

HOMEOSTASIS

10. The following statements refer to homeostatic control systems. Complete each statement by inserting your answers in the answer blanks.

- _____ 1. There are three essential components of all homeostatic control mechanisms: control center, receptor, and effector. The _____ 2. (1) senses changes in the environment and responds by sending information (input) to the (2) along the (3) _____ 3. pathway. The (4) analyzes the input, determines the appropriate response, and activates the (5) by sending information _____ 4. along the (6) pathway. When the response causes the initial stimulus to decline, the homeostatic mechanism is referred to as a (7) feedback mechanism. When the _____ 5. response enhances the initial stimulus, the mechanism is called a (8) feedback mechanism. (9) feedback mechanisms are much more common in the body.
- _____ 7.
- _____ 8.
- _____ 9.

THE LANGUAGE OF ANATOMY

11. Complete the following statements by filling in the answer blanks with the correct term.

- _____ 1. The abdominopelvic and thoracic cavities are subdivisions of the (1) body cavity; the cranial and spinal cavities are parts _____ 2. of the (2) body cavity. The (3) body cavity is totally surrounded by bone and provides very good protection to the _____ 3. structures it contains.

12. Circle the term or phrase that does not belong in each of the following groupings.

- | | | | |
|---------------|-------------|-------------|---------------------|
| 1. Transverse | Distal | Frontal | Sagittal |
| 2. Lumbar | Thoracic | Antecubital | Abdominal |
| 3. Sural | Brachial | Femoral | Popliteal |
| 4. Epigastric | Hypogastric | Right iliac | Left upper quadrant |

13. Select different colors for the *dorsal* and *ventral* body cavities. Color the coding circles below and the corresponding cavities in part A of Figure 1-7. Complete the figure by labeling those body cavity subdivisions that have a leader line. Complete part B by labeling each of the abdominal regions indicated by a leader line.

