Kelley: Sectional Anatomy for Imaging Professionals, 3rd Edition

Chapter 2: Cranium and Facial Bones

Test Bank

MULTIPLE CHOICE

1. Which of the following is a foramen contained within the sphenoid bone?
   a. Foramen lacerum
   b. Foramen ovale
   c. Jugular foramen
   d. Mental foramen

   ANS: B REF: page 28
   OBJ: Identify the location and unique structures of each cranial and facial bone.

2. The cribriform plate is part of which cranial bone?
   a. Sphenoid
   b. Temporal
   c. Ethmoid
   d. Occipital

   ANS: C REF: page 28
   OBJ: Identify the location and unique structures of each cranial and facial bone.

3. The lower portion of the bony nasal septum is formed by which facial bone?
   a. Maxilla
   b. Vomer
   c. Palatine bone
   d. Lacrimal bone

   ANS: B REF: page 58
   OBJ: Identify the location and unique structures of each cranial and facial bone.

4. The zygomatic arch is formed by the zygoma and the:
   a. maxilla.
   b. parietal bone.
   c. temporal bone.
   d. mandible.

   ANS: C REF: page 32
   OBJ: Identify the location and unique structures of each cranial and facial bone.

5. The anterior surface of the temporomandibular articular disk attaches to which muscle?
   a. Temporalis
   b. Medial pterygoid
   c. Lateral pterygoid
   d. Masseter

   ANS: C REF: page 63
   OBJ: Describe the structures that comprise the temporomandibular joint.

6. The osteomeatal complex is located in which portion of the maxillary sinus?
   a. Superior medial
   b. Superior lateral
   c. Inferior medial
   d. Inferior lateral

   ANS: A REF: page 74
   OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

7. Which of the following are the structures of the inner ear?
   a. Semicircular canals, malleus, vestibule
   b. Cochlea, incus, oval window
   c. Vestibule, cochlea, malleus
   d. Semicircular canals, cochlea, vestibule

   ANS: D REF: page 37
   OBJ: Identify the structures of the ear and describe their functions.

8. Which opening is located between the greater and lesser wings of the sphenoid bone?
   a. Superior orbital fissure
   b. Optic canal
   c. Inferior orbital fissure
   d. Optic foramen

   ANS: D REF: page 75
   OBJ: Identify the bones that form the orbit and their associated openings.

9. Which of the following is not a muscle of the eye?
   a. Superior rectus
   b. Lateral rectus
   c. Superior oblique
   d. Lateral oblique

ANS: D REF: page 83
OBJ: List the muscles of the eye and describe their functions and locations.

10. Which of the following cranial bones form the largest portion of the sides of the cranium?
    a. Parietal bones
    b. Temporal bones
    c. Occipital bones
    d. Sphenoid bones

ANS: A REF: page 19
OBJ: Identify the location and unique structures of each cranial and facial bone.

11. The parietal bones articulate with the _____, and temporal bones.
    a. ethmoid, frontal, occipital
    b. sphenoid, occipital, frontal
    c. ethmoid, frontal, maxillary
    d. sphenoid, frontal, maxillary

ANS: B REF: page 19
OBJ: Identify the location and unique structures of each cranial and facial bone.

12. The lateral masses and the superior and middle nasal conchae are part of which cranial bone?
    a. Ethmoid
    b. Sphenoid
    c. Temporal
    d. Frontal

ANS: A REF: page 23
OBJ: Identify the location and unique structures of each cranial and facial bone.

13. Which structure of the sphenoid bone houses the pituitary gland?
    a. Foramen ovale
    b. Pterygoid process
    c. Sella turcica
    d. Anterior clinoid process

ANS: C REF: page 25
OBJ: Identify the location and unique structures of each cranial and facial bone.

14. The petrosal nerve passes through the:
    a. foramen rotundum.
    b. foramen spinosum.
    c. optic canal.

d. pterygoid canal.

ANS: D REF: page 27
OBJ: Identify the location and unique structures of each cranial and facial bone.

