (netting)

Isaiah 19:8 (angling with a hook and netting)

Ezekiel 26:5 (netting)

Habakkuk 1:15 (angling with a hook, netting, and dragging)

Matthew 4:18 (netting)

Lesson 31

Calligraphy Letters s and t

Worktext, page 38

Calligraphy Letters s and t	name
ST Leave	e a space of an "o" between words.
Copy the practice strokes.	
))))) (E	e 200
Write the letters s and t.	Calter Fisherman Lighthous Lighthous Lighthous
*t t t / /	
38	the with Lesson 31,

Materials and Preparation

Have available:

- · A chisel-point pen for each student.
- · A guide sheet for each student.
- · Two pieces of typing paper for each student.
- · A transparency of the lowercase guide sheet.
- · An overhead projector.
- An overhead pen.

- Lesson Content

Introduction

Lead a critique session—On the overhead, write the following calligraphy letters, verbalizing the direction of each stroke as you write: *c, a, o, e, m, n, v, w, u, i,* and *r*:



See the calligraphy stroke descriptions in the Introduction.

Distribute a pen and two pieces of typing paper to each student. Direct the students to warm up with their practice strokes and then to write three times each all of the letters written on the overhead. When several students have finished, ask for volunteers to show their papers. Direct attention to each paper and ask the class to comment on the letters, using the following terms.

- 1. Slant (should be consistent and 13°)
- Pen angle (should have serifs of 45° and thin diagonal strokes)
- 3. Strokes (should start and end in the correct place)
- Spacing within a word (should have the most space between two straight strokes, less between a straight and a curved stroke, and the least between two curved strokes)

Point out to the students that evaluating work in this fashion will help them learn to evaluate their own work.

Skill development

Demonstrate the formation of lowercase *s* **and** *t*—Write the letters on the lines on the overhead, verbalizing the direction of each stroke as you write.

Direct attention to the letter *s*—Point out the curve at the beginning of the stroke and that the top and bottom of the letter are reversed mirror images.



Swing up to the left, Swerve around and back to the left.

Direct attention to the letter *t*—Point out that the first stroke starts above the body line. The second stroke begins at the bottom of the body line and glides across to the right.



- (1) Drop and curve right.
- (2) Glide right.

Remind the students that the letters should not connect to the letters that follow. **Introduce spacing between words**—Write the words *vow* and *crime* on the overhead. Lightly write an *o* between the words. Explain to the students that they should leave the space of an *o* between words.

Guided practice

Direct handwriting on worktext page 38—Review the calligraphy tip at the top of the page. Direct attention to the practice strokes. Point out that writing the practice strokes again will aid in better letter formation. Refer the students to the letter models on the lines at the bottom of the page. Remind them of the procedure for practicing the letters at the bottom of the page.

- Note the arrow that indicates the direction of each stroke.
- 2. Trace the black letter with your finger.
- 3. Trace the gray letters with your pen.

Walk around the classroom to check that the students are making the correct strokes, both for practice strokes and for letter formation. Look for common errors.

Continued practice

Direct practice with typing paper and a guide sheet—Remind the students to use the side of the guide sheet labeled "Lowercase Guide Sheet." Tell each student to write the practice strokes, new letters, and the letters that were taught in the previous calligraphy lessons (c, a, o, e, m, n, v, w, u, i, and r).