Dorsal body cavity

Ventral body cavity

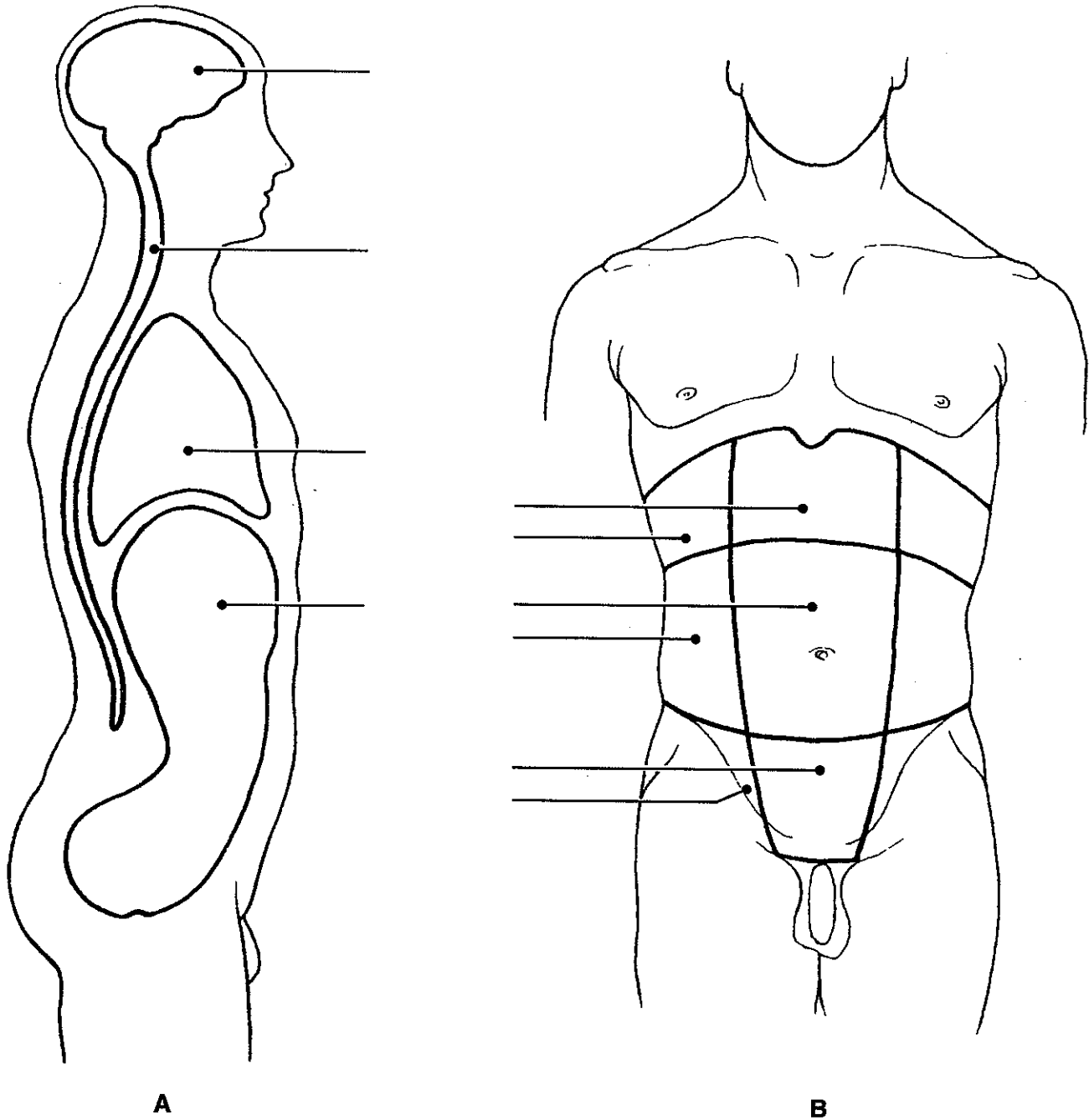


Figure 1-7

14. Select the key choices that identify the following body parts or areas.
Enter the appropriate letter or corresponding term in the answer blanks.

Key Choices

- | | | | |
|----------------|-------------|--------------|--------------|
| A. Abdominal | E. Buccal | I. Inguinal | M. Pubic |
| B. Antecubital | F. Cervical | J. Lumbar | N. Scapular |
| C. Axillary | G. Femoral | K. Occipital | O. Sural |
| D. Brachial | H. Gluteal | L. Popliteal | P. Umbilical |

- _____ 1. Armpit
- _____ 2. Thigh region
- _____ 3. Buttock area
- _____ 4. Neck region
- _____ 5. "Belly button" area
- _____ 6. Genital area
- _____ 7. Anterior aspect of elbow
- _____ 8. Posterior aspect of head
- _____ 9. Area where trunk meets thigh
- _____ 10. Back area from ribs to hips
- _____ 11. Pertaining to the cheek

15. Using the key terms from Exercise 14, correctly label all body areas indicated with leader lines on Figure 1–8.

In addition, identify the sections labeled A and B in the figure.

