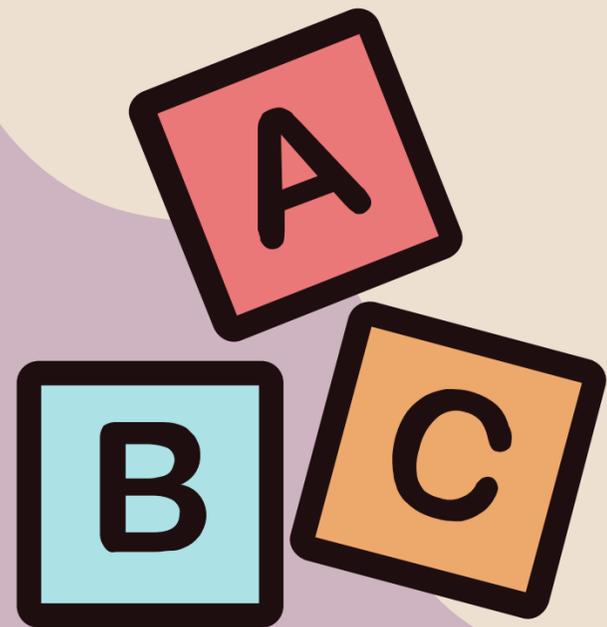


# PHONETICS

# SPEECH

# PRODUCTION



**Asst.Prof.Dr.Teeraporn Plailek**

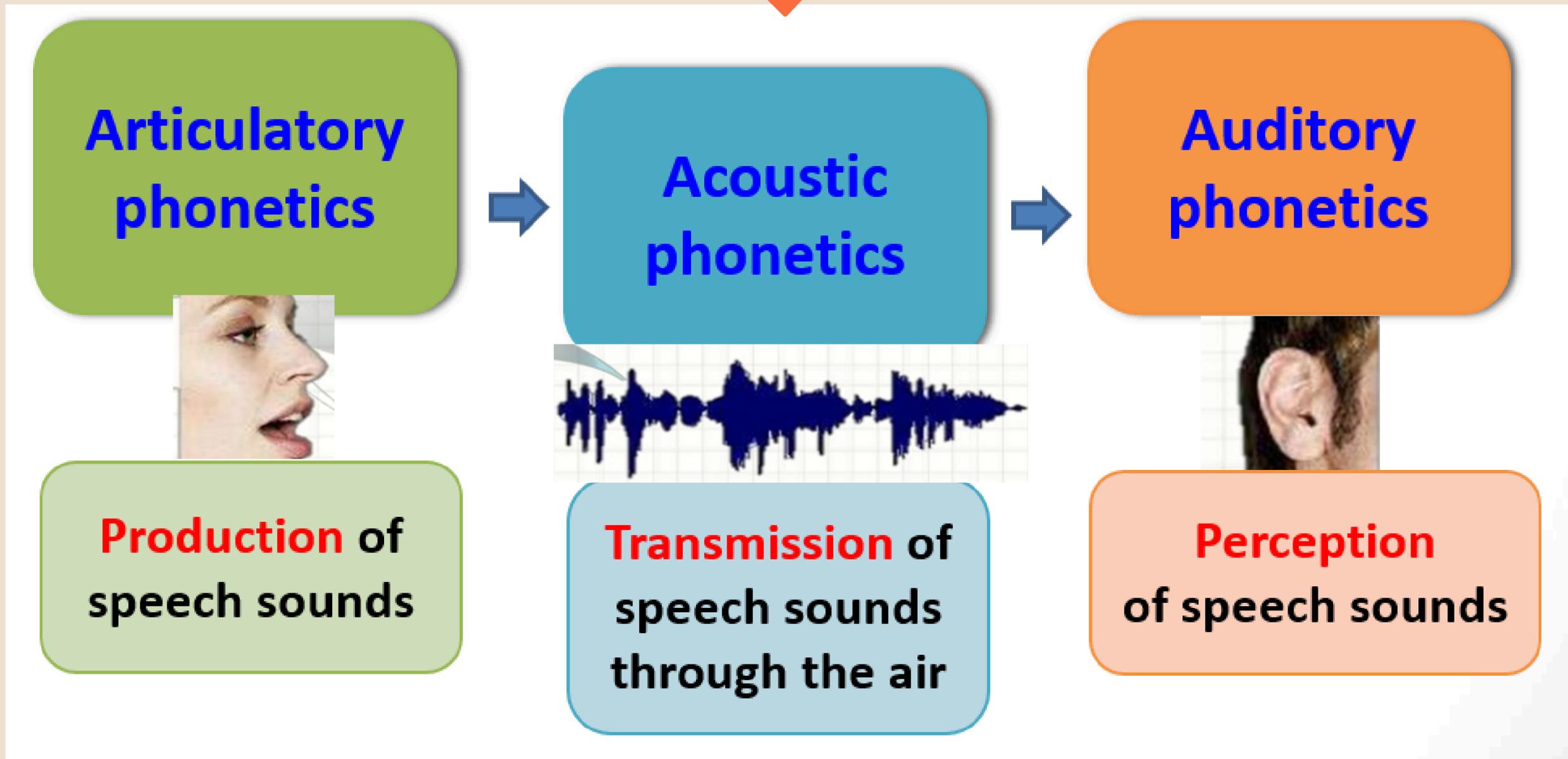
**Faculty of Education**

**Suan Sunandha Rajabhat University**

# PHONETICS

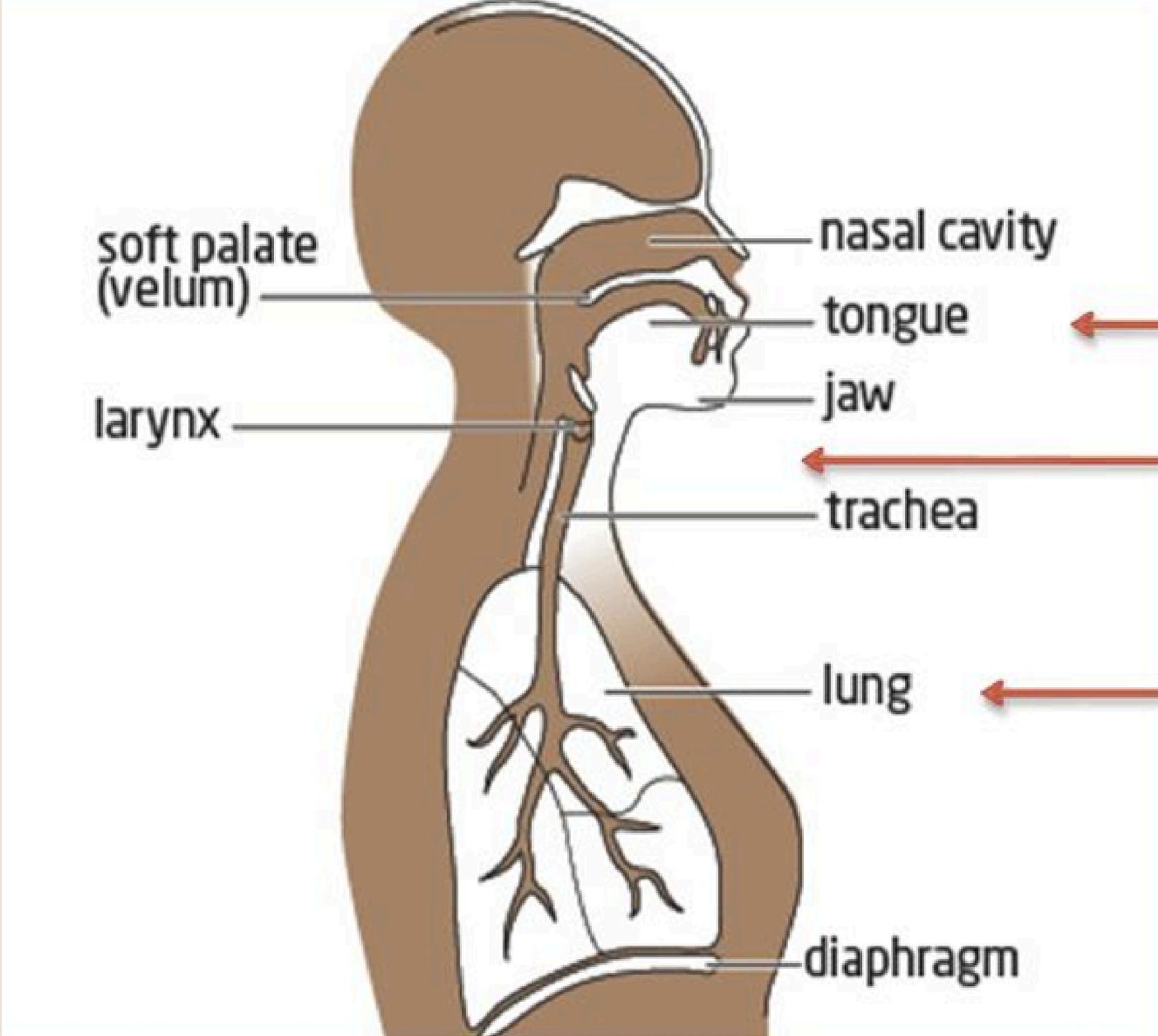
**Phonetics** is the study of **how speech sounds** – both consonants and vowels and other phonetic features such as stress