15. The foramen magnum is a structure of which cranial bone?
a. Sphenoid
b. Ethmoid
c. Frontal
d. Occipital

ANS: D REF: page 29
OBJ: Identify the location and unique structures of each cranial and facial bone.

16. The hypoglossal canals are located within which cranial bone?
a. Sphenoid
b. Ethmoid
c. Frontal
d. Occipital

ANS: D REF: page 29
OBJ: Identify the location and unique structures of each cranial and facial bone.

17. Cranial nerve XII passes through the _____ canal.
a. vidian
b. pterygoid
c. hypoglossal
d. optic

ANS: C REF: page 29
OBJ: Identify the location and unique structures of each cranial and facial bone.

18. The basilar portion of the occipital bone forms the anterior margin of the foramen magnum and slopes superiorly and anteriorly to meet with the dorsum sella to form which structure?
a. Clivus
b. Lateral condyle
c. Internal occipital protuberance
d. Sella turcica

ANS: A REF: page 29
OBJ: Identify the location and unique structures of each cranial and facial bone.

19. Which portion of the temporal bone is pyramidal in shape and situated at an angle between the sphenoid and occipital bones?
    a. Squamous
    b. Tympanic
    c. Mastoid
    d. Petrous

    ANS: D REF: page 33
    OBJ: Identify the location and unique structures of each cranial and facial bone.

20. The internal auditory canal transmits cranial nerves:
    a. VI and VII.
    b. VII and VIII.
    c. VIII and IX.
    d. IX and X.

    ANS: B REF: page 33
    OBJ: Identify the structures of the ear and describe their functions.

21. The stylomastoid foramen constitutes the end of the _____ canal.
    a. optic
    b. pterygoid
    c. facial nerve
    d. hypoglossal

    ANS: C REF: page 34
    OBJ: Identify the location and unique structures of each cranial and facial bone.

22. The middle ear, or tympanic cavity, communicates with _____ and the nasopharynx.
    a. the mastoid antrum
    b. the frontal sinus
    c. the sphenoid sinus
    d. Meckel's cave

    ANS: A REF: page 37
    OBJ: Identify the structures of the ear and describe their functions.

23. Which structure of the inner ear is responsible for hearing?
    a. Vestibule
    b. Semicircular canal
    c. Incus
    d. Cochlea

ANS: D REF: page 40
OBJ: Identify the structures of the ear and describe their functions.

24. Two opening of the vestibule are the:
    a. round window and internal auditory canal.
    b. oval window and internal auditory canal.
    c. oval window and vestibular aqueduct.
    d. round window and vestibular aqueduct.

ANS: C REF: page 40
OBJ: Identify the structures of the ear and describe their functions.

25. Which suture is located posterior in the cranium and joins the occipital and parietal bones?
    a. Squamous
    b. Coronal
    c. Sagittal
    d. Lambdoidal

ANS: D REF: page 46 OBJ: Identify the cranial sutures.

26. Which of the following is a point on the skull that corresponds to the posterior end of the parietomastoid suture?
    a. Asterion
    b. Pterion
    c. Bregma
    d. Lambda

ANS: A REF: page 46 OBJ: Identify the cranial sutures.

27. The term for the anterior fontanel is the:
    a. asterion.
    b. pterion.
    c. bregma.
    d. lambda.

ANS: C REF: page 49
OBJ: Describe the six fontanels within the infant cranium.

28. The infraorbital foramen is part of which facial bone?
    a. Mandible
    b. Maxillary
    c. Zygomatic

d. Nasal

ANS: B REF: page 52
OBJ: Identify the location and unique structures of each cranial and facial bone.

29. The ethmoid sinuses are contained in which portion of the ethmoid bone?
a. Body
b. Vertical portion
c. Horizontal portion
d. Lateral masses

ANS: D REF: page 69
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

30. The frontal sinuses drain into the:
a. sphenoethmoidal recess.
b. superior nasal meatus.
c. middle nasal meatus.
d. inferior nasal meatus.

ANS: C REF: page 73
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

Questions 31 through 33 refer to the figure below of a coronal CT of the ethmoid bone.

