

Chapter 01: Face and Neck Regions

Fehrenbach: Illustrated Dental Embryology, Histology, and Anatomy, 5th Edition

MULTIPLE CHOICE

1. Which of the following facial features is located laterally to each naris?
 - a. Orbit
 - b. Nasal ala
 - c. Nasal septum
 - d. Philtrum

ANS: B

The nares are separated by the midline nasal septum. The nares are also bounded laterally by winglike cartilaginous structures, each ala (plural, alae) of the nose. In the orbital region of the face, the eyeball and all its supporting structures are contained in the orbit of the skull, the bony eye socket. On the midline of the upper lip extending downward from the nasal septum is a vertical groove, the philtrum.

DIF: Recall

REF: Chapter 1, Nasal Region, Page 3

OBJ: 2

TOP: CDA, GC, I.B.2 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

2. The lips are outlined from the surrounding skin by a transition area called the
 - a. philtrum.
 - b. mucogingival junction.
 - c. mucocutaneous junction.
 - d. mandibular symphysis.

ANS: C

The vermilion zone of each lip has a darker appearance than the surrounding skin, with the lips outlined from the surrounding skin by a transition zone, the mucocutaneous junction. On the midline of the upper lip extending downward from the nasal septum is a vertical groove, the philtrum. The line of demarcation between the firmer and pinker attached gingiva and the movable and redder alveolar mucosa is the scallop-shaped mucogingival junction. The midline of the mandible is marked by the mandibular symphysis.

DIF: Recall

REF: Chapter 1, Oral Region, Page 3

OBJ: 2

TOP: CDA, GC, I.B.6 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

3. Which of the following structures can be palpated in the anterior midline of the neck?
 - a. Thyroid cartilage
 - b. Parathyroid glands
 - c. Sternocleidomastoid muscle
 - d. Submandibular salivary gland

ANS: A

Found in the anterior midline and inferior to the hyoid bone is the thyroid cartilage, which is the prominence of the “voice box,” or larynx. The vocal cords, or ligaments of the larynx, are attached to the posterior surface of the thyroid cartilage. The parathyroid glands are located close to or within the posterior aspect of the thyroid gland but cannot be palpated in a patient; the thyroid gland can be palpated on a patient within the midline cervical area. The large strap muscle, the sternocleidomastoid muscle, is easily palpated on each side of the neck. The submandibular salivary gland is in the neck region but not in the midline.

DIF: Recall REF: Chapter 1, Neck Regions, Page 6 OBJ: 4
TOP: CDA, GC, I.A.2 | NBDHE, Assessing Patient Characteristics (Head and neck examination)

4. Which of the following statements concerning the zygomatic arch is *correct*?
- Temporomandibular joint is superior.
 - Infraorbital region is inferior.
 - It overlies mandible.
 - External ear is posterior.

ANS: D

Farther laterally to the infraorbital region is the zygomatic region, which overlies the bony support for the cheek, the zygomatic arch. The zygomatic arch extends from just below the lateral margin of the eye toward the middle part of the external ear, which is located posteriorly. Inferior to the zygomatic arch and just anterior to the external ear is the temporomandibular joint.

DIF: Comprehension REF: Chapter 1, Zygomatic Region, Page 3
OBJ: 2
TOP: CDA, GC, I.B.2 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

5. One of the muscles forming the cheek is the strong _____ muscle, which is felt when a patient clenches the teeth together.
- lateral pterygoid
 - masseter
 - medial pterygoid
 - temporalis

ANS: B

The buccal region of the face is composed of the soft tissue of the cheek. The cheek forms the side of the face and is a broad area of the face between the nose, mouth, and ear. Most of the upper cheek is fleshy, mainly formed by a mass of fat and muscles. One of the muscles forming the cheek is the strong masseter muscle, which is palpated when a patient clenches the teeth together. The pterygoid muscles are also located on each side of the face near the mouth, and the temporalis is located in the temporal region.

DIF: Recall REF: Chapter 1, Buccal Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B.4 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

6. Just inferior to the zygomatic arch and just anterior to the external ear is the
- temporomandibular joint.
 - infraorbital region.
 - mental region.

d. parotid gland.