and intonation – **are produced** and what their properties are.

# PHONETICS



# Speech production process

- 1 **Respiratory** process
- 2 **Phonatory** process
- 3 **Articulatory** process



**Articulation**

**Phonation**

**Respiration**

# **THREE** airstream mechanisms

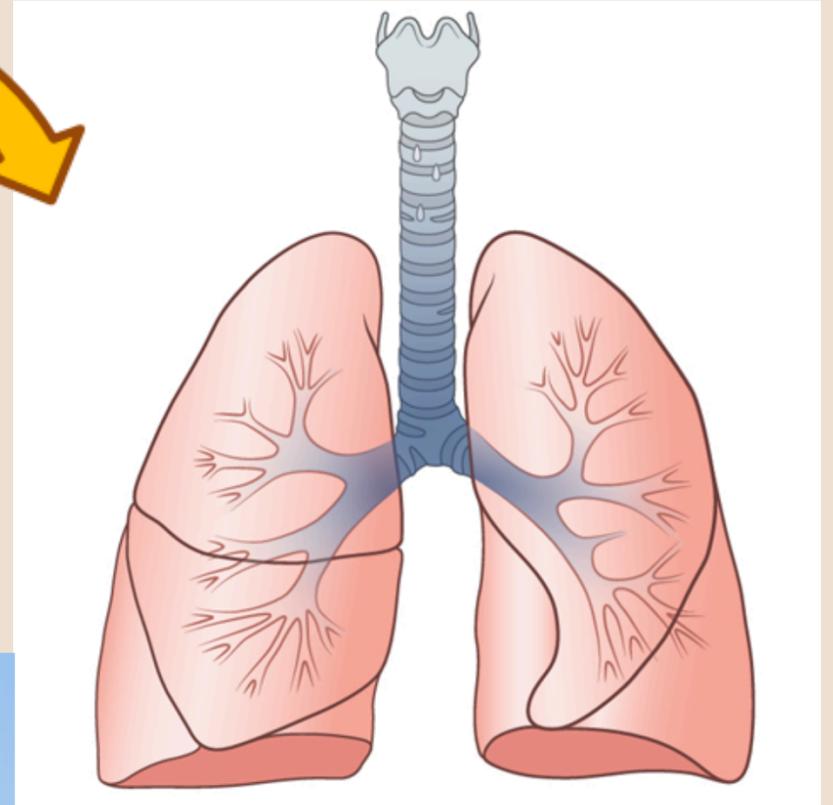
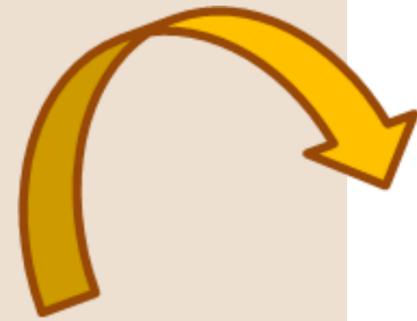
**1** **Pulmonic** airstream mechanisms

