Lesson Objectives

Day 1 Students will:
- Understand the meanings of the prefixes quadr-/quar- (“four”), quint-/pent- (“five”), oct- (“eight”), dec- (“ten”), and cent- (“one hundred”)
- Define words using the meanings of the prefixes and roots
- Write sentences using words with the prefixes quadr-/quar-, quint-/pent-, oct-, dec-, and cent-
- Read and write words with the prefixes quadr-/quar-, quint-/pent-, oct-, dec-, and cent-

Materials:
- Anchor Poster

Day 2 Students will:
- Sort words by spelling patterns
- Define words using the meanings of the prefixes and roots

Materials:
- BLM 2: Category Cards
- BLM 4: Word Cards
- BLM 6: Take-Home Activity
- Teacher Category Cards—quadr-/quar-, quint-/pent-, oct-, dec-, cent-
- Teacher Word Cards—same as BLM 3

Day 3 Students will:
- Sort words by prefix meaning in a buddy sort

Materials:
- BLM 2: Category Cards
- BLM 5: Word Cards
- BLM 7: Classroom Activity
- BLM 8: Take-Home Activity

Day 4 Students will:
- Identify words with the prefixes quadr-/quar-, quint-/pent-, oct-, dec-, and cent-
- Write a paragraph using words with quadr-/quar-, quint-/pent-, oct-, dec-, and cent-
- Spell words with the prefixes quadr-/quar-, quint-/pent-, oct-, dec-, and cent-

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

Day 5 Students will:
- Spell words with the prefixes quadr-/quar-, quint-/pent-, oct-, dec-, and cent-

Materials:
- Quick-Check Assessment
Day One

Supporting ELs
The lesson introduces the example words using concrete objects and demonstrations. Continue to support ELs by providing concrete examples whenever possible to help explain word meanings.

All the initial example words have Spanish cognates, although the spelling of the quar- prefix is slightly different. Use these to help Spanish speakers understand the meanings of the prefixes: el cuarteto/quartet; el quinteto/quintet; el octeto/octet; el decimal/decimal; el centímetro/centimeter.

The Greek and Latin number prefixes occur in many different languages. The prefixes are visible in the Spanish cognates, including: el cuadrángulo/quadrangle; la quintaesencia/quintessence; el pentágono/pentagon; el centenario/centennial.

Blending Practice
If some students have difficulty reading the words, help them read the words syllable by syllable. For example, point to the word quartet on the chalkboard. Show how you divide the word into two syllables between the two consonants, r and t. Explain that you now have two closed syllables, one with an r-controlled vowel sound and one with a short vowel sound. Read each syllable and then blend the syllables together: quartet: quartet. Continue to support students who need help with blending throughout the week, using the example words used in the lesson.

Review Prefix Assimilation ad-
Focus Words: advertise, appreciate, assessment, attribute, accommodate
Write the focus words on the chalkboard. Ask students what these words have in common. (The prefix ad- or one of its spelling variations.)
Ask a volunteer to explain in his or her own words why the prefix changes spelling. (The /d/ sound is absorbed into the sound at the beginning of some words.)

Introduce Greek and Latin Prefixes for Numbers quadr-/quar-, quint-/pent-, oct-, dec-, cent-
Model
Explain that in this lesson, students will learn some Greek and Latin number prefixes.
Hold up four of the same type of object, such as books. Say: I have a quartet of books. Quartet is another way of saying “a group of four.”

Next, hold up five of the same type of object, such as pencils. Say: I have a quintet of pencils. Quintet means “a group of five.”

Write the words quartet and quintet on the chalkboard and circle the prefixes quar- and quint-. Say: The prefixes quar- and quint- are number prefixes that mean “four” and “five.” Other number prefixes include oct-, which means “eight,” dec-, which means “ten,” and cent-, which means “one hundred.”

Write the words octet, decimal, and centimeter on the chalkboard. Circle the prefix in each. Say: The prefix oct- means “a group of eight.” I recognize the words decimal and centimeter. A decimal is “a number expressed in base ten.” A centimeter is “one hundredth of a meter.”

Guide
Show students the anchor poster and tell them to use it as a reference as they work with the number prefixes.

Write the words quarter, quintuplets, octagon, decathlon, and century on the chalkboard. For each word, ask a volunteer to identify the prefix and its meaning, and to give the meaning of the word.

