

Tishk International University
Faculty of Science
Medical Analysis Department



Medical Terminology I

Word Parts

Lect. 2

Part II

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Learning Outcomes

- By the end of this session, you will be able to...
 - Identify the components of word

Pretest

Multiple Choice. Select the best answer and write the letter of your choice to the left of each number.

- _____ 1. The main part of a word is called the:
a. origin
b. prefix
c. root
d. extension
- _____ 2. A word part at the beginning of a word is a:
a. prefix
b. combining form
c. preview
d. root
- _____ 3. A word part at the end of a word is the:
a. vowel
b. adjective
c. insertion
d. suffix
- _____ 4. The adjective form of *thorax*, meaning “chest,” is:
a. thoracic
b. thoraxal
c. thorous
d. thoral
- _____ 5. The *ch* in the word *chemistry* is pronounced like the letter:
a. s
b. h
c. k
d. f
- _____ 6. The *ps* in the word *psychology* is pronounced like the letter:
a. p
b. s
c. j
d. k
- _____ 7. The word below that has a hard *g* is:
a. grasp
b. gem
c. page
d. judge
- _____ 8. The symbol ↓ means:
a. start
b. turn
c. decrease
d. left

Introduction

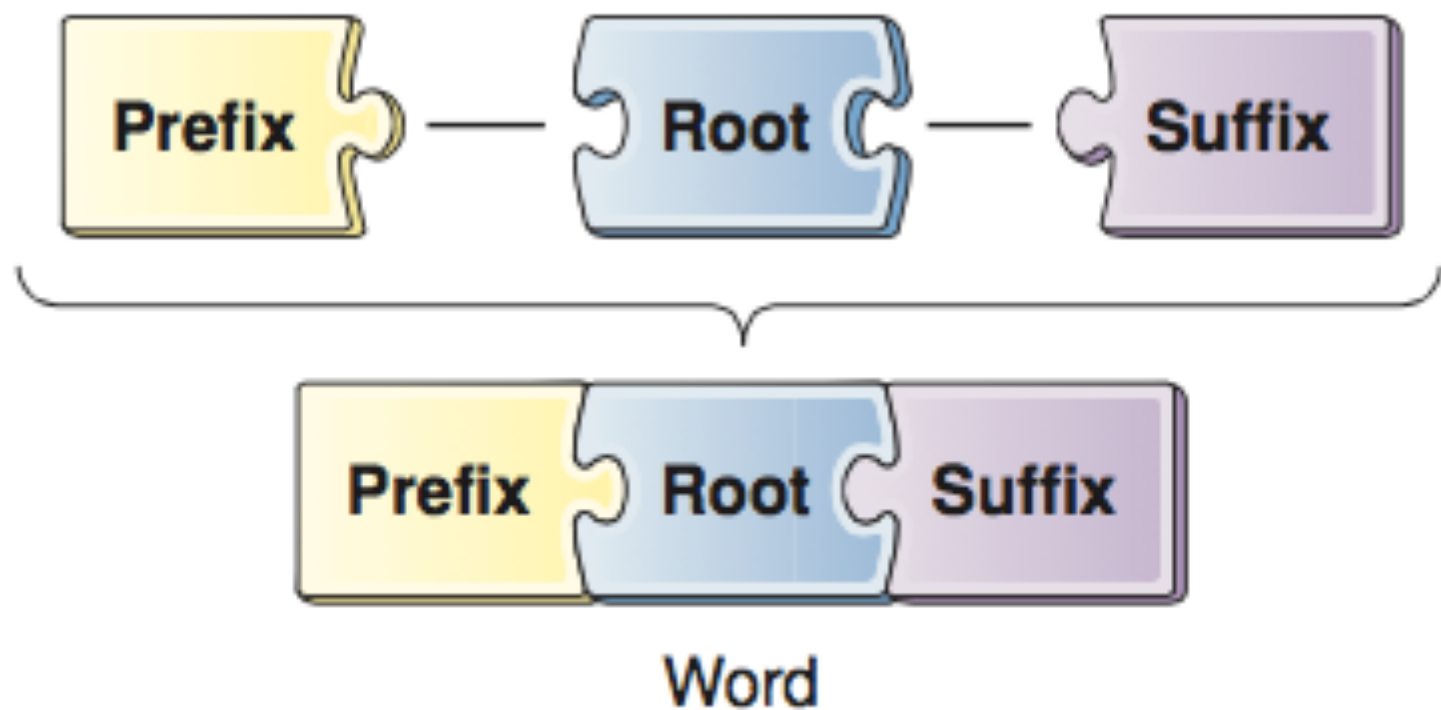
Word components fall into three categories:

