Lesson Objectives

Day 1
Students will:
• Identify Greek roots tele ("distant"), phon ("sound"), photo ("light"), graph ("write")
• Define Greek roots tele, phon, photo, graph
• Read and write words with Greek roots tele, phon, photo, graph

Materials:
• Teacher Category Cards—tele, phon, photo, graph
• Teacher Word Cards—television, phonics, photocopier, graphic, telecast

Day 2
Students will:
• Sort words by Greek roots
• Sort words with Greek roots by meaning

Materials:
• Anchor Poster
• BLM 2: Category Cards
• BLMs 3–4: Word Cards
• BLM 6: Take-Home Activity
• Teacher Category Cards—tele, phon, photo, graph
• Teacher Word Cards—same as BLM 4

Day 3
Students will:
• Sort words with Greek roots by meaning
• Write sentences using words with Greek roots

Materials:
• BLM 2: Category Cards
• BLM 5: Word Cards
• BLM 6: Take-Home Activity
• BLM 7: Classroom Activity
• BLM 8: Take-Home Activity
• Teacher Category Cards—distant, sound, light, write

Day 4
Students will:
• Identify words with Greek roots in a passage
• Write and spell words with Greek roots

Materials:
• BLM 9: Reading Passage
• BLM 10: Spelling Dictation
• BLM 11: Spelling Peer Check

Day 5
Students will:
• Correctly spell words with Greek roots

Materials:
• Quick-Check Assessment

Additional Materials:
• Word Study Notebooks
• Pocket Chart
• Dictionaries (Days 2, 3)
Day One

Supporting ELs

Some English Learners may have difficulty understanding the literal meaning of words with Greek roots. For example, they might not understand how television literally means “a vision that travels a distance.” Find pictures of cables, satellites, and antennas. Using gestures, short phrases, and the pictures explain how the images on a television screen are sent through these devices over a distance to be seen on a screen.

Blending Practice

If some students have difficulty reading the words, help them read the words syllable by syllable. For example, point to the word phonics in the pocket chart. Show how you divide the word into two syllables, between the n and the i. Point out that there are two closed syllables in this word, each with a short vowel sound. Read each syllable and then blend the syllables together: phon/ics: phonics. Point out that the root phon will always be one syllable. Continue to support students who need help with blending throughout the week, using the example words used in the lesson.

Review Size Prefixes micro-, mega-, super-, hyper-

Focus Words: microwave, megaphone, supermarket, hyperactive

Write the words microwave, megaphone, supermarket, and hyperactive on the chalkboard. Ask students to identify the prefix in each word and tell what it means. Then discuss the meaning of each focus word.

Have pairs write sentences with each focus word in their word study notebooks and then share their sentences with the class.

Introduce Greek Roots tele, phon, photo, graph

Teacher Word Cards: television, phonics, photocopier, graphic, telecast
Teacher Category Cards: tele, phon, photo, graph

Model

Place the category cards tele, phon, photo, and graph in a pocket chart. Point to the roots. Say: Many words in the English language contain these Greek roots. They usually combine with other word parts to form words. Learning the meaning of these roots will help you figure out the meaning of unfamiliar words.

Hold up the word card television. As you say it aloud, run your finger under tele. Say: The Greek root tele means “distant.” The other word part is vision. So the meaning of television is “vision from a distance.” Discuss with students how television brings visions from a distance. I will place the word television in the tele category because it has the Greek root tele.

Hold up the word card phonics. As you say it aloud, run your finger under phon. Say: The Greek root phon means “sound.” The word phonics means “relating to sound.” I will place the word phonics in the phon category.

Identify the Greek roots in the words photocopier and graphic: photo—“light” and graph—“write.” Discuss the meanings of the words photocopier and graphic and sort the words according to the root word.

Guide

Hold up and read the word card telecast. Prompt students to identify the root tele and its meaning. Have them discuss the meaning of the word telecast and tell you where to place the word in the pocket chart.
Apply

Have students copy the chart in their word study notebooks. Write homophone, photosynthesis, and graphite on the chalkboard. Have students work in pairs to sort the words and write definitions in their own words, based on their understanding of the root and other word parts.

Spelling Words with Greek Roots

Unit Spelling Words: telephone, telephoto, headphones, microphone, paragraph, photograph, symphony, autograph

Write the spelling words on the chalkboard. Read the words aloud. Have students identify the root in each word. Point out that some words have more than one root, such as the word telephoto.

Underline the roots in each word. Say: What letters form the /f/ sound in the roots phon and graph? Guide students to identify the letters p and h.

Ask students to copy the spelling words in their word study notebooks. Have partners check each other’s spellings. Ask students to identify the meaning of each spelling word.

Assessment Tip

Notice which students have difficulty sorting words based on root words. Have students look at each root word separately. Have them look for that root word in the word they are sorting. If they do not see one root word, they look for the next one, and so on. Have them use the following steps.

1. Read the word.
2. Does the word have the root tele?
3. Does the word have the root phon?
4. Does the word have the root photo?
5. Does the word have the root graph?
6. Underline the root in the word.
7. Sort the word in the correct column.

