

1. Volume of air that will remain in the lungs after a normal expiration is about:

(A) 1200 ml

✓ ~~(B)~~ 2300 ml

(C) 4600 ml

(D) 5800 ml

⇒ RV + ERV

Answer

2-4

Respiratory Volume
Capacity

2. Lungs are made up of air-filled sacs, the alveoli. They do not collapse even after forcefull expiration because of

- ✓ (A) Residual Volume (RV)
- (B) Inspiratory Reserve Volume (IRV)
- (C) Tidal Volume (TV)
- (D) Expiratory Reserve Volume (ERV)

3. What is vital capacity of our lungs?

- (A) Inspiratory reserve volume plus tidal volume
- (B) Total lung capacity minus expiratory volume
- (C) Inspiratory reserve volume plus expiratory reserve volume
- ✓ (D) Total lung capacity minus residual volume

Vital Capacity

↓
Total amount of air
which could be exhaled
after forceful inhalation

$$\checkmark VC = TLC - RV$$

$$\checkmark VC = TV + IRV + ERV$$

4. The volume of 'anatomical dead space' air is normally

(A) 230 mL

(B) 210 mL

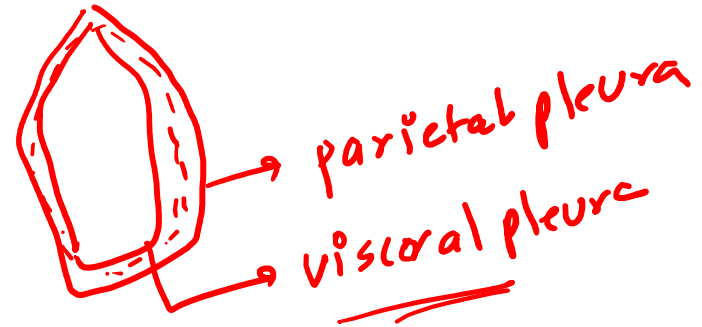
(C) 190 mL

✓ (D) 150 mL

Trachea

5. Which of the following is true about pleural membranes except

- (A) Outer pleural membrane is in close contact with the thoracic lining ✓
- (B) Inner pleural membrane is in contact with the lung surface ✓
- (C) Pleural fluid is present between them
- ✓ (D) It increases friction on the lung surface



6. Contraction of diaphragm;

- (A) Increases the volume of the thoracic chamber in the antero-posterior axis ✓
- (B) Increases the volume of the thoracic chamber in the dorso-ventral axis ✗
- (C) Decreases the volume of the thoracic chamber in the antero-posterior axis ✗
- (D) Decreases the volume of the thoracic chamber in the dorso-ventral axis ✗

Normal inhalation

Diaphragm
↓

Contract
↓

Becomes flat
↓

Vol ↑ ant-post

Pres ↓

7. Which of the following is the part of the thoracic chamber:

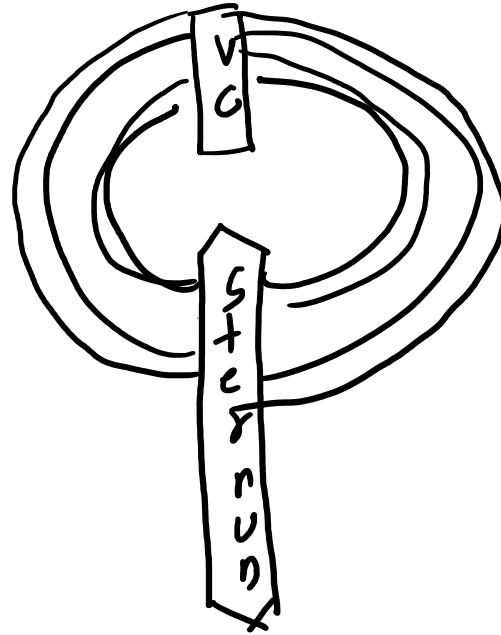
↳ Lung 2

(A) Ribs and vertebral column

(B) Diaphragm

(C) ~~Sternum~~

✓ (D) All of these



8. During inspiration which of the following events takes place

- (A) Diaphragm and external intercostal muscles contracts ✓
- (B) Diaphragm and internal intercostal muscles relax ✗
- (C) Intra Pleural pressure is less than atmospheric pressure
- ✓✓ (D) Both (A) and (C)

$P_{ext} \uparrow$
Inhalation
 $P_{ins} \downarrow$

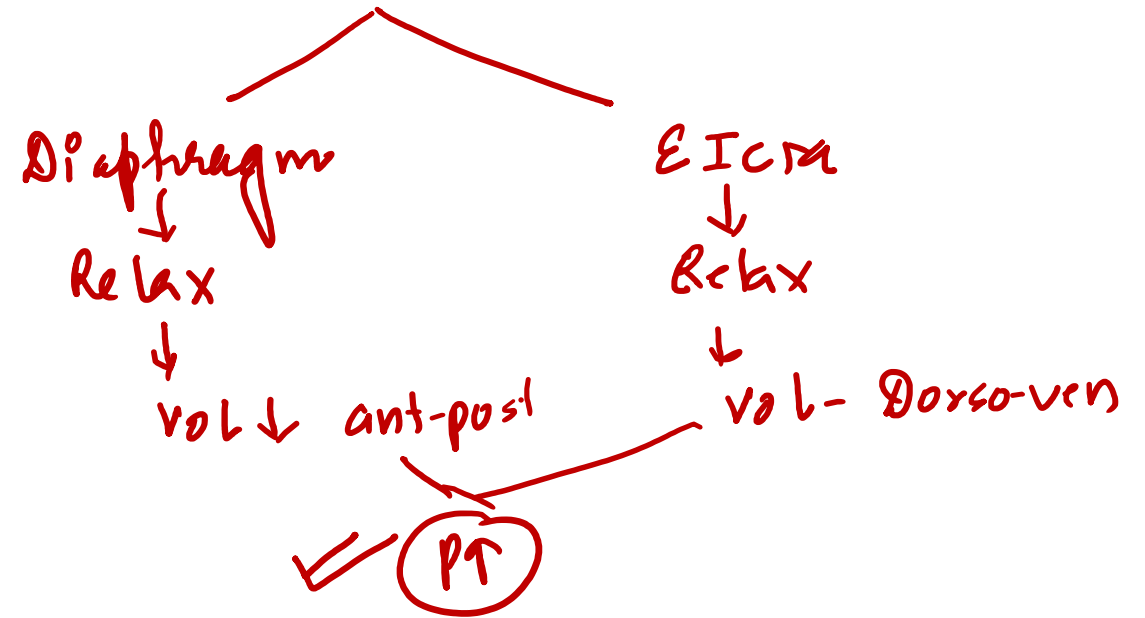
9. During expiration which of the following events takes place

(A) Diaphragm and external intercostal muscles contracts ~~X~~

~~(B) Diaphragm and external intercostal muscles relax~~ ✓

(C) Inter Pleural pressure is less than atmospheric pressure ✓

(D) Both (A) and (C)



10. Which of the following constitute the conduction part of the respiratory system

- (A) External nostrils to trachea
- (B) External nostrils to primary bronchioles
- (C) Respiratory bronchioles to alveoli
- ☒ (D) External nostrils to terminal bronchioles

Respiratory Bronchioles
Alveoli