Section A: _____

Section B: _____

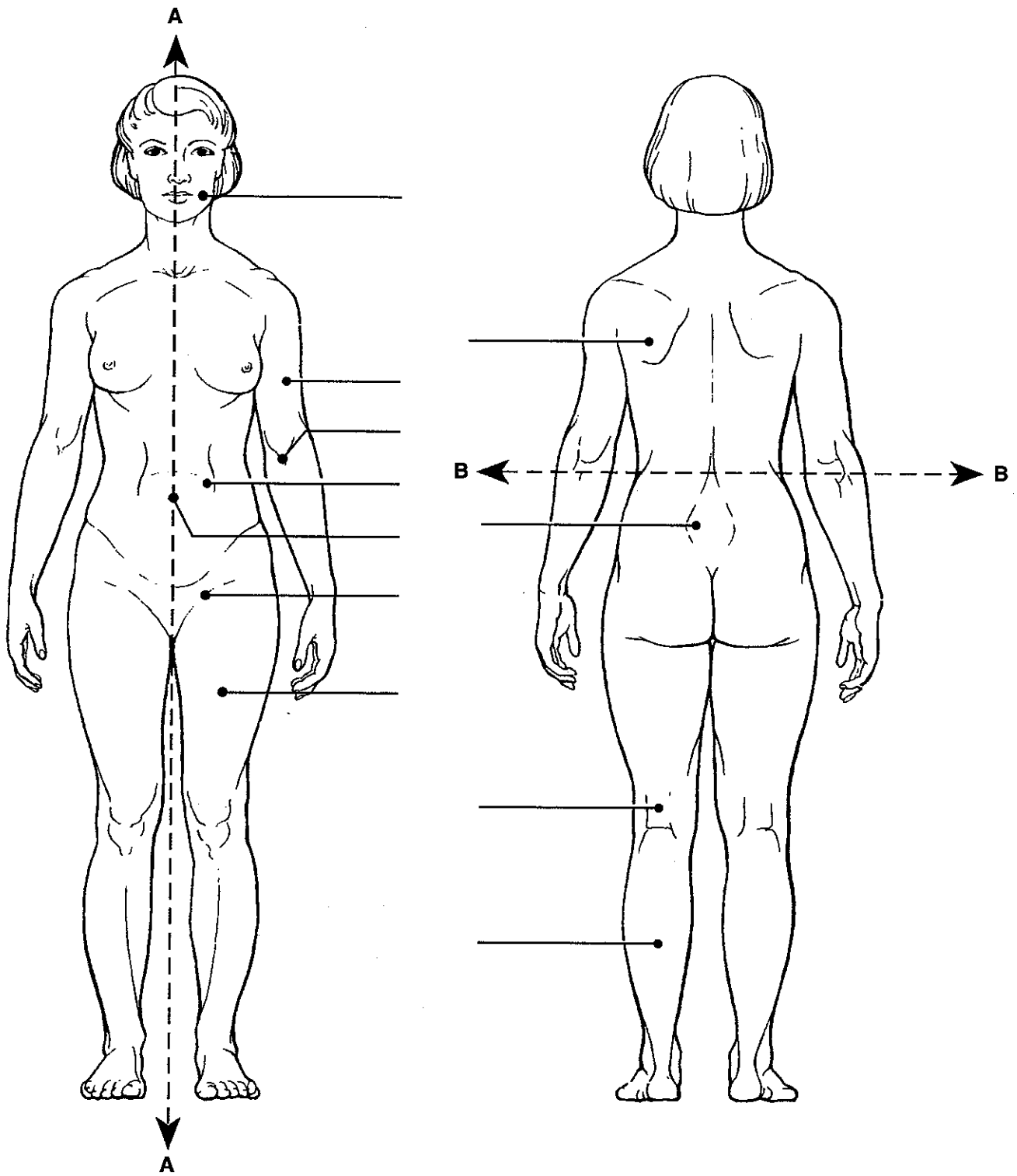


Figure 1-8

16. From the key choices, select the body cavities where the following surgical procedures would occur. Insert the correct letter or term in the answer blanks. Be precise: also select the name of the cavity subdivision if appropriate.

Key Choices

- A. Abdominal C. Dorsal E. Spinal G. Ventral
 B. Cranial D. Pelvic F. Thoracic

- _____ 1. Removal of the uterus, or womb
 _____ 2. Coronary bypass surgery (heart surgery)
 _____ 3. Removal of a serious brain tumor
 _____ 4. Removal of a "hot" appendix
 _____ 5. A stomach ulcer operation

17. Complete the following statements by choosing an anatomical term from the key choices. Enter the appropriate letter or term in the answer blanks.

Key Choices

- A. Anterior D. Inferior G. Posterior J. Superior
 B. Distal E. Lateral H. Proximal K. Transverse
 C. Frontal F. Medial I. Sagittal

- _____ 1. 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) to the shoulders and _____ (5) to the nose. The heart is _____ (6) to the spine and _____ (7) to the lungs. The elbow is _____ (8) to the fingers but _____ (9) to the shoulder. In humans, the dorsal surface can also be called the _____ (10) surface; however, in four-legged animals, the dorsal surface is the _____ (11) surface.
- _____ 6.
 _____ 7.
 _____ 8.
 _____ 9.
 _____ 10.
 _____ 11.

- _____ 12. If an incision cuts the heart into right and left parts, the section is a (12) section, but if the heart is cut so that anterior and posterior parts result, the section is a (13) section.
- _____ 13. You are told to cut an animal along two planes so that the paired kidneys are observable in both sections. The two sections that meet this requirement are the (14) and (15) sections.
- _____ 14.
- _____ 15.

18. Using key choices, identify the body cavities where the following body organs are located. Enter the appropriate letter or term in the answer blanks.

Key Choices

A. Abdominopelvic B. Cranial C. Spinal D. Thoracic

- _____ 1. Stomach
- _____ 2. Small intestine
- _____ 3. Large intestine
- _____ 4. Spleen
- _____ 5. Liver
- _____ 6. Spinal cord
- _____ 7. Bladder
- _____ 8. Trachea
- _____ 9. Lungs
- _____ 10. Pituitary gland
- _____ 11. Rectum
- _____ 12. Ovaries

19. Refer to the organs listed in Exercise 18. In the spaces provided, record the numbers of the organs that would be found in each of the abdominal regions named here. Some organs may be found in more than one abdominal region.

- _____ 1. Hypogastric region
- _____ 2. Right lumbar region
- _____ 3. Umbilical region
- _____ 4. Epigastric region
- _____ 5. Left iliac region