Home/School Connection

Students can take home a list of the spelling words and practice reading, writing, and spelling the words with a family member.
Day Two

**Common Features Sort**

<table>
<thead>
<tr>
<th>tele</th>
<th>phon</th>
</tr>
</thead>
<tbody>
<tr>
<td>telecast</td>
<td>headphones</td>
</tr>
<tr>
<td>telegram</td>
<td>homophone</td>
</tr>
<tr>
<td>television (telegraph)</td>
<td>phonics</td>
</tr>
<tr>
<td>(telegraph)</td>
<td>(phonograph)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>photo</th>
<th>graph</th>
</tr>
</thead>
<tbody>
<tr>
<td>photocopier</td>
<td>autograph</td>
</tr>
<tr>
<td>photosynthesis (photograph)</td>
<td>graphic</td>
</tr>
<tr>
<td>(photographer)</td>
<td>graphite</td>
</tr>
<tr>
<td>(photographer)</td>
<td>paragraph</td>
</tr>
<tr>
<td>(telegraph)</td>
<td>(phonograph)</td>
</tr>
</tbody>
</table>

**Review Greek Roots tele, phon, photo, graph**

Review the meanings of the Greek roots using the anchor poster.

Write the word telegraph on the chalkboard. Ask students to read the word aloud. Then ask students to identify the Greek root in the word. Students should be able to identify that the word contains two roots. Have the class identify the meaning of the roots and tell what the word means using the meaning of the roots.

Have students call out the other roots they learned and their meanings. Record the roots and meanings on the chalkboard.

**Common Features Sort**

**Teacher Category Cards: tele, phon, photo, graph**

Place the category cards next to each other in a pocket chart.

Provide students with BLM 3 word cards. Have students record the category cards from the pocket chart in a four-column chart in their word study notebooks. Have them sort the words according to the Greek roots by writing the words in their word study notebooks. Point out that some words should be recorded in more than one column. Have students circle words in their sort that have more than one root.

Have students use a dictionary to define any unfamiliar words, and note the definition in their notebooks.

Review the sort with the class to make sure they correctly sorted the BLM 3 word cards.

**Buddy Sort**

Give pairs of students the root category cards from BLM 2 and the word cards from BLM 4. Have one student read a word and ask in which category to place the word. When the second student responds and the word is placed, that student then chooses a word and asks where the word should be sorted.

Have students use a dictionary to define any unfamiliar words.

Have students record the sort and the definitions of unfamiliar words in their word study notebooks.

**Spelling.** Have students sort their spelling words based on the meaning of the root of each word.

**Home/School Connection**

Give students BLM 6 to complete with a family member. Students can also take home the word cards and share their sorts with a family member.

**Supporting ELs**

Because some ELs may not have someone at home who speaks English well enough to work with them on BLM 6, make sure that they understand what they are supposed to do on the BLM.
Meaning Sort

Teacher Word Cards: same as BLM 5
Teacher Category Cards: distant, sound, light, write

Place the meaning category cards in a pocket chart and read each word aloud. Explain that these are the meanings of the Greek roots they are studying. Call on students to identify which meaning goes with which root.

Hold up the word card for cacophony and say the word aloud. Say: When I say cacophony aloud, I can hear the root phon. I know that phon means “sound,” and that cacophony means “a harsh mixture of sounds.” I’ll place cacophony in the sound column.

Tell students that they will sort words based on the meaning of the root in each word.

Read aloud each word card from BLM 5. Discuss the meaning of each word and have students tell you in which category to place it. Have students use a dictionary to define any unfamiliar words. Remind students that some words can be placed in more than one category.

Give students the word cards from BLM 5 and the category cards for meaning from BLM 2. Have students to work with a partner to sort the words. The pocket chart may be used for reference if needed.

Spelling. Have students write a sentence in their word study notebooks with each spelling word.

Applying Meaning. Give students BLM 7 and have them complete the activities, choosing the words with the correct roots.

Assessment Tip

Use students’ completed BLM 7 to assess their understanding of Greek root words. Note whether they need more practice in identifying how the roots contribute to the meaning of the words.

Providing Support

ELs and struggling readers may have difficulty completing BLM 7 on their own. Have them work with a partner to read and complete it.

Home/School Connection

Give students BLM 8 to complete with a family member. Explain that they are to do the same thing they did on BLM 7 in class.

Supporting ELs

Make sure that ELs understand what to do on BLM 8 since there may not be anyone at home who speaks English well enough to help them complete it. It might be helpful to have students use a beginner’s dictionary to find the definition of the words.
Providing Support
Instead of having students read the passage independently, place students in small groups of mixed reading abilities and have them choral-read the passage straight through. Then have them work as a team to find examples of words with Greek roots.

A Very Brief History of Photography
Taking photographs is so easy today. There are cameras in all price ranges, with all sorts of features, including digital lenses that make it possible to take pictures of things very far away and lenses that can take incredibly close-up shots. Even most mobile telephones are equipped with cameras. People can take pictures and distribute them immediately via e-mail, text messages, or social networking sites, sending them to be posted on Web sites or printed if they desire. Images can be manipulated easily on computers using digital software.