**2** **Glottalic** airstream mechanisms

**3** **Velaric** airstream mechanisms

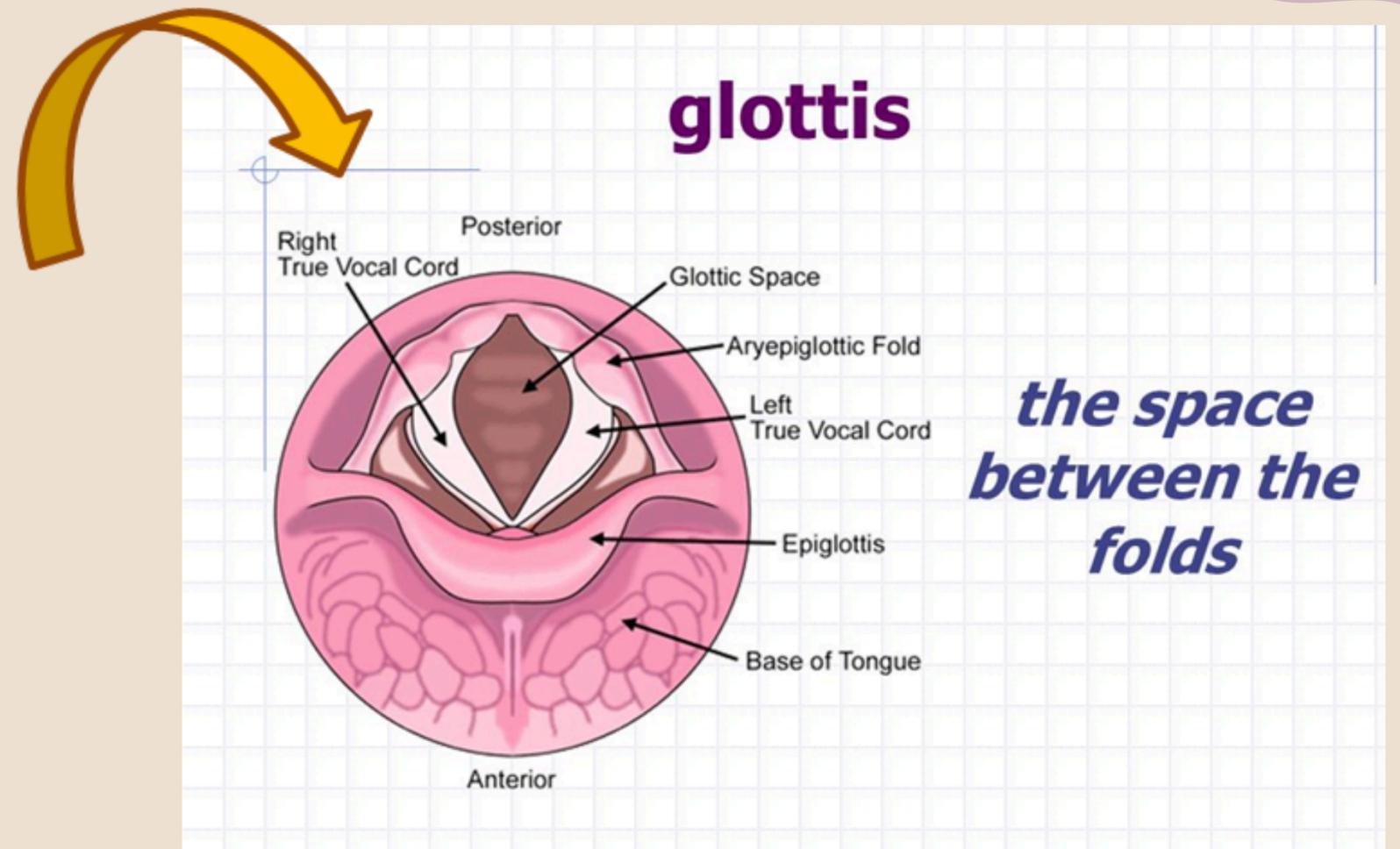
# 1 The PULMONIC airstream mechanism

...involves the lungs, which force air through the vocal tract for speech in the same way as for breathing.



## 2 The **GLOTTALIC** airstream mechanism

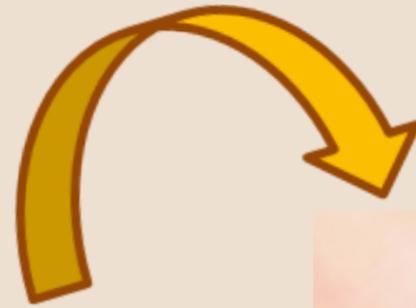
...involves the glottis and a raising or lowering of the vocal folds to change the pressure in the vocal tract.



The **pharyngeal** airstream mechanism

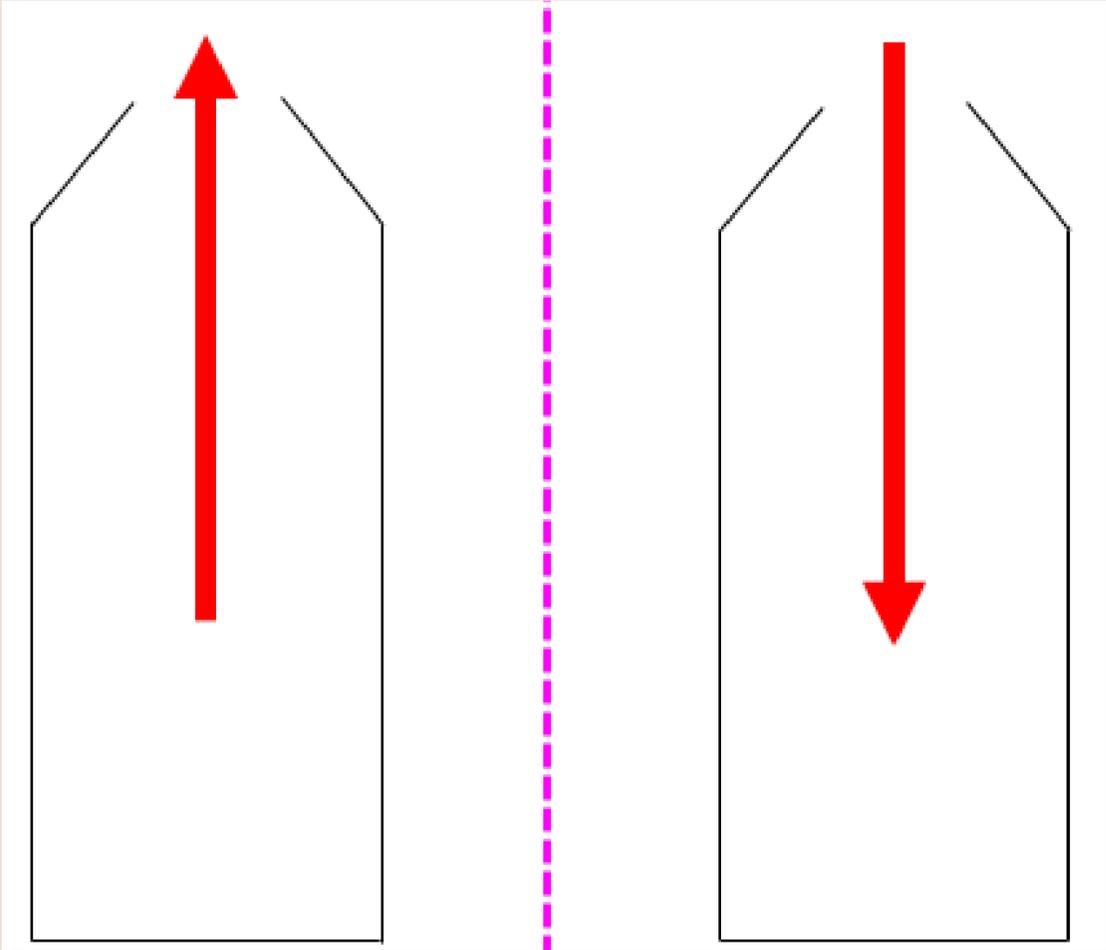
### 3 The VELARIC airstream mechanism

...is produced by a closure between the velum and the back of the tongue.



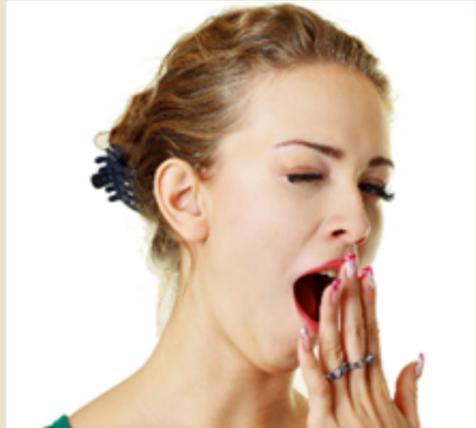
The **oral** airstream mechanism

# The directions of airstream

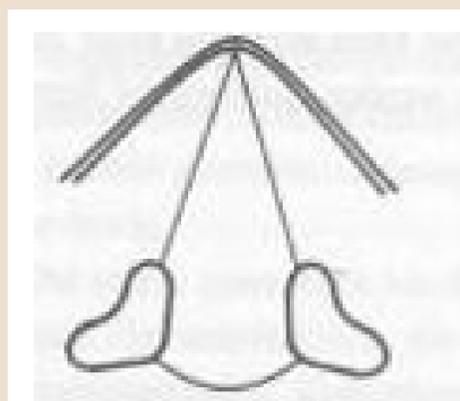
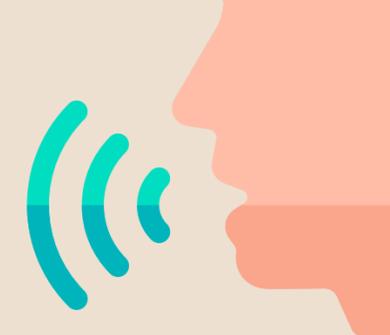


