

Phonetics and Human Physiology

Phonetics · Answer Key · 12 Questions

1. Which organ is primarily responsible for the vibration of air required to produce voiced sounds?

- A) The lungs
- B) The larynx**
- C) The nasal cavity
- D) The tongue

2. During the production of nasal consonants like 'm' or 'n', which physiological structure must be lowered to allow airflow into the nose?

- A) The epiglottis
- B) The hard palate
- C) The velum**
- D) The uvula

3. Which muscle is the primary driver of respiration, providing the subglottal pressure necessary for speech?

- A) The diaphragm**
- B) The intercostal muscles
- C) The trapezius
- D) The sternocleidomastoid

4. Ankyloglossia, a condition that can affect phonetic precision, is commonly known by what name?

- A) Cleft palate
- B) Tongue-tie**
- C) Deviated septum
- D) Hypernasality

5. What is the medical term for the space between the vocal folds, which must be open during the production of voiceless sounds?

- A) Pharynx
- B) Glottis**
- C) Trachea
- D) Bronchi

6. Which structure in the oral cavity is most critical for changing the shape of the vocal tract to produce different vowel qualities?

- A) The mandible
- B) The teeth
- C) The tongue**
- D) The alveolar ridge

7. Damage to the cranial nerve responsible for tongue movement would most likely result in which type of phonetic impairment?

- A) Dysarthria**
- B) Sensorineural hearing loss
- C) Otitis media
- D) Tinnitus

8. Which cartilage in the larynx serves as the primary attachment point for the vocal folds and rotates to adjust their tension?

- A) Thyroid cartilage
- B) Cricoid cartilage
- C) Arytenoid cartilage**
- D) Epiglottic cartilage

9. Which part of the vocal tract is formed by the union of the maxilla and the palatine bones?

- A) The soft palate
- B) The hard palate**
- C) The uvula
- D) The mandible

10. What is the clinical term for the inability to produce speech sounds clearly due to weakness in the muscles used for articulation?

- A) Aphasia
- B) Dysarthria**
- C) Apraxia
- D) Dysphagia

11. The resonance of speech sounds is significantly altered by the size and shape of which area located above the larynx?

- A) The pharynx**
- B) The alveoli
- C) The diaphragm
- D) The trachea

12. Which structure acts as a valve to prevent food from entering the larynx during swallowing, an essential function shared with the airway management of speech?

- A) The glottis
- B) The epiglottis**
- C) The soft palate
- D) The vocal folds