ANS: A

Inferior to the zygomatic arch and just anterior to the external ear is the temporomandibular joint. The infraorbital region of the face is located inferior to the orbital region and lateral to the nasal region. Farther laterally is the zygomatic region, which overlies the bony support for the cheek, the zygomatic arch. The zygomatic arch extends from just below the lateral margin of the eye toward the middle part of the external ear. The chin is the major feature of the mental region of the face; the bone underlying the mental region is the mandible, or lower jaw. The parotid is located irregularly from the zygomatic arch down to the posterior border of the lower jaw.

DIF: Recall

REF: Chapter 1, Zygomatic Region, Page 3

OBJ: 2

TOP: CDA, GC, I.B.2 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

7. The _____ salivary gland is located irregularly from the zygomatic arch down to the posterior border of the lower jaw.
- parotid
 - submandibular
 - von Ebner
 - sublingual

ANS: A

The parotid is located irregularly from the zygomatic arch down to the posterior border of the lower jaw. Both the submandibular salivary and sublingual are in the neck region. The von Ebner refers to minor glands located deep to the circumvallate lingual papillae on the dorsal surface of the tongue.

DIF: Recall

REF: Chapter 1, Buccal Region, Page 3

OBJ: 2

TOP: CDA, GC, I.B.3 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

8. The _____ extends from just below the lateral margin of the eye toward the middle part of the external ear.
- temporomandibular joint
 - zygomatic arch
 - labial commissure
 - infraorbital region

ANS: B

The zygomatic arch extends from just below the lateral margin of the eye toward the middle part of the external ear. Inferior to the zygomatic arch and just anterior to the external ear is the temporomandibular joint. The upper and lower lips meet at each corner of the mouth at the labial commissure. The infraorbital region of the face is located inferior to the orbital region and lateral to the nasal region.

DIF: Recall

REF: Chapter 1, Zygomatic Region, Page 3

OBJ: 2

TOP: CDA, GC, I.B.2 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

9. The main feature of the _____ region of the face is the external nose.
- infraorbital

- b. zygomatic
- c. nasal
- d. temporal

ANS: C

The main feature of the nasal region of the face is the external nose. The infraorbital region of the face is located inferior to the orbital region and lateral to the nasal region. Farther laterally is the zygomatic region, which overlies the bony support for the cheek, the zygomatic arch. The temporal region is on the lateral side of the head at the temple.

DIF: Recall REF: Chapter 1, Nasal Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

10. Which of the following orofacial structures is located in the midline of the face or neck?
- a. Philtrum
 - b. Submandibular salivary gland
 - c. Naris and ala
 - d. Parotid salivary gland

ANS: A

On the midline of the upper lip extending downward from the nasal septum is a vertical groove, the philtrum. The submandibular can also be palpated in a patient in the neck region but not in the midline. Inferior to the apex on each side of the nose is a nostril, or naris (plural, nares). The nares are also bounded laterally by winglike cartilaginous structures, each ala (plural, alae) of the nose. The parotid is located irregularly from the zygomatic arch down to the posterior border of the lower jaw and not in the midline.

DIF: Recall REF: Chapter 1, Oral Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B.6 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

11. The _____ region includes the forehead and area above the eyes.
- a. infraorbital
 - b. orbital
 - c. temporal
 - d. frontal

ANS: D

The frontal region of the face includes the forehead and the area above the eyes. The infraorbital region of the face is located inferior to the orbital region and lateral to the nasal region. In the orbital region of the face, the eyeball and all its supporting structures are contained in the orbit of the skull, the bony eye socket. The temporal region is on the lateral side of the head at the temple.

DIF: Recall REF: Chapter 1, Frontal Region, Page 1 OBJ: 2
TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

12. Which of the following may be involved in the disruption of the vermilion zone and may make it hard to determine the exact location of its mucocutaneous junction between the lips and the surrounding skin?
- a. Scar tissue
 - b. Hypercalcification
 - c. Cleft palate

d. Symmetry

ANS: A

Disruption of the vermillion zone may make it hard to determine the exact location of its mucocutaneous junction between the lips and the surrounding skin. These changes may be due to scar tissue from past traumatic incidents, developmental disturbances, or cellular changes in the tissue such as occur with solar damage. These changes may also represent a more serious condition such as cancer; however, this can be verified only with tissue biopsy and microscopic examination. If this change is part of a past history of a cleft lip, this also needs to be noted in the patient record because of its impact on dental care.