Egressive  
airstream

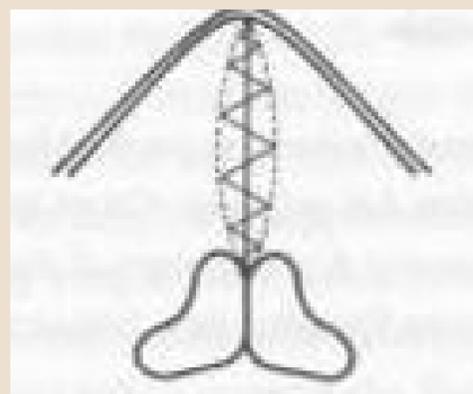
ingressive  
airstream



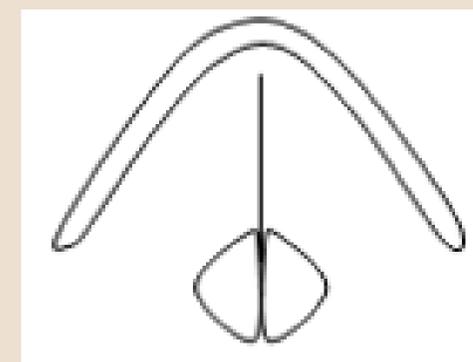
# The states of the glottis



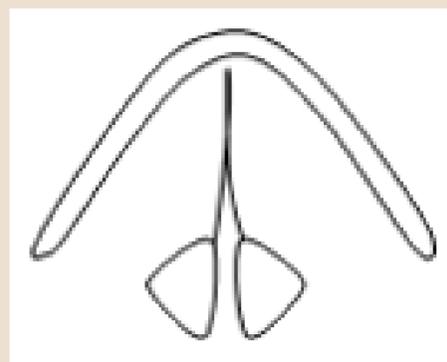
Open glottis



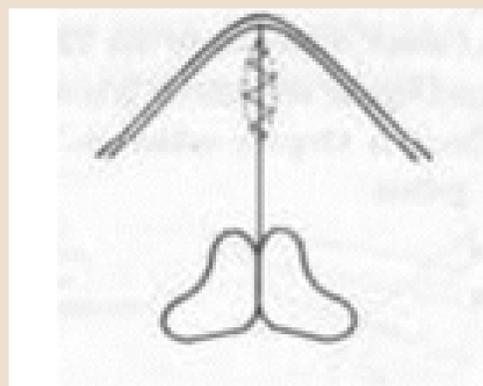
Glottis in vibration



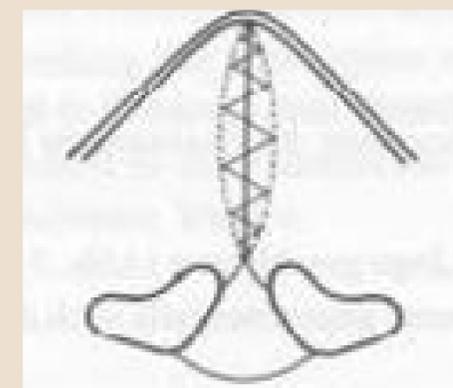
Glottal stop  
[Closed glottis]



Whisper



Creaky voice



Breathy voice

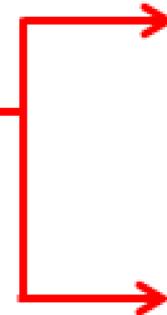
# Phonetics features

Airstream mechanism



Pulmonic airstream mechanism

The state of the glottis



Sounds which are made with vocal folds vibration

voiced

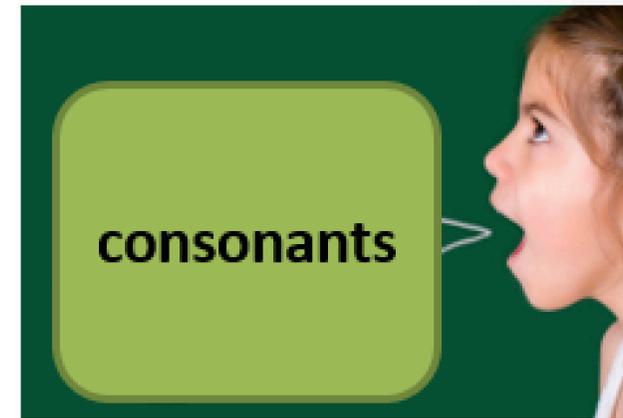
Sounds made without vocal folds vibration