Write the word *sweater* on the overhead for the students to see. Point out that this word, along with the words *crime*, *ocean*, and *vow*, will provide good review and practice in word formation. Remind the students to leave the space of an *o* between words. Be sure to collect the pens when the students have finished.

sweater



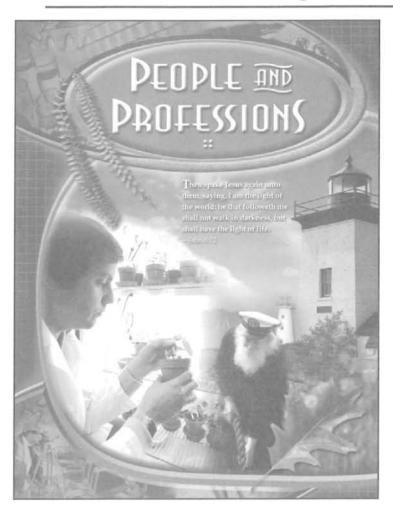
Lighthouse Keeper and Botanist

The occupations presented in this unit, lighthouse keeper and botanist, may not be familiar to the students. The study of these occupations will broaden the students' general knowledge and provide them with some historical perspective while they review the letters *l* and *b*.

Read the whole unit, giving special attention to the calligraphy lesson at the end. Be sure to practice the calligraphy strokes ahead of time so that you will be well prepared to present the new letters.



Abbie Burgess, Lighthouse Keeper



Abbie Burgess, name Lighthouse Keeper When Abbie Burgess was fourteen years old, her father was appointed the keeper of the two lighthouses on Matinicus Rock, a rock island twenty-two miles from the coast of Maine. Because the lighthouse lamps had to keep burning all night, Abbie tended the lighthouses whenever her father went to the coast for supplies. Although she was only fourteen years old, she managed to keep the lamps lit to protect the passing ships Write on handwriting paper the list of things Abble had to do each morning to get the lamps ready to be lit at night. 1. Blow out the oil lamps in the tower. 2. Remove the glass chimneys after they 3. Clean the oil lamp bowls. 4. Irim the wicks in the lamps. 5. Refill the lamps with oil 6. Polish the silver reflectors in the tower.

Materials and Preparation

Have available:

· Handwriting paper for each student.

Prepare:

· Handwriting lines on the chalkboard.

Lesson Content ·

Introduction

Introduce the unit—Direct the class to worktext page 39. Ask a student to read the unit verse. Ask how the function of a lighthouse relates to the statement that Jesus is the Light of the world. (Lighthouses warn ships of danger and can help guide a ship to safety. Jesus, as the Light of the world, warns us of the dangers of sin and provides our salvation.)

Direct attention to worktext page 40—Ask a student to read the story of Abbie Burgess at the top of the page.

Relate the following information.

For centuries, lighthouses have warned sailors of dangers that they could not see. Instead of using lanterns, the ancient Libyans filled metal baskets with burning wood and coal and hung them from poles at the top of high towers. Today's lighthouses send their signals from a huge lamp and lens that are sheltered in an enclosure of glass and steel. Some modern lighthouses also send radio signals; many are automatic. They do not require a keeper to take care of the equipment as they did when Abbie Burgess was growing up.

Skill development

Review the formation of *I*—Verbalize the direction of each stroke as you write the letters on the chalkboard. Point out that uppercase and lowercase *l* connect to letters that follow.



Swing up, Curve left and drop, Loop left and sweep across.



Swing up, Curve left and loop.

Demonstrate the writing of lowercase *I* in pairs—Point out that the pencil is not lifted between letters. Tell the students to air-trace the letters, and then allow volunteers to write the following words on the chalkboard.

hall

rebellion

dwell

hollow

small

Demonstrate alternate styles of writing the letter l (optional).

LLB

Guided practice

Direct completion of worktext page 40—Allow a volunteer to read the list of things Abbie had to do each morning. Instruct the students to position their paper correctly before they begin writing.