1. The **ROOT** is the fundamental unit of each medical word.

- It establishes the basic meaning of the word and is the part to which modifying word parts are added.

2. A **Prefix** is a short word part added before a root to modify its meaning.

3. A **Suffix** is a short word part or series of parts added at the end of a root to modify its meaning.



Words are formed from roots, suffixes, and prefixes.

Example

- The simple word *learn* can be used as a root to illustrate.
- If we add the **suffix -er** to form *learner*, we have “one who learns.”
- If we add the **prefix re-** to form *relearn*, we have “to learn again.”

- Not all roots are complete words. In fact, most medical roots are derived from other languages and are meant to be used in combinations.
- The Greek word *kardia*, for example, meaning “heart,” gives us the root *cardi*.

- The Latin word *pulmo*, meaning “**lung**,” gives us the root *pulm*.
- In a few instances, both the Greek and Latin roots are used for the same structure. We find both the Greek root *nephr* and the Latin root *ren* used in words pertaining to the kidney.

- Note that the same root may have different meanings in different fields of study.
- The root *myel* means “**marrow**” and may apply to either the bone marrow or the spinal cord.
- The root *scler* means “**hard**” but may also apply to the white of the eye.
- *Cyst* means “a filled **sac** or **pouch**” but also refers specifically to the urinary bladder.

Part II



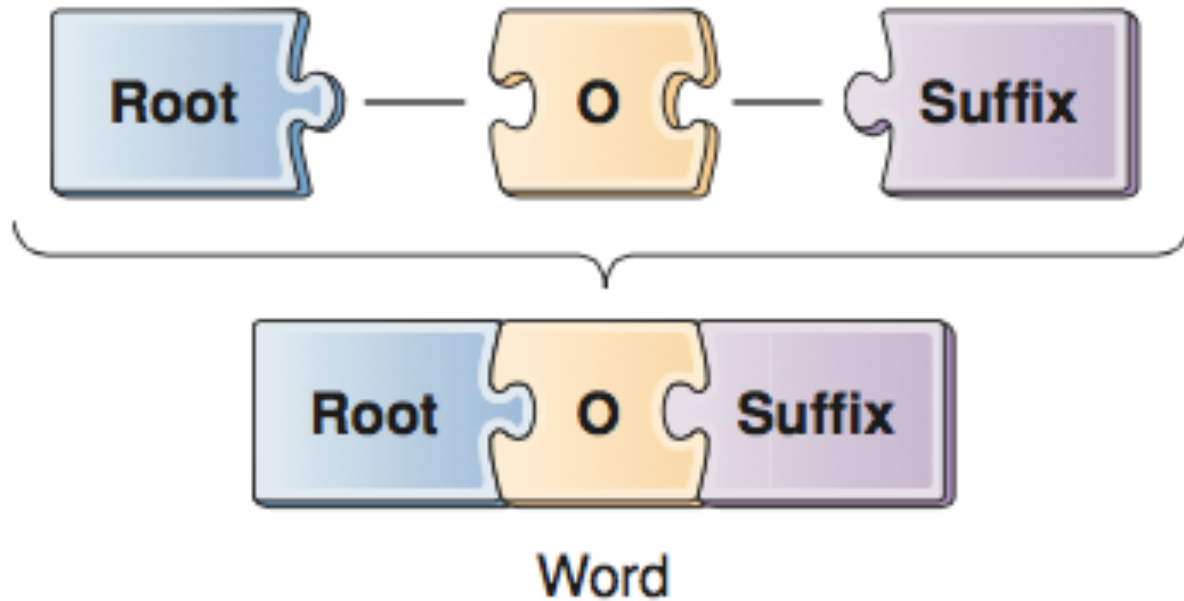
Compound words

- **Compound words** contain more than one root.
- *Examples:*
 - **cardiovascular** (pertaining to the heart and blood vessels)
 - **urogenital** (pertaining to the urinary and reproductive systems)
 - **lymphocyte** (a white blood cell found in the lymphatic system)



Combining forms

A combining vowel may be added between a root and a word part that follows.