voiceless

Place of articulation

Manner of articulation

consonants



# **THREE** features of articulatory properties

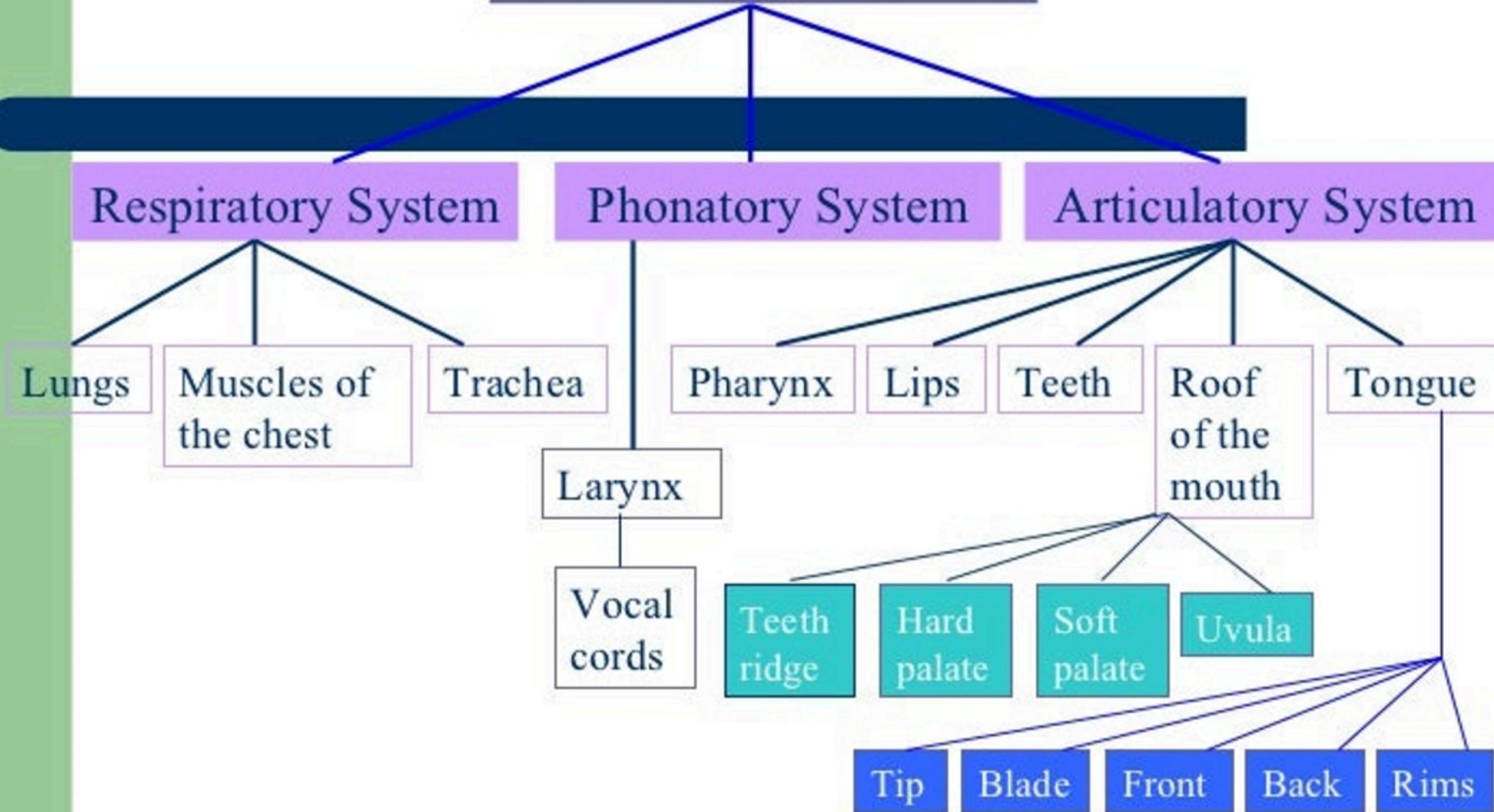