31. Which arrow points to the ethmoid sinuses?

a. A
b. B
c. C
d. D

ANS: C REF: page 69
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

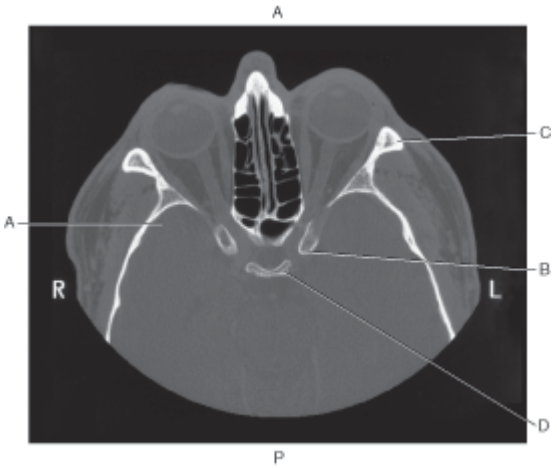
32. Which arrow points to the vomer?
a. A
b. B
c. C
d. D

ANS: B REF: page 87
OBJ: Identify the location and unique structures of each cranial and facial bone.

33. Which arrow points to the cribriform plate?
a. A
b. B
c. C
d. D

ANS: A REF: page 87
OBJ: Identify the location and unique structures of each cranial and facial bone.

Questions 34 through 36 refer to the figure below of an axial CT of the orbit.



34. Which arrow points to the dorsum sellae?
a. A
b. B

c. C
d. D

ANS: D REF: page 23
OBJ: Identify the location and unique structures of each cranial and facial bone.

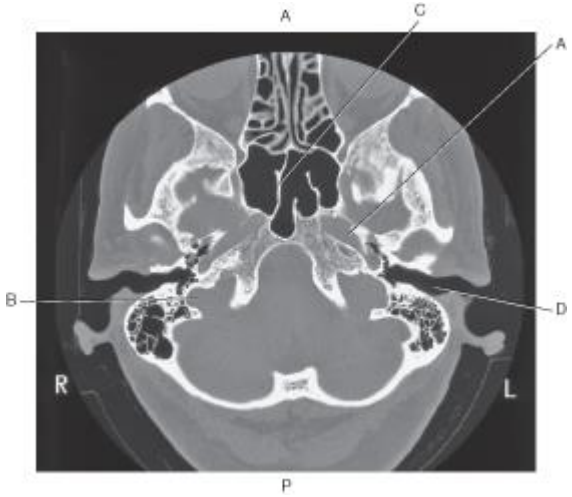
35. Which arrow points to the optic canal?
a. A
b. B
c. C
d. D

ANS: A REF: page 26
OBJ: Identify the location and unique structures of each cranial and facial bone.

36. Which arrow points to the anterior clinoid process?
a. A
b. B
c. C
d. D

ANS: B REF: page 26
OBJ: Identify the location and unique structures of each cranial and facial bone.

Questions 37 through 39 refer to the figure below of an axial CT of the temporal bone.



37. Which arrow points to the carotid canal?
a. A
b. B
c. C

d. D

ANS: A REF: page 32
OBJ: Identify the location and unique structures of each cranial and facial bone.

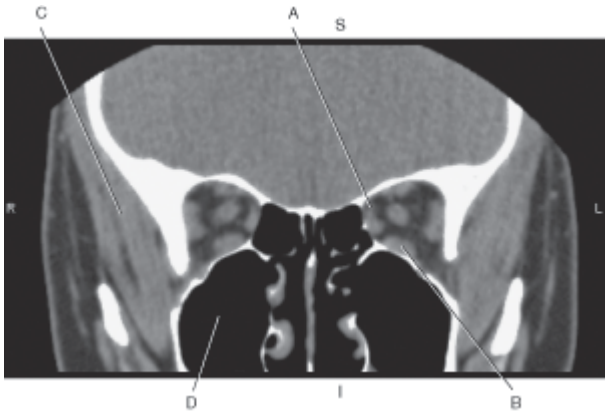
38. Which arrow points to the jugular foramen?
a. A
b. B
c. C
d. D

ANS: B REF: page 32
OBJ: Identify the location and unique structures of each cranial and facial bone.