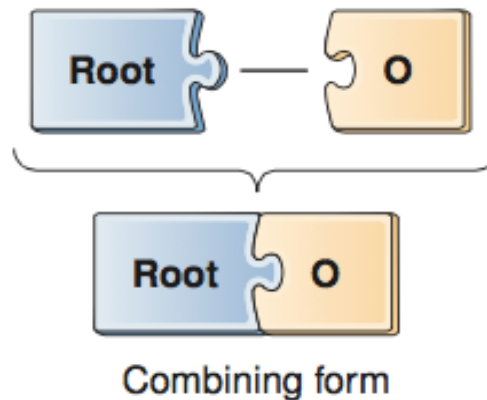


Example

- neur + o + logy = neurology (study of the nervous system)
- **Note:** The combining vowel is usually an *o* but it may occasionally be *a*, *e*, or *i*.



- Roots shown with a combining vowel are called **combining forms**.



Example:

neur/o.

neur + itis = neuritis (inflammation of a nerve)



Words ending in *x*

- When you add a suffix to a word ending in *x*, the *x* is changed to a ***g*** or a ***c***.
- If there is a consonant before the *x*, such as ***yx*** or ***nx***, the *x* is changed to a ***g***.



Examples

- *pharynx* (throat) becomes *pharyngeal* (*fa-RIN-jē-al*), to mean “pertaining to the throat;”
- *Coccyx* (terminal portion of the spine) becomes *coccygeal* (*kok-SIJ-ē-al*), to mean “pertaining to the coccyx.”



- If a vowel comes before the **x**, such as **ax** or **ix**, you change the **x** to a **c**.
- **Example:**
 - *thorax* (chest) becomes *thoracic* (*tho⁻-RAS-ik*) to mean “pertaining to the chest”
 - *cervix* (neck) becomes *cervical* (*SER-vi-kal*) to mean “pertaining to a neck.”



Suffixes beginning with rh

- When you add a suffix beginning with *rh* to a root, the *r* is doubled.

Example:

- hem/o (blood) + -rhage (bursting forth) = hemorrhage (a bursting forth of blood)



Pronunciation

Silent Letters and Unusual Pronunciations

LETTER(S)	PRONUNCIATION	EXAMPLE	DEFINITION OF EXAMPLE
ch	k	chemical <i>KEM-i-kal</i>	pertaining to the elements and their interactions (root <i>chem/o</i> means “chemical”)
dys	dis	dysfunction <i>dis-FUNK-shun</i>	difficult or abnormal (<i>dys-</i>) function
eu	u	euphoria <i>û-FOR-ê-a</i>	exaggerated feeling of well-being (<i>eu-</i> means “true” or “good”)
gn	n	gnathic <i>NATH-ik</i>	pertaining to the jaw (<i>gnath/o</i>)
ph	f	phantom <i>FAN-tom</i>	illusion or imaginary image
pn	n	pneumonia <i>nû-MŌ-nê-a</i>	inflammation of the lungs (<i>pneumon/o</i>)
ps	s	pseudonym <i>SÛ-dô-nim</i>	false name (<i>-nym</i>)
pt	t	ptosis <i>TŌ-sis</i>	dropping, downward displacement
rh	r	rhinoplasty <i>RĪ-nô-plas-tê</i>	plastic repair of the nose (<i>rhin/o</i>)
x	z	xiphoid <i>ZĪ-foyd</i>	pertaining to cartilage attached to the sternum (from Greek <i>xiphos</i> , meaning “sword”)



Learning Objectives

- Now, you will be able to...
 - Identify the components of word



**Thanks for listening
&
Any Questions**

