



Basics of medical terminology

جامعة ساوة
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introduction

What is Medical Terminology?

- The language of medicine
- Used by healthcare professionals to describe:
 - The human body
 - Diseases & conditions
 - Procedures & treatments
- Helps in accurate communication between professionals



introduction

Importance for Optics Technology Students

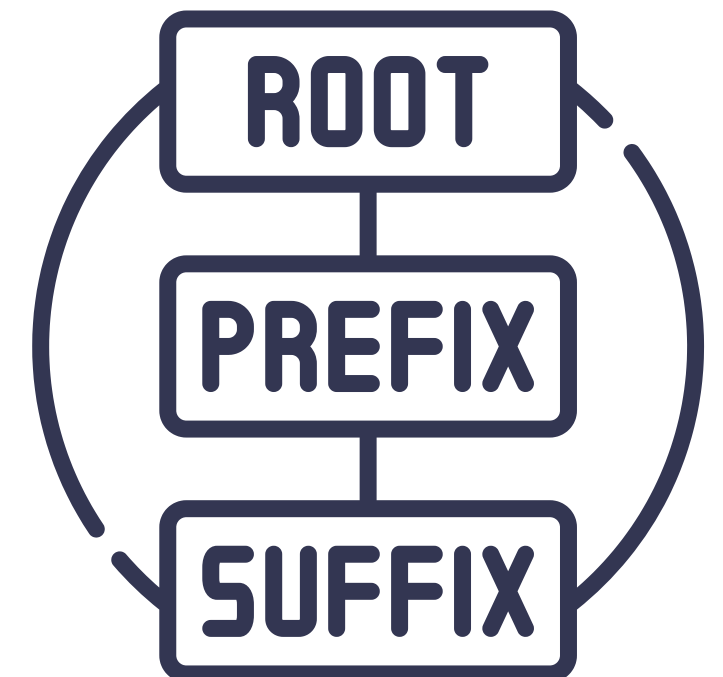
- Understand terms related to:
 - Eye anatomy (cornea, retina, lens, etc.)
 - Eye diseases (glaucoma, cataract, keratitis)
 - Medical devices (ophthalmoscope, slit-lamp)
- Improves clinical communication with doctors and patients
- Essential for reading textbooks and research



Structure of Medical Terms

Most medical words are built from word parts:

- **Prefix** – beginning (e.g., hyper-)
- **Root** / Combining Form – main meaning (e.g., kerat/o = cornea)
- **Suffix** – ending (e.g., -itis = inflammation)



introduction

Example of Word Building

Keratitis

- Kerat/o = cornea
- -itis = inflammation
- = Inflammation of the cornea



Combining Vowel

Combining Vowel

- A letter (often “o”) used to join word parts
- Makes the term easier to pronounce
- Example:
 - Ophthalm/o + scope = Ophthalmoscope
 - (Instrument to examine the eye)

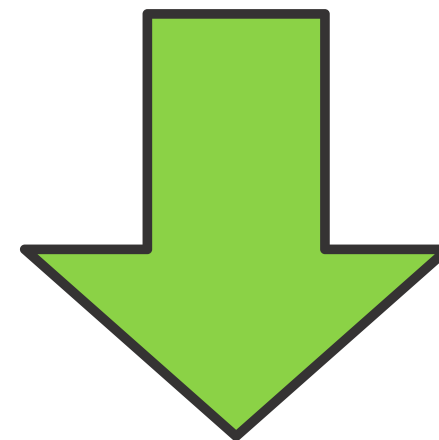


Basic Rules of Word Building

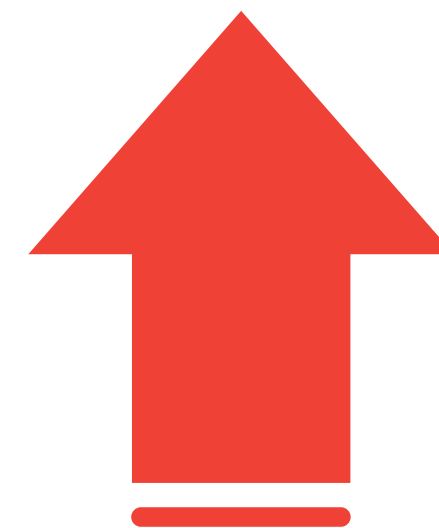
1. Root + suffix = medical word
 - e.g., retin/itis = inflammation of retina
2. Root + combining vowel + suffix
 - e.g., retin/o/pathy = disease of retina
3. If the suffix begins with a vowel, drop the combining vowel
 - e.g., gastr/o + -itis = gastritis (not gastroitis)
4. If the suffix begins with a consonant, keep the combining vowel
 - e.g., gastr/o + -logy = gastroenterology

Prefixes in Medicine

- Modify the meaning of the root
- Examples (relevant to optics):
 - **Hyper-** = excessive (hypertension)
 - **Hypo-** = below/low (hypotension)
 - **Poly-** = many (polyopia = many images)



Hypo



Hyper

Suffixes in Medicine

- Give the action or condition
- Examples:
 - **-logy** = study of (ophthalmology)
 - **-pathy** = disease (retinopathy)
 - **-ectomy** = surgical removal (keratectomy)



Examples

1. Break down the term keratoplasty.

- Kerat/o = cornea
- -plasty = surgical repair
- → Surgical repair of the cornea

2. Analyze the term blepharitis.

- Blephar/o = eyelid
- -itis = inflammation
- → Inflammation of the eyelid

3. Build a medical term:

- Root: phot/o (light) + Suffix: -phobia (fear)
- → Photophobia = fear of light

4. Build a term meaning disease of the retina.

- Root: retin/o + Suffix: -pathy
- → Retinopathy



Questions

1. The combining vowel is usually “o”. (True)
2. In medical terms, the suffix is read first. (True)
3. The word “photophobia” means “study of light.” (False → fear of light)
4. **Which part of the medical term usually gives the main meaning?**
 - A) Prefix
 - B) Root
 - C) Suffix
 - D) Combining vowel

Answer: B (Root)



Questions

1. **The root of the word keratitis refers to:**

- A) Lens
- B) Cornea
- C) Retina
- D) Eyelid

2. **Answer: B (Cornea)**

2. **Which rule is correct for word building?**

- A) Always keep the combining vowel
- B) Drop the combining vowel if suffix begins with a vowel
- C) Use two suffixes in every term
- D) Prefix is always required

Answer: B





THANK

YOU