Ask the rest of the class if they agree with the volunteer’s definition. Guide students to the correct meaning of each word.
Apply

Ask students to work with a partner to create sentences in their word study notebooks using five of the words on the chalkboard, one with each of the prefixes quar-, quint-, oct-, dec-, and cent-.

Spelling Greek and Latin Number Prefixes

Unit Spelling Words: quartile, quadrangle, quintuplets, pentagon, octave, decimal, centennial, centipede

Write the prefixes quadr-/quar-, quint-/pent-, oct-, dec-, and cent- in a row on the chalkboard. Write the words quartile, quadrangle, quintessence, and pentagon on the chalkboard under the appropriate headings.

Explain that Greek and Latin had different words signifying “four” and “five,” so there are two different spellings of these two prefixes. Say: Both quar- and quadr- mean “four.” And quint- and pent- mean “five.” Write 4 and 5 above the appropriate columns on the chalkboard.

Write the remaining spelling words on the chalkboard in the appropriate categories. Write 8, 10, and 100 above the corresponding columns.

Have students discuss and speculate about the meanings of the spelling words and how the prefixes influence those meanings. Have students write the spelling words in their word study notebooks and circle the words they are least familiar with. Tell them to work with a partner to create sentences for these words.

Assessment Tip

Note which students do not volunteer during the discussion of word meanings, or who seem to lack understanding of the meanings of the prefixes. You may want to review Greek and Latin roots with these students, or have them create a reminder chart like the one shown here of the meanings of the prefixes.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>quadr-/quar-</td>
<td>four</td>
</tr>
<tr>
<td>quint-/pent-</td>
<td>five</td>
</tr>
<tr>
<td>oct-</td>
<td>eight</td>
</tr>
<tr>
<td>dec-</td>
<td>ten</td>
</tr>
<tr>
<td>cent-</td>
<td>one hundred</td>
</tr>
</tbody>
</table>

Home/School Connection

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

Review Greek and Latin Prefixes for Numbers
quadr-/quar-, quint-/pent-, oct-, dec-, cent-

Say the following sentence: *That quartet is the quintessence of musical talent.*
Ask students what they remember about words such as *quartet* and *quintessence*.

After students have explained the meanings of *quar-* and *quint-*, ask them for the other prefixes with the same meanings. (*quadr-* and *pent-*) Then ask them for the prefixes meaning “eight,” “ten,” and “one hundred.” (*oct-, dec-, and *cent-*) Ask volunteers to think of words with these prefixes and write them on the chalkboard.

Spelling Pattern Sort

Teacher Word Cards: same as BLM 3
Teacher Category Cards: quadr-/quar-, quint-/pent-, oct-, dec-, cent-

Place the category cards in a row in a pocket chart so that students can see them.
Hold up the word card *quarter*.

**Think aloud:** The word *quarter* starts with the prefix *quar-*, which means “four.”
*Quarter* belongs in the chart under *quadr-/quar-*.

Have students help you sort the remaining cards. In addition to telling you which category to place the word in, ask students to state the meaning of the word’s prefix.
The word *percentage* is an oddball in that the prefix *per-* has been added to the prefix *cent-*, so you may need to clarify this word’s relationship to the category.

Buddy Sort

Give pairs of students the category cards and the word cards from BLM 4 and have them sort the words by prefix spelling. Ask students to explain how the prefix is reflected in the word’s meaning as they sort each word.

Spelling. Ask students to re-create the pattern sort in their word study notebooks with the spelling words.

Providing Support

Students may find it difficult to define *quintessence*. Explain that in ancient times there were four essences: air, earth, fire, and water. The fifth essence came after these and was the highest essence. So *quintessence* means “for the highest or purest expression of something” or “the best example of.”

Home/School Connection

Have students take home 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.
**Buddy Meaning Sort**

Give pairs of students the category cards **four**, **five**, **eight**, **ten**, and **one hundred** and the word cards from BLM 5.

Explain that in this sort they will categorize words by the meaning of their prefix. **Say:** Your partner will read you a word. Listen for the prefix and determine its meaning. Tell your partner in which category the word belongs. Take turns reading and sorting and continue until you have sorted all the words.

When pairs have finished, ask them to double-check their work and make sure they sorted all the words correctly.

**Applying Meaning.** Give students BLM 7 and have them choose the correct words to complete each sentence. Remind students to check their spelling.

**Oddballs**

Students may wonder about the derivation of the words **October** and **December**. Based on the meanings of the prefixes, it would be logical for October to be the eighth month and December to be the tenth month of the year, instead of the tenth and twelfth months.

