

ANATOMICAL TERMINOLOGY: Directional Terms

There is universal agreement in the field of anatomy that the relative description of the human body is always in a specific position called _____. In this position, the individual is standing upright, face forward, with the upper limbs positioned at the sides, the palms turned forward, and the feet flat on the floor.

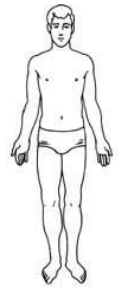
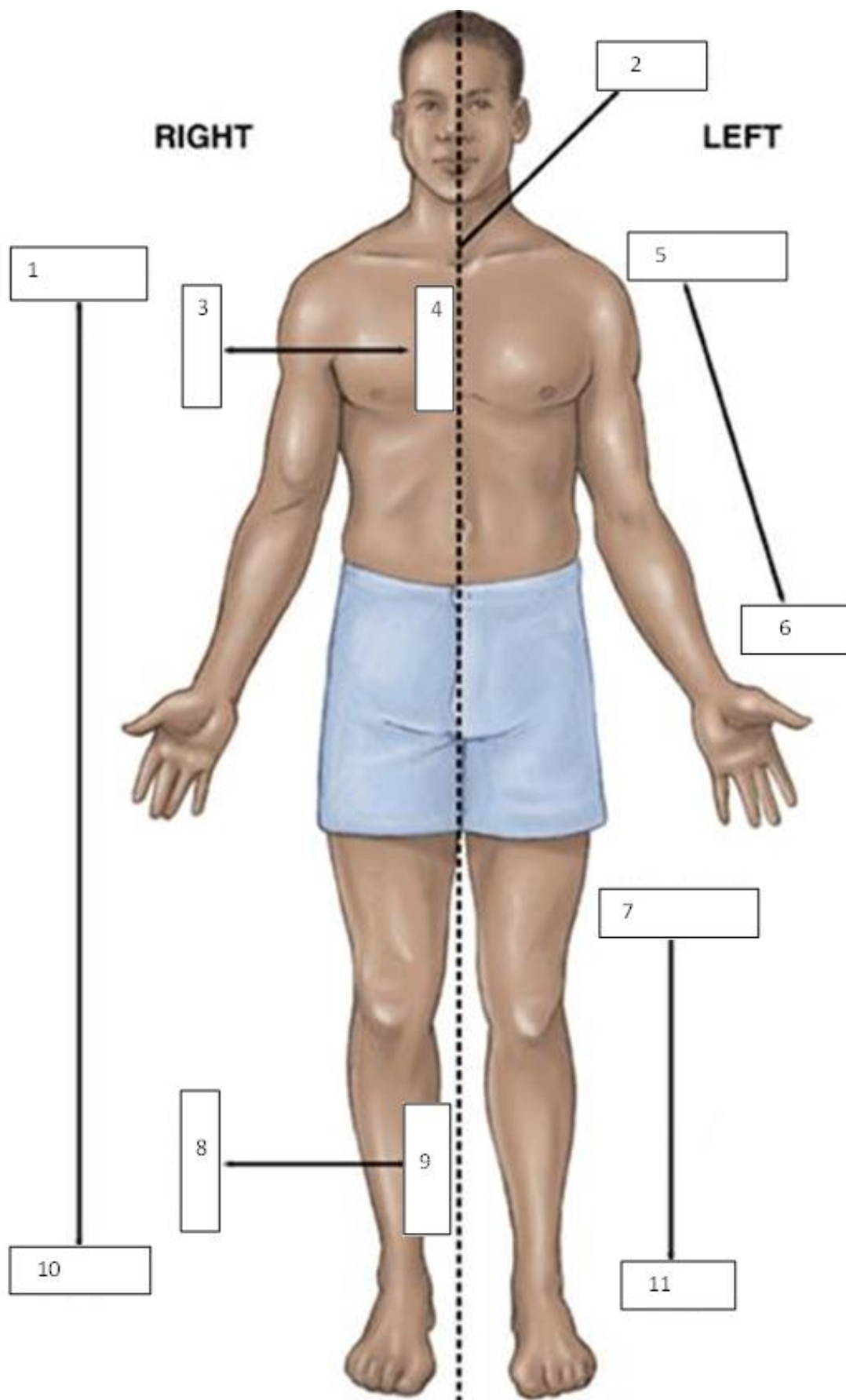


FIGURE A

Directional terms are used by anatomists to locate numerous body structures in relationship to one another. Label the following directional terms on Figure B, based on their description below. Then, using the same directional terms, fill in the blanks to describe the body parts relationship to one another.

1. Superior: _____
Example: The head is _____ to the shoulders.
2. Inferior: _____
Example: The intestines are _____ to the lungs
3. Anterior (also known as ventral): _____
Example: The trachea is _____ to the esophagus.
4. Posterior (also known as dorsal): _____
Example: The esophagus is _____ to the trachea.
5. Medial: _____
Example: The ulna is _____ to the radius.
6. Lateral: _____
Example: The lungs are _____ to the heart.
7. Intermediate: _____
Example: The index finger is _____ to the thumb and middle finger.
8. Proximal: _____
Example: The knee is _____ to the shin.
9. Distal: _____
Example: The elbow is _____ the shoulder.
10. Superficial: _____
Example: The skin is _____ to the muscles.
11. Deep: _____
Example: The ribs are _____ to the skin.