39. Which arrow points to the sphenoid sinus?
a. A
b. B
c. C
d. D

ANS: C REF: page 35
OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

40. On the figure below, a coronal CT of the orbit with optic nerve and vessels, which arrow points to the temporalis muscle?

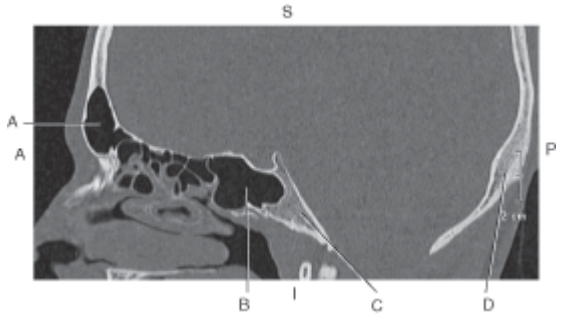


a. A
b. B
c. C
d. D

ANS: C REF: page 66

OBJ: List the muscles of the eye and describe their functions and locations.

Questions 41 through 44 refer to the figure below of a sagittal CT reformat of the cranium.



41. Which arrow points to the frontal sinus?
    a. A
    b. B
    c. C
    d. D

    ANS: A REF: page 69
    OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

42. Which arrow points to the sphenoid sinus?
    a. A
    b. B
    c. C
    d. D

    ANS: B REF: page 69
    OBJ: Identify the location of each paranasal sinus and the meatus into which it drains.

43. Which arrow points to the clivus?
    a. A
    b. B
    c. C
    d. D

    ANS: C REF: page 25
    OBJ: Identify the location and unique structures of each cranial and facial bone.

44. Which arrow points to the occipital bone?
    a. A
    b. B

c. C
d. D

ANS: D REF: page 30
OBJ: Identify the location and unique structures of each cranial and facial bone.

Questions 45 through 47 refer to the figure below of the coronal CT of the dorsum sella.

45. Which arrow points to the temporal bone?
    a. A
    b. B
    c. C

ANS: A REF: page 22
OBJ: Identify the location and unique structures of each cranial and facial bone.

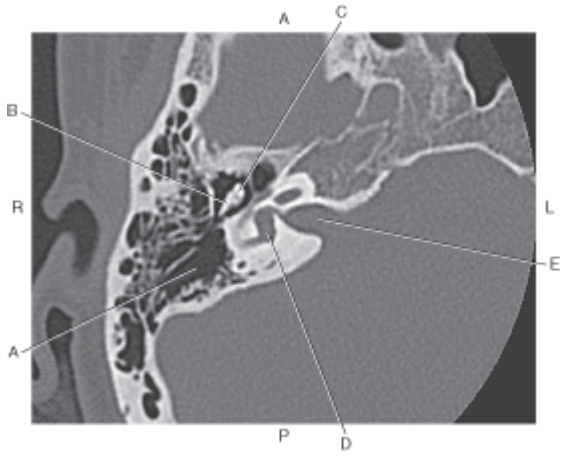
46. Which arrow points to the clinoid process?
    a. A
    b. B
    c. C

ANS: B REF: page 22
OBJ: Identify the location and unique structures of each cranial and facial bone.

47. Which arrow points to the condyloid process of the mandible?
    a. A
    b. B
    c. C

ANS: C REF: page 43
OBJ: Describe the structures that comprise the temporomandibular joint.

Questions 48 through 52 refer to the figure below of an axial CT of the inner ear.



48. Which arrow points to the mastoid antrum?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: A REF: page 43
    OBJ: Identify the structures of the ear and describe their functions.

49. Which arrow points to the incus?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: B REF: page 44
    OBJ: Identify the structures of the ear and describe their functions.

50. Which arrow points to the malleus?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: C REF: page 45
    OBJ: Identify the structures of the ear and describe their functions.