Explain that the first Roman calendar had ten months in total. A month lasted from one full moon to the next, and the calendar didn't begin until the spring equinox in March. The calendar left out two full months of winter. So, by that calendar, October was the eighth month and December was the tenth, and last, month. During the reign of Julius Caesar, the calendar was changed to the one we use today.

**Assessment Tip**

If students have difficulty with the sort, you may want to give them additional practice in hearing and distinguishing number prefixes and in understanding their meanings.

**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.
Day Four

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 Greek and Latin number prefixes.

Word Hunt
Give students a copy of the passage on BLM 9. Tell them that they will read the passage and underline the words with the Greek and Latin number prefixes they have learned.

Have students read the passage twice. On their first read-through, have them underline examples of words with the prefixes quadr-/quar- and quint-/pent-.

When they are finished, ask them to share the words they found and write them on the chalkboard.

During their second reading, ask them to underline examples of words with the prefixes oct-, dec-, and cent-. Again, have volunteers state the words they found.

Ask students to write a paragraph using five of the words they found in the passage with Greek or Latin number prefixes.

Spelling Dictation
Give students Spelling Dictation (BLM 10). Dictate the following words from last week’s spelling words to students, one at a time, and have students write them on their BLMs: additional, assessment, accommodate.

Dictate the following words from this week’s unit, one at a time, having students write them on the BLMs: decibel, pentagon, octopus.

Dictate the following sentence and have students write it on their papers: The scientist measured the large centipede and found that it was in the fourth quartile for length.

Write the words and sentence on the chalkboard and have students self-correct their papers.

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 and Latin number prefixes using the Quick-Check for Unit 10.

Suggestions for Independent Practice

Go Fish. Give pairs of students a set of word cards that has been selected so that there are three words with each prefix, quadr-/quar-, quint-/pent-, oct-, dec-, and cent-. Each student draws six word cards; the rest of the cards remain facedown in a pile. The first student asks if the other student has any words with a certain prefix. The other student hands over a word with the prefix, if he or she has one, or says “Go fish,” in which case the student draws a card from the pile. When students have three of a kind, they lay the cards on the table. The object is to get rid of all one’s cards.

Scrambled Words. Have students scramble ten words from the word cards and write them on a sheet of paper. Students exchange papers with another student and try to unscramble the words. Students can time themselves with a stopwatch and see who can unscramble the words the fastest.

Matching Definitions. Students select eight to ten word cards and write definitions in their own words. Students may consult a dictionary as they write their definitions. After exchanging definitions and word cards with a partner, the student matches each word with its definition.

Blind Writing Sort. To practice their spelling, give pairs of students one set of category cards and one set of word cards. Have them write the categories in a row in their word study notebooks. The first reader chooses a card and pronounces the word without showing the card, and his or her partner writes the word in the correct category. Remind students to switch roles.
Unit 10 Quick-Check:
Greek and Latin Number Prefixes

Answer Questions

**Directions:** Choose the word for each question that does not have the correct spelling. Next to each incorrect word, write the correct spelling.

1. a. octave ____________
   b. decathlon ____________
   c. quintuple ____________
   d. quadrtile ____________

2. a. quintessence ____________
   b. quadruped ____________
   c. quintagon ____________
   d. pentameter ____________

3. a. octigrade ____________
   b. decade ____________
   c. quadruple ____________
   d. centipede ____________

4. a. quintet ____________
   b. pentimate ____________
   c. octopus ____________
   d. century ____________

Apply

**Directions:** In the space below, list three to five words you know that have the prefixes quadr-/quar-, quint-/pent-, oct-, dec-, or cent-.

__________________  __________________  __________________  __________________

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

| quadr-/quar- | quint-/pent- | Word Bank
|--------------|-------------|------------------------
|              |             | pentathlon, octane, decibel, quintessential, quintuplets, centimeter, decagon, quadrant |

<table>
<thead>
<tr>
<th>oct-</th>
<th>dec-</th>
<th>cent-</th>
</tr>
</thead>
</table>

Think and Write about Greek and Latin Prefixes for Numbers
quadr-/quar-, quint-/pent-, oct-, dec-, cent-

**Directions:** In the space below, explain how understanding Greek and Latin prefixes for numbers quadr-/quar-, quint-/pent-, oct-, dec-, cent- helps you as a reader, speller, and writer.