1. The heart is _____ to the lungs.
2. The thumb is _____ to the wrist.
3. The kneecap is _____ to the ankle.
4. The nose lies on the _____ surface of the body.
5. The eyes are located _____ to the nose.
6. The ears are situated _____ to the head.
7. The upper arm muscle is _____ to the skin.
8. The ring finger is located _____ relative to the thumb.
9. The spine is located _____.
10. The esophagus is located _____ to the trachea.
11. The large intestine is _____ to the stomach.
12. The hamstrings are located _____ to the quadriceps.
13. The brain is _____ to the heart.
14. The index finger is _____ to the thumb and middle finger.
15. The liver is _____ to the diaphragm
16. Fingers are located _____ to the wrist bones.
17. The skin on the dorsal surface of your body is said to be located on your _____ surface.
18. The great(big) toe is _____ to the little toe.
19. The skin on your leg is _____ to the muscle tissue in your leg.
20. When you float face down in a pool, you are lying on your _____ surface.
21. The lungs and the heart are located _____ to the abdominal organs.

In Anatomy specific terms are used to explain the location of body organs, systems, as well as body movements.

1. Fill in the missing words to make the passage correct using words from the word bank provided.

reference, side, stand, body, arms, hands, anatomical, forward

All anatomical terms have a _____ point which is called the _____ position. This is a _____ position where you _____ up, head straight and _____ by your _____, with the palm of your _____ facing _____.

Complete these sentences using the terms superior and inferior.

2. The hands are _____ to the feet
3. The knees are _____ to the waist.
4. The elbow is _____ to the wrist.
5. The calf muscle is _____ to the ankle.

Complete these sentences using the terms anterior and posterior.

6. The heel is _____ to the toes.
7. The biceps are _____ to the triceps.
8. The hamstring is _____ to the quadriceps.

Complete these sentences using the terms lateral and medial.

9. The arms are _____ to the midline.
10. The neck is _____ to the arms.
11. The shoulders are _____ to the midline.

Anatomical Terms – Word Match

Match the correct terms with their meanings. Place the correct letter in the empty column

_____	Superior	a. closer to the top of the limb
_____	Inferior	b. lying face downwards
_____	Anterior	c. towards the head, or above
_____	Posterior	d. back or at the back of
_____	Lateral	e. closer toward the bottom or end of a limb
_____	Medial	f. towards the feet, or below
_____	Proximal	g. front, or in front of
_____	Distal	h. lying face upwards
_____	Supine	i. toward the side of the body, or away from the midline of the body
_____	Prone	j. toward the midline of the body

Circle the answer which will make the sentence correct.

13. The big toe is on the lateral/medial side of the body?
14. The shoulder blade is on the anterior/posterior side of the body?
15. The hand is distal/proximal to the elbow?
16. The hips are superior/inferior to the shoulders?
17. The shoulders are medial/lateral to the spine?
18. The knee is distal/proximal to the ankle?
19. What is the importance of having the anatomical position?

Multiple Choice

1. Which of the following sets of directional terms are most appropriately referred to as opposite?
 - a. Distal and proximal
 - b. Medial and inferior
 - c. Superior and ventral
 - d. Anterior and deep

2. The anatomical term that means "away from the midline of the body" is

- a. medial b. Proximal c. Distal d. lateral

3. The ankle is _____ to the knee.
 a. deep b. Peripheral c. Superior d. distal

4. The concept of anatomical position stipulates all of the following EXCEPT the
 a. forearms are supine c. arms are held down to the sides
 b. feet are slightly apart d. mouth is closed

Several incomplete statements are listed below. Correctly complete each statement by choosing the appropriate anatomical term from the key. Record the key letters and/or terms on the correspondingly numbered blanks below. Some terms are used more than once.

a.	anterior	d.	inferior	g.	posterior	j.	superior
b.	distal	e.	lateral	h.	proximal	k.	transverse
c.	frontal	f.	medial	i.	sagittal		

In the anatomical position, the face and palms are on the _1_ body surface; the buttocks and shoulder blades are on the _2_ body surface; and the top of the head is the most _3_ part of the body. The ears are _4_ and _5_ to the shoulders and _6_ to the nose. The heart is _7_ to the vertebral column (spine) and _8_ to the lungs. The elbow is _9_ to the fingers but _10_ to the shoulder. The abdominopelvic cavity is _11_ to the thoracic cavity and _12_ to the spinal cavity. In humans, the dorsal surface can also be called the _13_ surface; however, in quadruped animals, the dorsal surface is the _14_ surface.

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|----------|----------|-----------|
| 1. _____ | 5. _____ | 10. _____ |
| 2. _____ | 6. _____ | 11. _____ |
| 3. _____ | 7. _____ | 12. _____ |
| 4. _____ | 8. _____ | 13. _____ |
| | 9. _____ | 14. _____ |

Fill in the blank completing the analogy.

- A. anterior is to ventral as posterior is to _____
 B. superficial is to external as deep is to _____
 C. cranial is to caudal as superior is to _____
 D. medial is to lateral as proximal is to _____