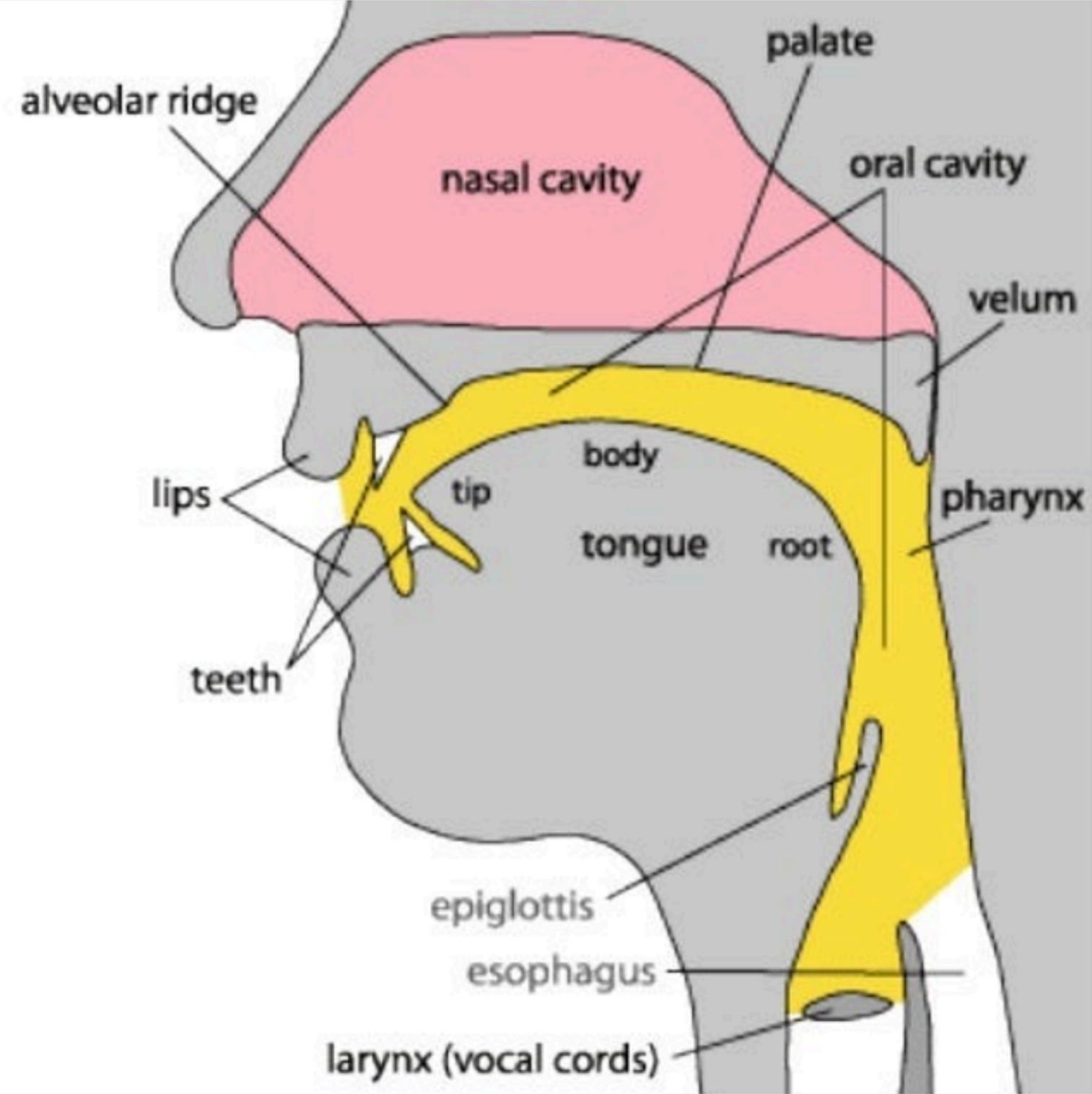
**1** Voicing

**3** Manner of  
articulation

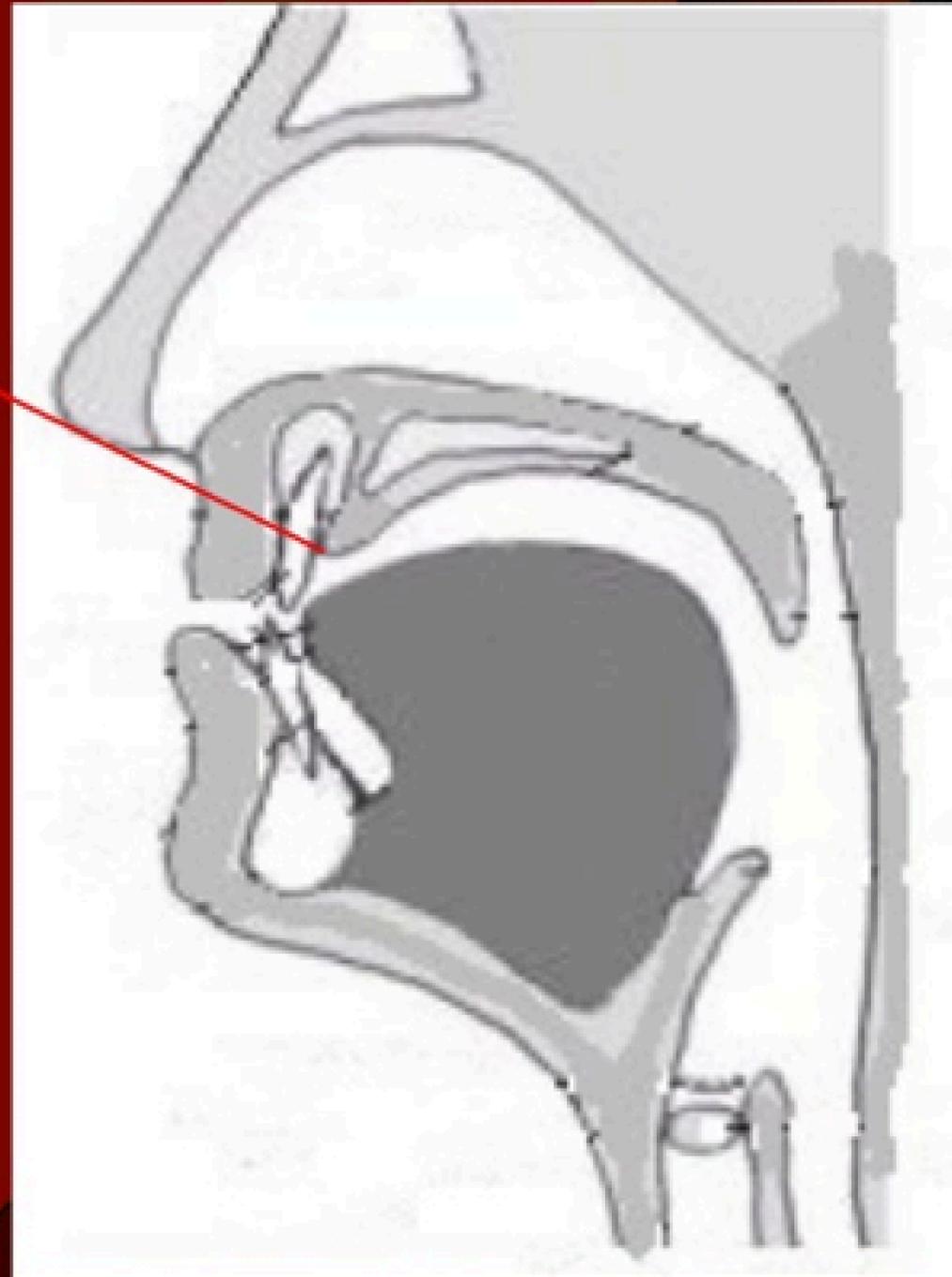
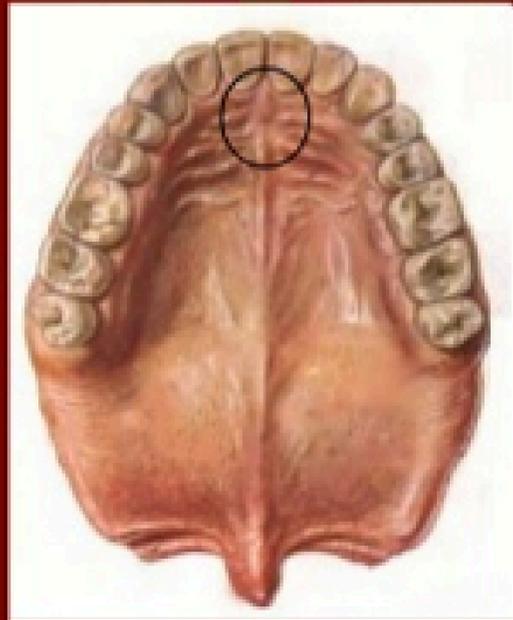
**2** Place of  
articulation