Things were not always so easy to say the least. Early photographers needed bulky equipment to take photographs and elaborate darkrooms to develop them. Two Frenchmen are credited with inventing the first method of recording images on tin and coated glass, and in 1889 George Eastman invented flexible roll film. Variations on this type of film, including those with the ability to record images in color, were commonly used until the widespread adoption of digital cameras. Today, digital imaging has taken over because film developing is not necessary and one can take and store multiple digital images more cheaply. This way, the photographer can choose to print out the best images from many choices.

Alicia did not hear the telephone because she was using her headphones to listen to a recording of the symphony.

Spelling Practice
Give pairs of students Spelling Peer Check (BLM 11). While one student reads the spelling words from his or her word study notebook, the other student writes the words in the First Try column. After the second student has spelled the words, the first student places a check mark next to words spelled correctly.

For the second try, the first student may prompt the second student by sounding out the words that were spelled incorrectly the first time. If the second spelling attempt is correct, the first student places a check mark in the Second Try column. Then students switch roles.
Spelling Assessment
Use the following procedure to assess students’ spelling of the unit spelling words:
• Say a spelling word and use it in a sentence.
• Have students write the word on their papers.
• Continue with the remaining words on the list.
• When students have finished, collect their papers and analyze their spelling of the words.
• Use the assessment to plan small-group or individual practice.

Quick-Check Assessment
Assess students’ mastery of Greek roots using the Quick-Check for Unit 26.

Suggestions for Independent Practice
Crossword Puzzle. Students can work with a partner to make a crossword puzzle that uses some of the words with Greek roots from the word cards. Pairs can swap their puzzles with another pair.

Guess My Word. Have pairs of students work as a team against other pairs of students. Have students place the word cards facedown in a pile. One member of a team draws a card without his or her partner seeing. The student then tries to draw clues for his or her partner to guess the word. The pairs have one minute to guess the word. If they guess it correctly, they get a point. Then the next pair repeats the process.

Class Story. Have groups of students combine their word cards. Have the groups write a story using their word cards. Have groups exchange their stories. Then have the groups continue the story started by a previous group. When all groups have added to each story, share the stories with the class.

Write the Words. Have students make up meaningful cloze sentences that use words from the word cards. Students can exchange sentences and try to complete them.

Answer Key Unit 26 Quick-Check

Answer Key BLM 6

<table>
<thead>
<tr>
<th>tele</th>
<th>phon</th>
</tr>
</thead>
<tbody>
<tr>
<td>telecast</td>
<td>headphones</td>
</tr>
<tr>
<td>telemarketing</td>
<td>phonetically</td>
</tr>
<tr>
<td>telethon</td>
<td>phonemic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>photo</th>
<th>graph</th>
</tr>
</thead>
<tbody>
<tr>
<td>photocopier</td>
<td>graphite</td>
</tr>
<tr>
<td>photogenic</td>
<td>calligraphy</td>
</tr>
<tr>
<td>photofinishing</td>
<td>bibliography</td>
</tr>
</tbody>
</table>

Answer Key BLM 7

| 1. paragraph | 6. graphite |
| 2. calligraphy | 7. phonograph |
| 3. bibliography | 8. photographer |
| 4. saxophone | 9. telegraph |
| 5. videographer | 10. photograph |

Answer Key BLM 8

| 1. choreography | 6. headphones |
| 2. Telemarketing | 7. phonograph |
| 3. symphony | 8. cacophony |
| 4. xylophone | 9. phonemic |
| 5. photosynthesis | 10. euphony |
Unit 26 Quick-Check: Greek Roots tele, phon, photo, graph

Answer Questions

Directions: Read the questions and choose the best answer.

1. Phillip stood in line for an hour to get an ____________ from the famous pitcher.
   - ethnography  
   - autograph  
   - euphony

2. The ____________ chose a white background for the picture.
   - photographer  
   - photoactive  
   - topography

3. Mrs. Davenport waited for her turn to use the ____________ to make copies of the spelling list.
   - videographer  
   - photocopier  
   - telegraph

4. Leo’s dad asked him to be quiet during his ____________.
   - paragraph  
   - teleconference  
   - photon

Apply

Directions: In the space below, list three to five words you know that have the Greek root tele, phon, photo, or graph.

_________________  ____________  ____________  ____________  ____________

Directions: Using the words from the word bank, complete the following sort by writing the words in the appropriate category.

<table>
<thead>
<tr>
<th>Word Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>autograph, cacophony, bibliography, photogenic, calligraphy, digraph, television, phonetically, xylophone, phonograph, telethon, telecast</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>graph</th>
<th>phon</th>
<th>tele</th>
<th>photo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Think and Write about Greek Roots tele, phon, photo, graph

Directions: In the space below, explain how understanding the Greek roots tele, phon, photo, and graph helps you as a reader, speller, and writer.