Optional activity

Direct a writing activity—Direct each student to write the following list of types of illuminants that have been or are still used for lighthouse lamps.

wood fires

acetylene gas

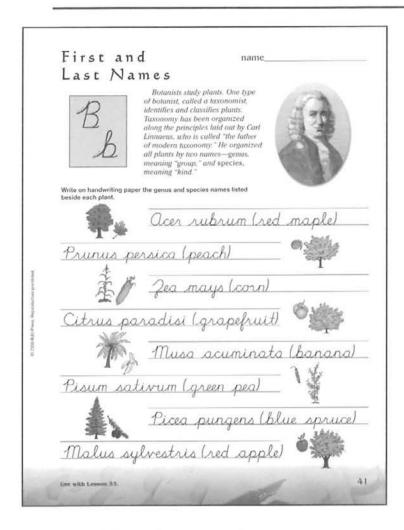
coal

propane

oil lamp

electricity

vaporized oil burner



Materials and Preparation

Have available:

· Handwriting paper for each student.

Prepare:

Handwriting lines on the chalkboard.

- Lesson Content -

Introduction

Direct attention to worktext page 41—Ask a student to read the paragraph about botanists at the top of the page.

Relate further information about Linnaeus.

Even though Carl Linnaeus began his professional training by going to medical school, he had been interested in plants ever since his boyhood in Sweden. He looked after a small botanical garden and began an insect collection. He also took several trips to study and collect plants. Later he became a professor of botany at the University of Uppsala and wrote books about plants and his special method of classifying them.

Skill development

Review the formation of b-Verbalize the direction of each stroke as you write the letters on the chalkboard. Point out that uppercase and lowercase b connect to the letters that follow.



Swing up and drop, Retrace and swing around Retrace and swing around to lock. Sweep out.



Swing up, Curve left and drop. Retrace and swing around to lock. Sweep out.

Demonstrate the writing of lowercase b in pairs—Point out that the pencil is not lifted between letters. Tell the class to air-trace the letters, and then allow volunteers to write the following words.

bubble

stubborn

robber

scribble

Demonstrate alternate styles of writing the letter b (optional).







Guided practice

Guide the completion of worktext page 42—Ask several students to read the scientific names of the plants pictured on this page. Check students' posture as they write the genus and species names of each plant on handwriting paper.

Optional activity

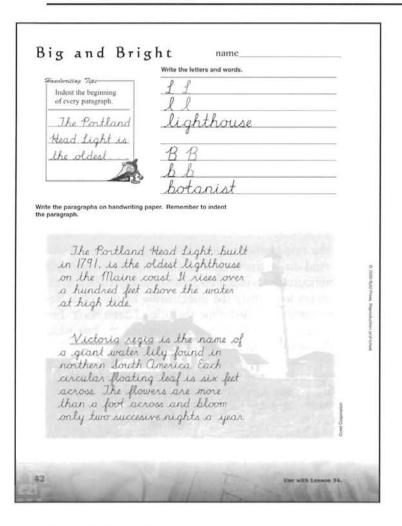
Direct a writing activity—On the chalkboard or on an overhead projector, write verses 1-6, 9-10, and 12 from the poem "Tapestry Trees" by William Morris. (See Favorite Poems Old and New, edited by Helen Ferris.) Do not include the names of the trees above the verses, but rather write them in a random order after you have written the verses. Direct each student to match the name of the tree to its description by writing the names of the trees on handwriting paper in the same order as the verses. When they are finished, go over the definitions of the following words.

weal (prosperity or happiness) bane (fatal injury or ruin, a deadly poison) wain (a large, open farm wagon) odorous (fragrant) Also point out that the phrase "In my warm wave do fishes swim" could refer to the practice fishermen have of placing a drop of oil on the surface of troubled waters to calm them. The oil increases the surface tension of the water because it forms a film.

Lesson 34

Big and Bright

Worktext, page 42



Materials and Preparation

Have available:

Handwriting paper for each student.

Lesson Content

Introduction

Relate the following information.

Your worktext page tells about a beautiful water lily, the *Victoria regia*. It was discovered more than one hundred years ago along the Amazon River in South America. This remarkable lily proved to be very difficult to grow, and its first seeds were sent to England in a bottle of water in order to keep them alive. The northern species of this water lily

was named in honor of Queen Victoria, and in 1849 its first flower was presented to her.