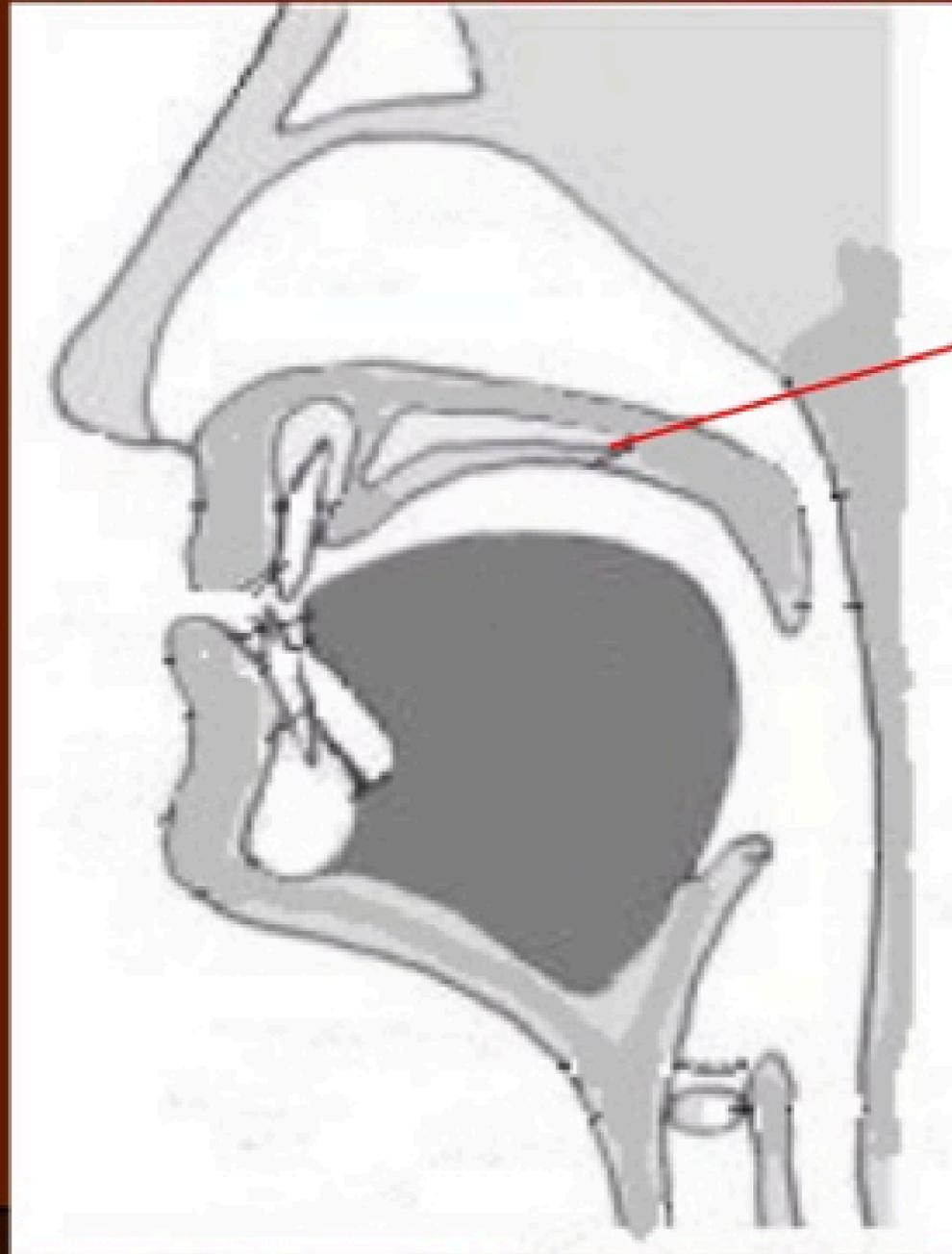
# Organs of Speech



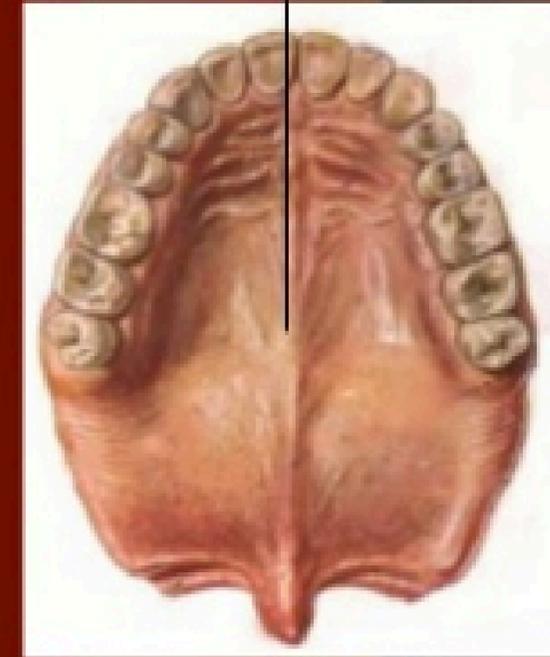


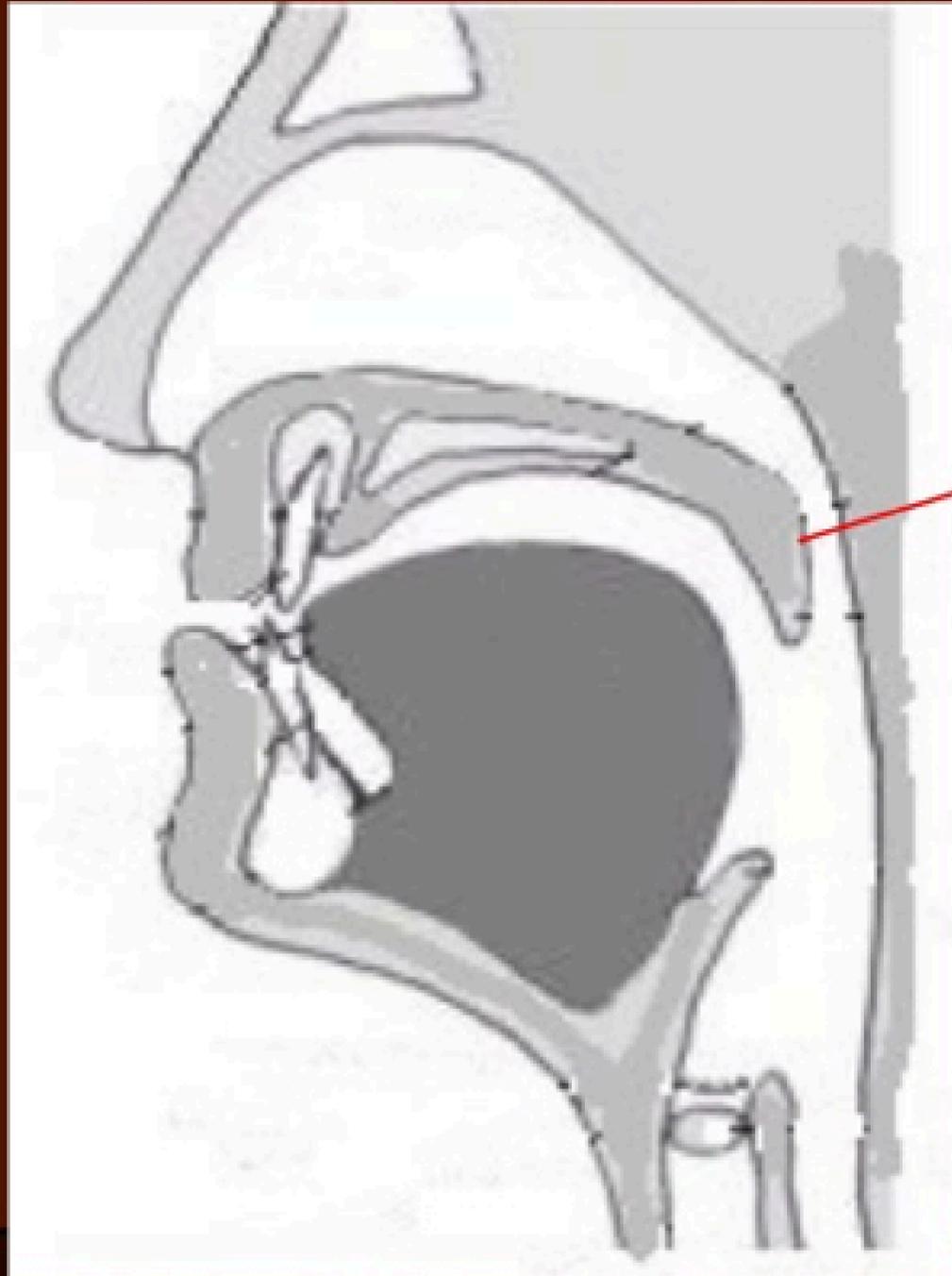
Alveolar Ridge



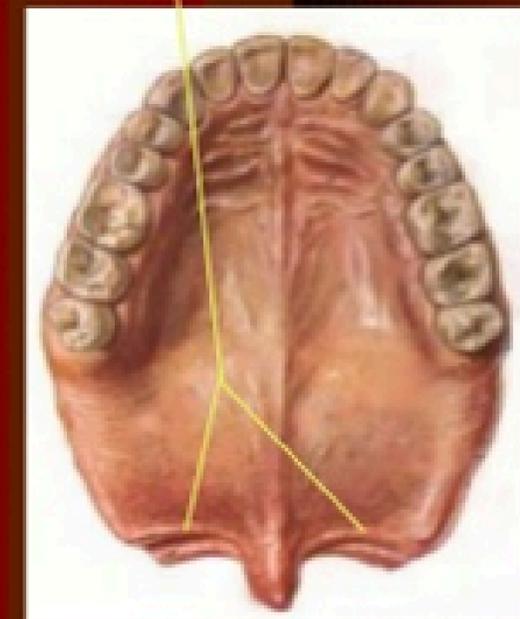


