

Physiology and Anatomy in Performance

Drama & Theatre · Answer Key · 8 Questions

1. Which anatomical structure, located in the larynx, is primarily responsible for the vibration that creates sound during theatrical vocal projection?

- A) Thyroid cartilage
- B) Vocal folds**
- C) Epiglottis
- D) Cricoid cartilage

2. During sustained 'stage breath' (diaphragmatic breathing), which muscle group contracts to increase the volume of the thoracic cavity?

- A) Internal intercostals
- B) Diaphragm**
- C) Pectoralis minor
- D) Sternocleidomastoid

3. In performance contexts, the 'Valsalva maneuver' is sometimes unintentionally triggered by performers during intense vocal strain; what physiological effect does this primarily cause?

- A) Increased venous return to the heart
- B) Decreased intrathoracic pressure
- C) Reduced cardiac output due to increased pressure**
- D) Rapid hyperventilation

4. Which cranial nerve, known as the 'wandering nerve', provides parasympathetic control to the heart, lungs, and the digestive tract, and is critical for regulating vocal cord tension?

- A) Trigeminal nerve
- B) Facial nerve
- C) Vagus nerve**
- D) Glossopharyngeal nerve

5. To maintain postural alignment for theatrical movement, the 'line of gravity' should ideally pass through which anatomical landmark to minimize muscle fatigue?

- A) Posterior to the mastoid process
- B) Anterior to the lumbar vertebrae
- C) Through the odontoid process of the axis**
- D) Posterior to the lateral malleolus

6. Chronic vocal nodules in actors are most commonly associated with repetitive mechanical trauma to which layer of the vocal fold tissue?

A) Superficial lamina propria

B) Thyroarytenoid muscle

C) Vocal ligament

D) Epithelium

7. When performing 'Alexander Technique' principles for stage, which joint is the primary focus for releasing tension to allow the head, neck, and back to align naturally?

A) Glenohumeral joint

B) Atlanto-occipital joint

C) Temporomandibular joint

D) Sacroiliac joint

8. The resonance of a performer's voice is largely determined by the shape of the supraglottic tract; which anatomical structure is specifically manipulated to alter the 'formants' of speech?

A) Hard palate

B) Pharyngeal constrictor muscles

C) Tongue root

D) Hyoid bone