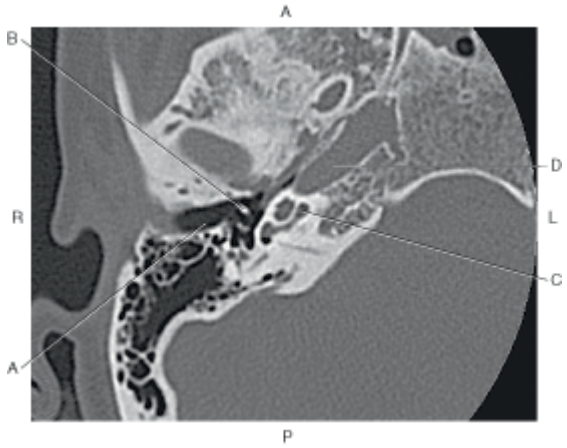
51. Which arrow points to the vestibule?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: D REF: page 35
    OBJ: Identify the structures of the ear and describe their functions.

52. Which arrow points to the internal auditory canal (IAC)?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: E REF: page 41
    OBJ: Identify the structures of the ear and describe their functions.

Questions 53 through 56 refer to the figure below of an axial CT of the inner ear.



53. Which arrow points to the external auditory meatus (EAM)?
    a. A
    b. B
    c. C
    d. D

    ANS: A REF: page 42

OBJ: Identify the structures of the ear and describe their functions.

54. Which arrow points to the malleus?
    a. A
    b. B
    c. C
    d. D

    ANS: B REF: page 42
    OBJ: Identify the structures of the ear and describe their functions.

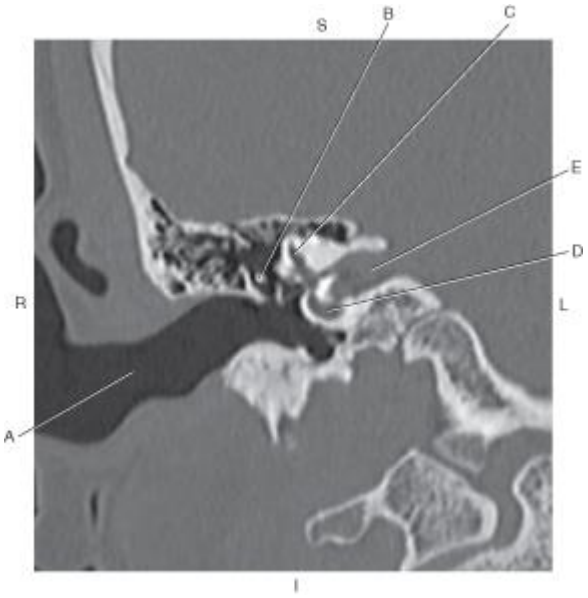
55. Which arrow points to the cochlea (basal turn)?
    a. A
    b. B
    c. C
    d. D

    ANS: C REF: page 42
    OBJ: Identify the structures of the ear and describe their functions.

56. Which arrow points to the carotid canal?
    a. A
    b. B
    c. C
    d. D

    ANS: D REF: page 42
    OBJ: Identify the structures of the ear and describe their functions.

Questions 57 through 61 refer to the figure below of a coronal CT of the inner ear.



57. Which arrow points to the external auditory meatus (EAM)?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: A REF: page 44
    OBJ: Identify the structures of the ear and describe their functions.

58. Which arrow points to the incus?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: B REF: page 44
    OBJ: Identify the structures of the ear and describe their functions.

59. Which arrow points to the superior semicircular canal?
    a. A
    b. B
    c. C
    d. D
    e. E

ANS: C REF: page 44
OBJ: Identify the structures of the ear and describe their functions.

60. Which arrow points to the cochlea (basal turn)?
    a. A
    b. B
    c. C
    d. D
    e. E

ANS: D REF: page 44
OBJ: Identify the structures of the ear and describe their functions.

61. Which arrow points to the internal auditory canal (IAC)?
    a. A
    b. B
    c. C
    d. D
    e. E

ANS: E REF: page 44
OBJ: Identify the structures of the ear and describe their functions.

