

Thoracic Cage Quiz

1. The thoracic wall is formed by all the following except:

- a) Thoracic vertebrae posteriorly
- b) Sternum anteriorly
- c) Ribs laterally
- d) Clavicle superiorly
- e) Diaphragm inferiorly

2. The manubrium articulates with all the following except:

- a) Clavicles
- b) First costal cartilage
- c) Xiphoid process
- d) Second costal cartilage
- e) Body of the sternum

3. Which of the following ribs are classified as "false ribs"?

- a) 1st to 7th ribs
- b) 8th to 10th ribs
- c) 11th and 12th ribs
- d) All ribs
- e) 7th to 9th ribs

4. The head of a typical rib articulates with which vertebrae?

- a) The corresponding vertebra only
- b) The vertebra below
- c) The vertebra above only
- d) The corresponding and the vertebra above
- e) The vertebra above and below

5. Which of the following statements is true regarding the xiphoid process?

- a) It is a flat bone
- b) It remains cartilage throughout life
- c) It is attached to the first rib
- d) It ossifies with age
- e) It is the largest part of the sternum

6. The costal groove of the rib accommodates which of the following structures?

- a) Intercostal artery only
- b) Intercostal nerve only
- c) Intercostal vein only
- d) Intercostal artery, vein, and nerve
- e) None of the above

7. All the following are true about the typical rib except:

- a) It has a head, neck, and tubercle
- b) The shaft is curved
- c) It has no costal groove
- d) It articulates with the vertebral body
- e) The shaft ends with costal cartilage

8. Which rib is the broadest and most curved?

- a) 2nd rib
- b) 11th rib
- c) 1st rib
- d) 3rd rib
- e) 12th rib

9. The external intercostal muscles:

- a) Are the deepest layer
- b) Run in the same direction as the internal oblique muscle
- c) Are located between the internal and innermost muscles
- d) Extend from the rib tubercle to the costochondral junction
- e) Have fibers that run upward and backward

10. The sternal angle (Angle of Louis) lies opposite which vertebral disc?

- a) Between T1 and T2
- b) Between T2 and T3
- c) Between T4 and T5
- d) Between T6 and T7
- e) Between T9 and T10

11. All of the following are true about the intercostal spaces except:

- a) They contain three layers of muscles
- b) They are lined by the endothoracic fascia
- c) The intercostal neurovascular bundle runs between the innermost and internal intercostal layers
- d) The order of the bundle is artery, vein, nerve (AVN)

- e) The innermost intercostal layer is the deepest

12. The subclavian vein passes in relation to the scalene tubercle:

- a) Anterior
- b) Posterior
- c) Superior
- d) Inferior
- e) Lateral

13. The ribs that lack a tubercle are:

- a) 1st and 2nd
- b) 11th and 12th
- c) 8th and 9th
- d) 3rd and 4th
- e) 6th and 7th

14. The cervical rib can cause symptoms by compressing which structure?

- a) Subclavian artery
- b) Subclavian vein
- c) Brachial plexus
- d) All of the above
- e) None of the above

15. The first rib articulates with which vertebra?

- a) C7 vertebra
- b) T1 vertebra
- c) T2 vertebra
- d) Both T1 and T2
- e) The manubrium

16. The transversus thoracis muscle attaches to:

- a) The upper costal cartilages
- b) The posterior surface of the sternum
- c) The lower true ribs
- d) The xiphoid process
- e) All of the above

17. Which of the following is not part of the thoracic cage?

- a) Suprapleural membrane
- b) Diaphragm

- c) Manubrium
- d) Clavicle
- e) Costal cartilages

18. The diaphragm separates which two cavities?

- a) Thoracic and neck
- b) Thoracic and abdominal
- c) Abdominal and pelvic
- d) Pleural and peritoneal
- e) Thoracic and pleural

19. The intercostal neurovascular bundle is arranged in which order from superior to inferior?

- a) Artery, vein, nerve
- b) Vein, artery, nerve
- c) Nerve, artery, vein
- d) Vein, nerve, artery
- e) Nerve, vein, artery

20. The innermost intercostal muscle:

- a) Runs in the same direction as the external intercostal muscle
- b) Is continuous with the transversus abdominis muscle
- c) Is the most superficial intercostal layer
- d) Is only present in the lower intercostal spaces
- e) Covers the external surface of the ribs

Answers

1. d) Clavicle superiorly

2. c) Xiphoid process

3. b) 8th to 10th ribs

4. d) The corresponding and the vertebra above

5. d) It ossifies with age

6. d) Intercostal artery, vein, and nerve

7. c) It has no costal groove

8. c) 1st rib

9. d) Extend from the rib tubercle to the costochondral junction
10. c) Between T4 and T5
11. d) The order of the bundle is artery, vein, nerve (AVN)
12. a) Anterior
13. b) 11th and 12th
14. d) All of the above
15. b) T1 vertebra
16. e) All of the above
17. d) Clavicle
18. b) Thoracic and abdominal
19. b) Vein, artery, nerve
20. b) Is continuous with the transversus abdominis muscle