

# Phonetics: The Articulation of Speech Sounds

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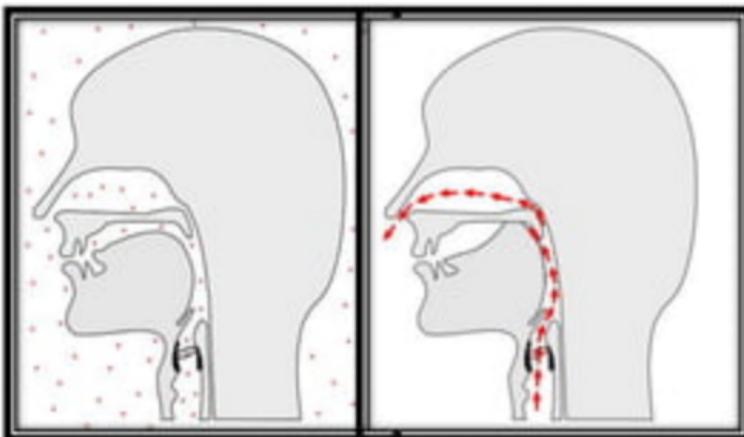
# Speech mechanism

**Phonetics** – articulation,  
transmission & reception

Organs of our body – 3 groups

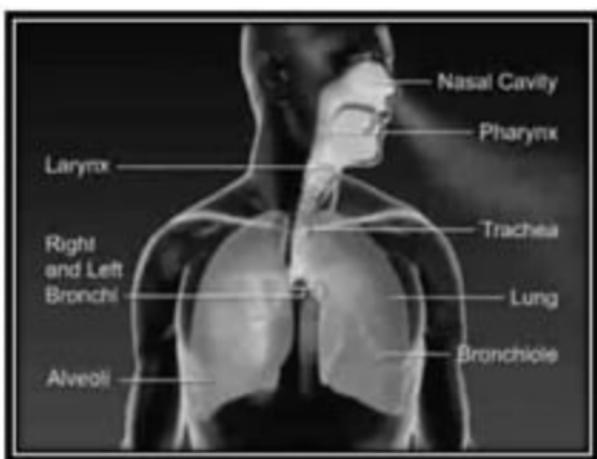
**Speech Mechanism**

- Respiratory System
- Articulatory System
- Phonatory System



# Respiratory system

- Trunk of our body (Neck – Abdomen)
- Lungs – soft bodies situated on either side of our chest
  - Receive oxygen through the 2 bronchi
  - Bronchus join the windpipe/ trachea
- Inspiration – breathe in – through the windpipe, the bronchus & the bronchi
- Expiration – breathe out – from the lungs goes out of the lungs through the bronchi into the bronchus, into the trachea and the outer atmosphere
- Expiratory Lung-air – production of a vast majority of speech sounds used by the languages of the world



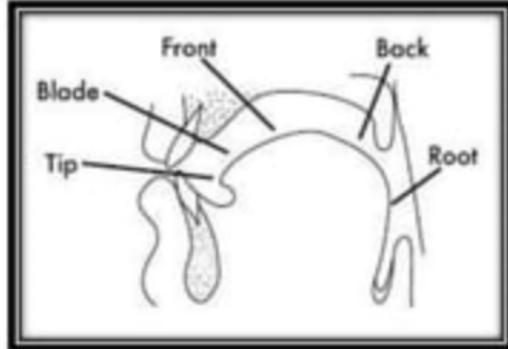
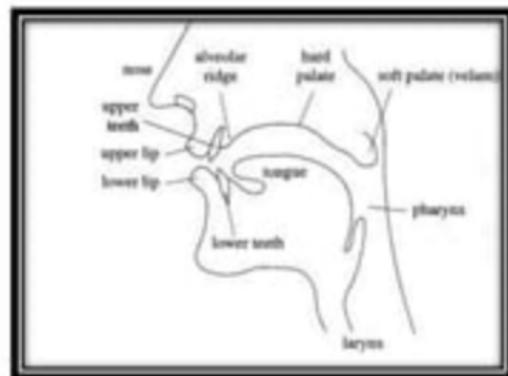
# Articulatory system

- Head & neck – Organs of Speech – Lips, Teeth, Tongue & Palate
- Roof of the Mouth – 4 parts

- Teeth Ridge/ Alveolar Ridge
- Hard Palate
- Soft Palate/ Velum
- Uvula

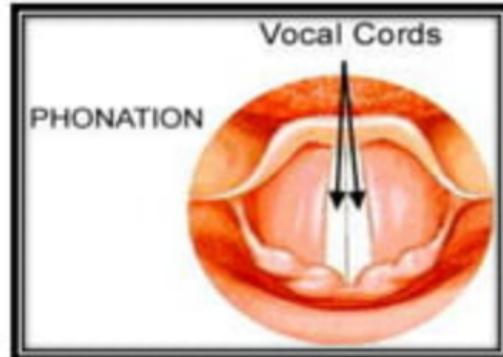
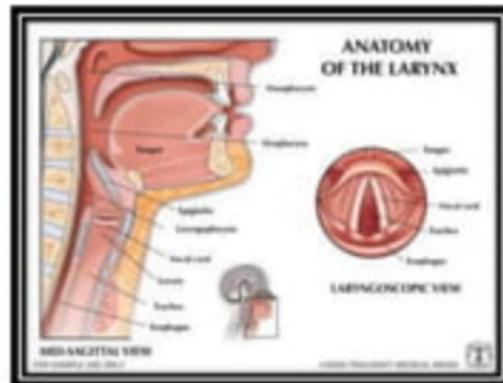
- Parts of the Tongue – 6 parts

- Tip
- Blade
- Front
- Centre
- Back
- Root



# Phonatory System

- Throat – Pharynx
- Behind the Pharynx – Back wall of the Pharynx (Adam's Apple – Larynx – upper part of the trachea)
- Phonatory System – Larynx & Vocal Cords
- Vocal Cords (inside the Larynx – Lip like structure)
- Glottis
  - VC attached at one end & left loose at the other end
  - Brought close/ move far away – there is a space



# Voiceless & Voiced Sounds

## ✓ Voiceless Sounds

- The air that we breathe in and breathe out passes through the Glottis
- Breathe normally – the vocal cords are moved away from each other – the glottis is wide open
- The air that we breathe in/out – goes freely through the wide-open glottis – without affecting/ moving the vocal cords

## ✓ The vocal cords are drawn far away from each other & the air passes through the wide-open glottis, without affecting the VCs.

## ✓ Voiced Sounds

- The air from the lungs passes through the Glottis – the pressure of the air makes them open and close rapidly
- The rapid opening and closing of the VCs – Vibration

## ✓ Sounds articulated with the VCs vibrating

## Pitch & intonation

- ✓ **Pitch** – the number of times the VCs open & close per second
- ✓ VC vibrate slowly – pitch is low
- ✓ VC vibrate fast – pitch is high
- ✓ **Intonation** – the patterns of variation of the pitch of our voice when we speak/ sing