Create interest in the lesson—Ask the students to pretend that they are botanists and have discovered a new plant that they will name after themselves. Give them a few minutes to think about their discovery, and then allow several students to describe their plant and tell its name.

Direct attention to worktext page 42—Explain that this page describes one of the oldest lighthouses and one of the largest lilies in the world.

Skill development

Focus on the handwriting tip on worktext page 42—Instruct the students that handwritten paragraphs should be indented approximately three spaces. Call attention to the handwriting tip at the top of the page.

Guided practice

Focus on writing the letters l and b—Point out the model letters at the top of worktext page 42. Remind the students that uppercase and lowercase l and b connect to letters that follow them. Tell the students to write the letters and words on the lines provided. Circulate among the students to check the formation of the letter b. Remind them that the uppercase and lowercase b lock on the base line and then sweep out.

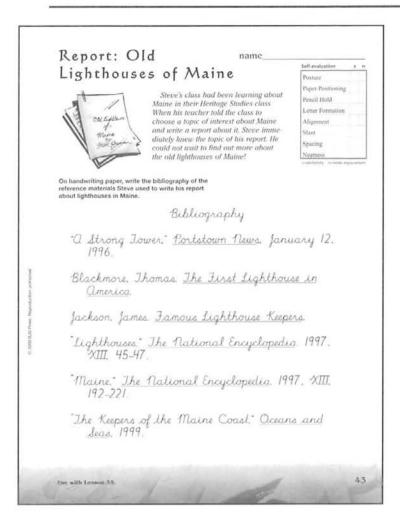
Guide the completion of worktext page 42—Ask two students to read the paragraphs. Remind students to check posture, paper positioning, and pencil hold before beginning the handwriting activity. Also remind them to indent the two paragraphs.

Optional activity

Direct a writing activity—Direct each student to look up the following references about light in Scripture and list next to the reference the person, thing, or idea mentioned in the verse.

I John 1:5 (God)
Psalm 104:2 (God)
John 1:4 (Jesus)
Proverbs 6:23 (the law)
Romans 13:12 (armour)
Psalm 119:105 (Word of God)
Matthew 5:14 (Christians)

Lesson 35 Report: Old Lighthouses of Maine Worktext, page 43



Materials and Preparation

Have available:

Handwriting paper for each student.

Prepare:

- Handwriting lines on the chalkboard.
- The following sentence on the chalkboard.
 Mr. Lee Billings would like to build a new lighthouse on the Maine coast.

· Lesson Content ·

Introduction

Lead a discussion—Tell the students to turn to worktext page 43. Ask a volunteer to read the paragraph at the top of the page. Remark that when Steve did the research for his report, he might have become curious about the men and

women who used to take care of the old lighthouses. Ask what qualities a good lighthouse keeper should have. As suggestions are given, list them on the chalkboard. Mention that most often a lighthouse keeper was a man in his middle years who was also a fisherman. Besides doing odd jobs like carpentry, painting, masonry, and plastering, he had to be able to fix plumbing and broken machinery. A lighthouse was often tended by a man-and-wife team.

Skill development

Review the formation of *l* and *b*—Allow several students to write the letters on the chalkboard as you verbalize the stroke descriptions. Ask how these letters are alike. (They both connect to letters that follow them.) Point out how letters connect within the words in the sentence on the chalkboard. Direct a student to underline words containing the letter *l* or *b*. Allow several students to write the underlined words on the chalkboard, using your examples as models.