DIF: Comprehension

REF: Chapter 1, Clinical Considerations with Lips, Page 4 OBJ: 3

TOP: CDA, GC, I.B.6 | NBDHE, Assessing Patient Characteristics (General)

13. The _____ region of the face is composed of the soft tissue of the cheek.
- infraorbital
 - orbital
 - temporal
 - buccal

ANS: D

The buccal region of the face is composed of the soft tissue of the cheek. The infraorbital region of the face is located inferior to the orbital region and lateral to the nasal region. In the orbital region of the face, the eyeball and all its supporting structures are contained in the orbit of the skull, the bony eye socket. The temporal region is on the lateral side of the head at the temple.

DIF: Recall

REF: Chapter 1, Buccal Region, Page 3 OBJ: 2

TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

14. To palpate the lower jaw moving at the temporomandibular joint on a patient, a finger is placed into the external ear canal during
- rest.
 - movement.
 - swallowing.
 - eye closure.

ANS: B

To palpate the lower jaw moving at the temporomandibular joint on a patient, a finger is placed into the external ear canal during movement.

DIF: Recall

REF: Chapter 1, Zygomatic Region, Page 3

OBJ: 3

TOP: CDA, GC, I.A.2 | NBDHE, Assessing Patient Characteristics (Head and neck examination)

15. The chin is the major feature of the _____ region of the face.
- zygomatic
 - infraorbital
 - mental
 - oral

ANS: C

The chin is the major feature of the mental region of the face. The infraorbital region of the face is located inferior to the orbital region and lateral to the nasal region. Farther laterally is the zygomatic region, which overlies the bony support for the cheek, the zygomatic arch. The oral region of the face has many structures within it, such as the lips and oral cavity.

DIF: Recall

REF: Chapter 1, Mental Region, Page 4

OBJ: 2

TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

16. The _____ gland, an endocrine gland, can be palpated within the midline cervical area.
- parathyroid
 - thyroid
 - parotid
 - submandibular

ANS: B

The thyroid gland, an endocrine gland, can be palpated on a patient within the midline cervical area. The parathyroid glands are located close to or within the posterior aspect of the thyroid gland but cannot be palpated in a patient. The parotid is located irregularly from the zygomatic arch down to the posterior border of the lower jaw; the parotid has a small part that can be palpated on a patient in the buccal region as well as in the zygomatic region. The submandibular can also be palpated in the neck region but not in the midline.

DIF: Recall

REF: Chapter 1, Neck Regions, Page 6

OBJ: 4

TOP: CDA, GC, I.A.3 | NBDHE, Assessing Patient Characteristics (Head and neck examination)

17. The large strap muscle, the _____ muscle, is located on each side of the neck.
- masseter
 - sternocleidomastoid
 - lateral pterygoid
 - medial pterygoid

ANS: B

The large strap muscle, the sternocleidomastoid muscle, is easily palpated on each side of a patient's neck. One of these muscles forming the cheek is the strong masseter muscle, which is palpated when a patient clenches the teeth together. The pterygoid muscles are also located on each side of the face.

DIF: Recall

REF: Chapter 1, Neck Regions, Page 5

OBJ: 4

TOP: CDA, GC, I.B.4 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

18. The regions of the face include the frontal, _____, nasal, infraorbital, zygomatic, buccal, oral, and mental regions.
- temporal
 - occipital
 - orbital
 - parietal

ANS: C

The regions of the face include the frontal, orbital, nasal, infraorbital, zygomatic, buccal, oral, and mental regions. The other regions are regions of the head and include the temporal, occipital, and parietal.

DIF: Recall REF: Chapter 1, Face Regions, Page 1 OBJ: 2
TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

19. The _____ are separated by the midline nasal septum.
- alae
 - nares
 - zygomatic arches
 - commissures

ANS: B

Inferior to the apex on each side of the nose is a nostril, or naris (plural, nares). The nares are separated by the midline nasal septum. The nares are also bounded laterally by winglike cartilaginous structures, each ala (plural, alae) of the nose. Farther laterally is the zygomatic region, which overlies the bony support for the cheek, the zygomatic arch. The upper and lower lips meet at each corner of the mouth at the labial commissure.