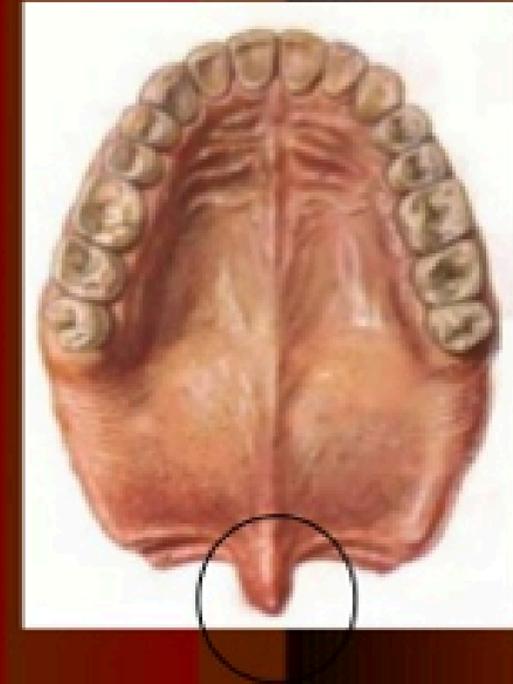
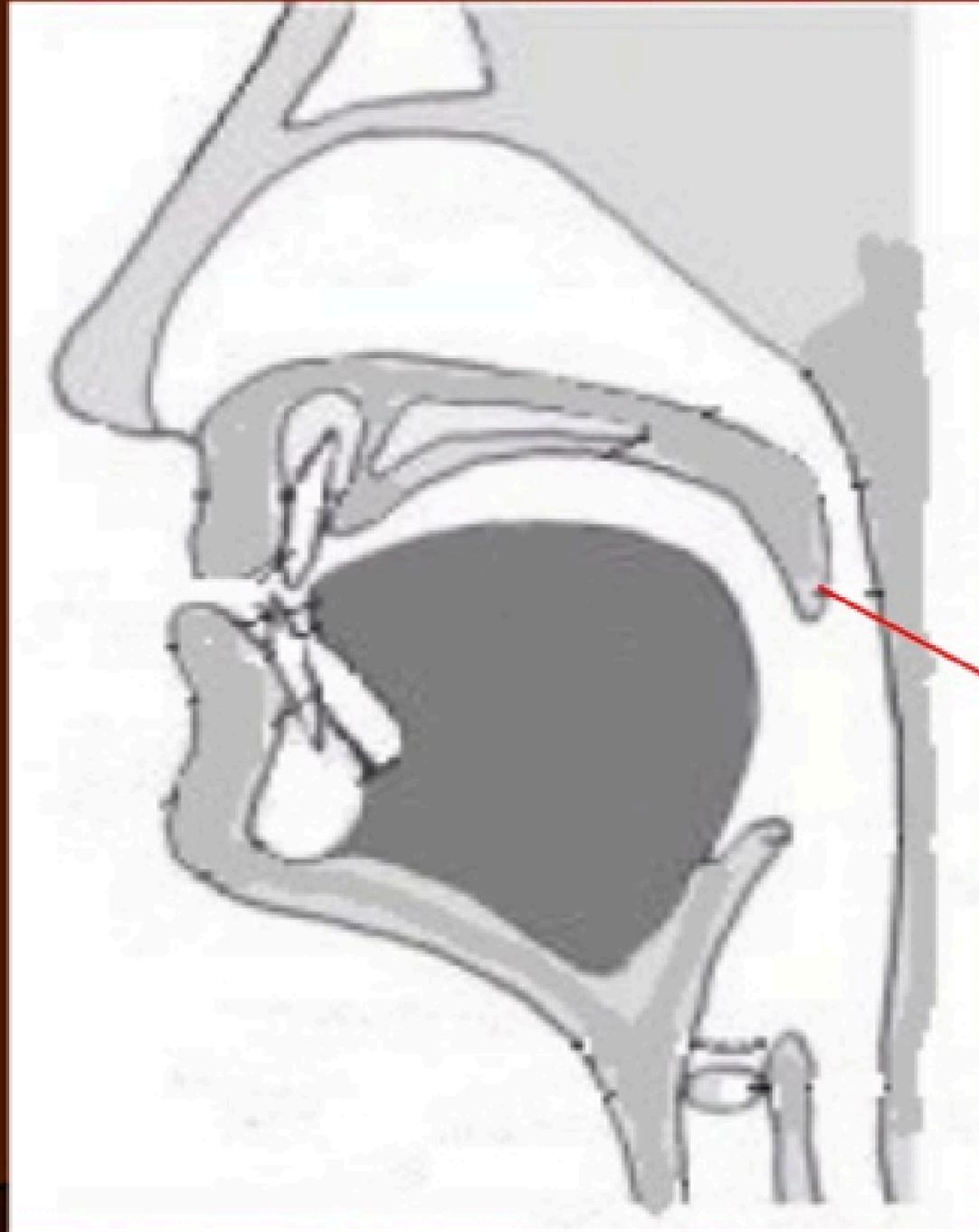
**Hard Palate**



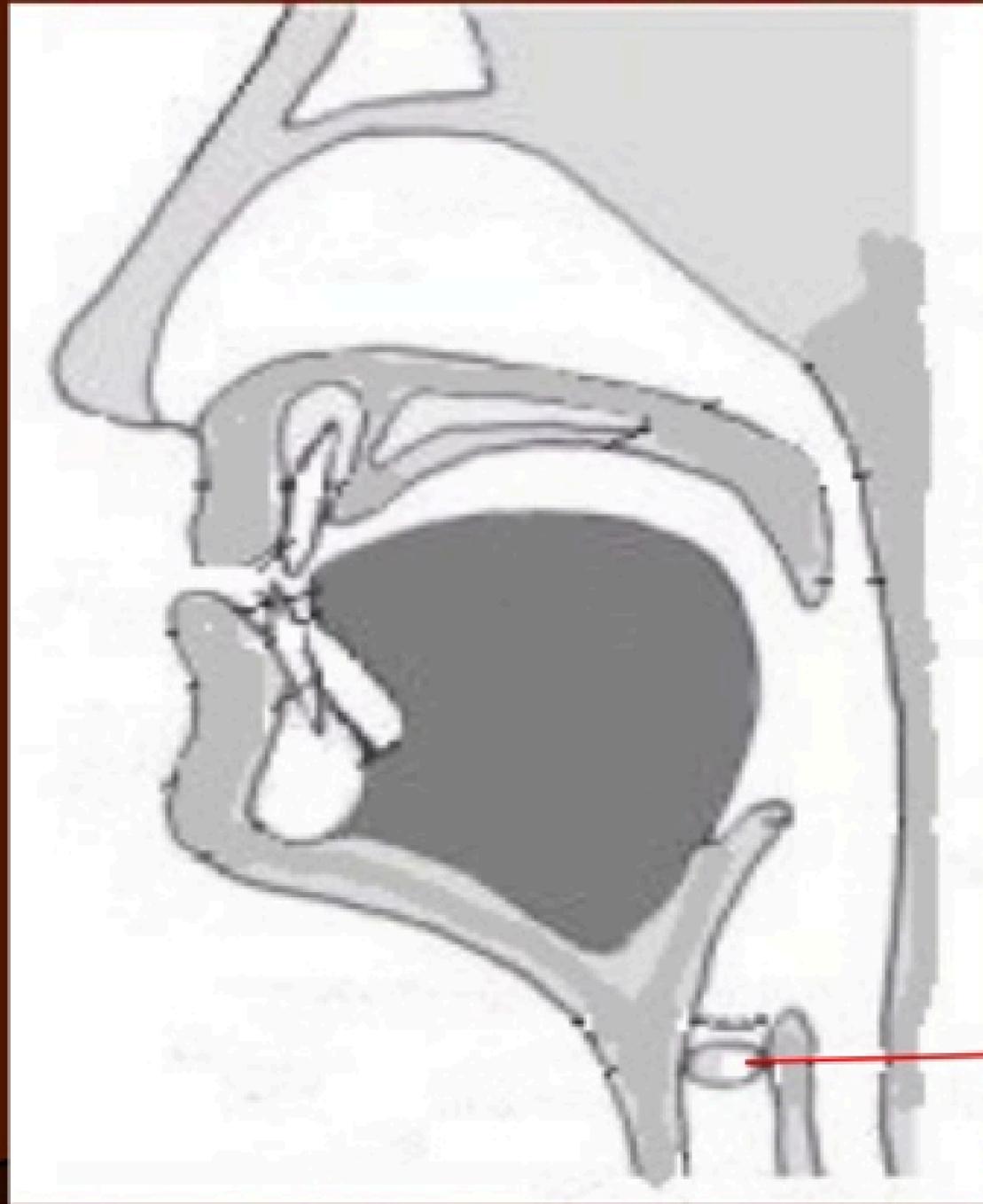


**Velum or Soft  
Palate**





Uvula



Glottis

**THANK YOU**