Questions 62 through 65 refer to the figure below of an axial CT of the cranium.

62. Which arrow points to the mastoid air cells?

a. A
b. B
c. C
d. D

ANS: A REF: page 47
OBJ: Identify the location and unique structures of each cranial and facial bone.

63. Which arrow points to the frontal bone?
a. A
b. B
c. C
d. D

ANS: B REF: page 47
OBJ: Identify the location and unique structures of each cranial and facial bone.

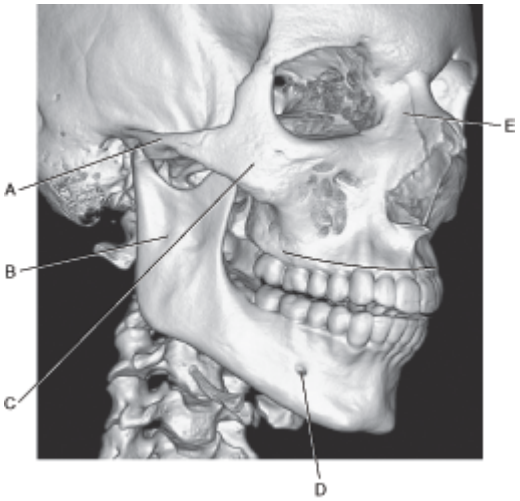
64. Which arrow points to the occipital bone?
a. A
b. B
c. C
d. D

ANS: C REF: page 47
OBJ: Identify the location and unique structures of each cranial and facial bone.

65. Which arrow points to the lambdoidal suture?
a. A
b. B
c. C
d. D

ANS: D REF: page 47 OBJ: Identify the cranial sutures.

Questions 66 through 70 refer to the figure below of a 3D CT of the oblique aspect of the facial bones.



66. Which arrow points to the zygomatic arch?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: A REF: page 53
    OBJ: Identify the location and unique structures of each cranial and facial bone.

67. Which arrow points to the ramus of mandible?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: B REF: page 53
    OBJ: Identify the location and unique structures of each cranial and facial bone.

68. Which arrow points to the zygoma?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: C REF: page 53
    OBJ: Identify the location and unique structures of each cranial and facial bone.

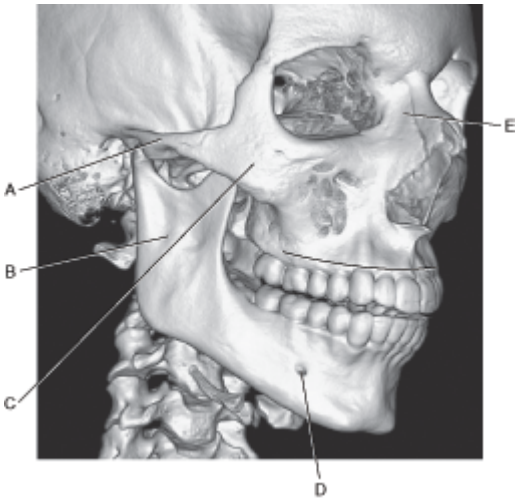
69. Which arrow points to the mental foramen?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: D REF: page 53
    OBJ: Identify the location and unique structures of each cranial and facial bone.

70. Which arrow points to the frontal process of maxilla?
    a. A
    b. B
    c. C
    d. D
    e. E

    ANS: E REF: page 53
    OBJ: Identify the location and unique structures of each cranial and facial bone.

Questions 71 through 73 refer to the figure below of a coronal CT of the cranium.



71. Which arrow points to the optic canal?
    a. A
    b. B
    c. C

    ANS: A REF: page 76
    OBJ: Identify the location and unique structures of each cranial and facial bone.

72. Which arrow points to the pterygoid process of the sphenoid bone?
    a. A
    b. B
    c. C

    ANS: B REF: page 28
    OBJ: Identify the location and unique structures of each cranial and facial bone.

73. Which arrow points to the anterior clinoid process of sphenoid bone?
    a. A
    b. B
    c. C

    ANS: C REF: page 28
    OBJ: Identify the location and unique structures of each cranial and facial bone.