DIF: Recall REF: Chapter 1, Nasal Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

20. What part of the mandible extends upward and backward from the body of the mandible on each side?
- Coronoid process
 - Mandibular symphysis
 - Ramus
 - Coronoid notch

ANS: C

The bone underlying the mental region is the mandible, or lower jaw. On the lateral aspect of the mandible, the stout, flat plate of the ramus (plural, rami) extends upward and backward from the body of the mandible on each side. At the anterior border of the ramus is a thin, sharp margin that terminates in the coronoid process. The midline of the mandible is marked by the mandibular symphysis. The main part of the anterior border of the ramus forms a concave forward curve, the coronoid notch.

DIF: Recall REF: Chapter 1, Mental Region, Page 4 OBJ: 2
TOP: CDA, GC, I.B.2 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

21. The lips are fleshy folds that mark the gateway of the _____ cavity proper.
- zygomatic
 - infraorbital
 - mental
 - oral

ANS: D

The upper and lower lips are fleshy folds that mark the gateway of the oral cavity proper. The infraorbital region of the face is located inferior to the orbital region and lateral to the nasal region. Farther laterally is the zygomatic region, which overlies the bony support for the cheek, the zygomatic arch. The chin is the major feature of the mental region of the face.

DIF: Recall REF: Chapter 1, Oral Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B.6 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

22. The sharp angle of the lower jaw inferior to the earlobe is termed the *angle of the*
- mandible.
 - maxilla.
 - temporomandibular joint.
 - zygomatic arch.

ANS: A

The sharp angle of the lower jaw inferior to the earlobe is termed the *angle of the mandible*. The bone underlying the lower lip is the lower jaw, or mandible. Underlying the upper lip is the upper jaw, or maxilla. Inferior to the zygomatic arch and just anterior to the external ear is the temporomandibular joint. The zygomatic arch extends from just below the lateral margin of the eye toward the middle part of the external ear.

DIF: Recall REF: Chapter 1, Buccal Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B.2 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

23. Between the vermilion zone and the inner oral cavity is the
- philtrum.
 - mucogingival junction.
 - mucocutaneous junction.
 - intermediate zone.

ANS: D

Between the vermilion zone and the inner oral cavity is the intermediate zone. The vermilion zone of each lip has a darker appearance than the surrounding skin, with the lips outlined from the surrounding skin by a transition zone, the mucocutaneous junction. On the midline of the upper lip, extending downward from the nasal septum, is a vertical groove, the philtrum. The line of demarcation between the firmer and pinker attached gingiva and the movable and redder alveolar mucosa is the scallop-shaped mucogingival junction.

DIF: Recall REF: Chapter 1, Oral Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

24. Which of the following orofacial structures contributes to the prominence of the neck that is also called the “Adam’s apple”?
- Sublingual salivary gland
 - Submandibular salivary gland
 - Thyroid cartilage
 - Hyoid bone

ANS: C

Found in the anterior midline and inferior to the hyoid bone is the thyroid cartilage, which is the prominence of the “voice box,” or larynx. The submandibular salivary gland and the sublingual salivary gland can also be palpated in a patient in the neck region superior to the hyoid bone. At the anterior midline is the hyoid bone, which is suspended in the neck; many muscles attach to the hyoid bone, which controls the position of the base of the tongue.

DIF: Recall REF: Chapter 1, Neck Regions, Page 6 OBJ: 4
TOP: CDA, GC, I.B | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)

25. The philtrum terminates in a thicker area of the midline of the upper lip, the _____ of the upper lip.
- a. septum
 - b. tubercle
 - c. symphysis
 - d. ramus

ANS: B

The philtrum terminates in a thicker area of the midline of the upper lip, the tubercle of the upper lip. The nares are separated by the midline nasal septum. The midline of the mandible is marked by the mandibular symphysis. On the lateral aspect of the mandible, the stout, flat plate of the ramus (plural, rami) extends upward and backward from the body of the mandible on each side.

DIF: Recall REF: Chapter 1, Oral Region, Page 3 OBJ: 2
TOP: CDA, GC, I.B.6 | NBDHE, Anatomic Sciences (Anatomy, Head and neck anatomy)