Assessment

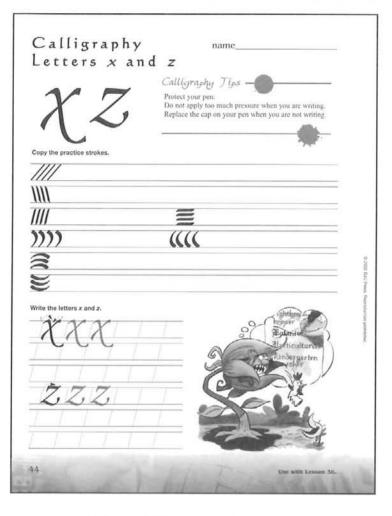
Guide the completion of worktext page 43—Ask a student to read the instructions. Point out that the second line of the bibliography is indented approximately three spaces. Ask students to identify the punctuation marks used. Remind the students to underline the title of each book. Encourage them to use their best handwriting as they write the bibliography on handwriting paper.



You may want to use the evaluation form in the Appendix with this lesson. Be aware that the back of this page will be used in the next lesson on calligraphy.

Optional activity

Direct a writing activity—Draw attention to the fact that the primary function of a lighthouse is to produce light. Tell the students that without that light, lighthouses would not be able to warn ships of danger. Encourage each student to write a paragraph about lighthouses.



Materials and Preparation

Have available:

- · A chisel-point pen for each student.
- · A guide sheet for each student.
- · Two pieces of typing paper for each student.
- A transparency of the lowercase guide sheet.
- An overhead projector.
- An overhead pen.

— Lesson Content

Introduction

Lead a critique session—On the overhead or white board, write the following calligraphy letters, verbalizing the direction of each stroke as you write: *c, a, o, e, m, n, v, w, u, i,* and *r*:



See the calligraphy stroke descriptions in the Introduction.

Distribute a pen and two pieces of typing paper to each student. Direct the students to warm up with their practice strokes and then to write three times each all of the letters written on the overhead. When the students have finished, ask for volunteers to show their papers. Direct attention to each paper and ask the class to comment on the letters, using the following terms.

- 1. Slant (should be consistent and 13°)
- 2. Pen angle (should have serifs of 45° and thin diagonal strokes)
- 3. Strokes (should start and end in the correct place)
- Spacing within a word (should have the most space between two straight strokes, less between a straight and a curved stroke, and the least between two curved strokes)

Point out that evaluating work in this fashion will help them learn to evaluate their own work.

Review some of the terms relating to the guide sheet— Choose a student to demonstrate the terms relating to the guide sheet. (the slant lines, the x-height, and these two guidelines: the base and body lines) Ask another student to explain the reason for using the guide sheet. (to control the height and slant of each stroke).

Skill development

Demonstrate the formation of lowercase *x* and *z*—Write the letters on the lines on the overhead, verbalizing the direction of each stroke as you write. Show the students how the *x* is made up of two basic strokes.

Point out to the students that the letters should not connect to the letters that follow.



 Short diagonal right, Drop right below base line and curve.

(2) Drop left.



Short stroke up, Glide right, Drop left, Swing right and curve up. **Review spacing between words**—Write the words *ocean* and *sweater* on the overhead. Lightly write an *o* between the words. Remind the students to leave the space of an *o* between words.

Guided practice

Direct handwriting on worktext page 44—Point out that writing the practice strokes will aid in better letter formation. Refer the students to the letter models on the lines at the bottom of the page. Remind them of the procedure for practicing the formation of the letters at the bottom of the page.

- Note the arrow that indicates the direction of each stroke.
- 2. Trace the black letter with your finger.
- 3. Trace the gray letters with your pen.

Walk around the classroom to check that the students are making the correct strokes, both for practice strokes and for letter formation. Look for common errors.

Continued practice

Direct practice with typing paper and a guide sheet—Remind the students to use the side of the guide sheet labeled "Lowercase Guide Sheet." Tell each student to write the practice strokes, new letters, and the letters that were taught in the previous calligraphy lessons (c, a, o, e, m, n, v, w, u, i, r, s, and t).

Write the words *maze* and *six* on the overhead for the students to see. Point out that these words will provide good review and practice in word formation. Remind the students to leave the space of an *o* between words. Be sure to collect the pens when the students have finished.

