

Unit 1 Levels of organization	Chapter <b>1.6</b>	<b>Organization within the Human Body</b>	<b>_____/202 points</b>
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**SECTION OBJECTIVES**

- Describe the locations of the major body cavities
- List the organs located in each major body cavity
- Name the membranes associated with the thoracic and abdominopelvic cavities
- Name the major organ systems, and list the organs associated with each
- Describe the general functions of each organ system

**Lecture Notes (57)**

The human body is divided into two main sections: \_\_\_\_\_ – head, neck, and trunk and \_\_\_\_\_ – upper and lower limbs

The human body is also divided into three categories:

body \_\_\_\_\_, layers of \_\_\_\_\_ within these cavities, and a variety of \_\_\_\_\_

**Axial Portion:** Contains the \_\_\_\_\_ cavity, \_\_\_\_\_ canal, \_\_\_\_\_ cavity, and \_\_\_\_\_ cavity. The thoracic and abdominopelvic cavities separated by the \_\_\_\_\_.

\_\_\_\_\_ **cavity:** \_\_\_\_\_: stomach, intestines, liver, spleen, and kidneys.

\_\_\_\_\_ : bladder, rectum, and reproductive organs

The \_\_\_\_\_ separates the thoracic cavity into right and left compartments

Cranial cavities include the \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and middle \_\_\_\_\_

**Membranes:** a. \_\_\_\_\_ –membranes attached to the wall or lines the cavity (pariet = wall)

b. \_\_\_\_\_ - membrane that covers organ {Viscera - organs within the cavity}

c. \_\_\_\_\_ - potential space between the visceral and parietal membranes. Has watery fluid (serous fluid) that acts as lubricant.

**\_\_\_\_\_ Membranes (pleur=rib)**

- \_\_\_\_\_ pleura - membrane that \_\_\_\_\_ the thoracic cavity
- \_\_\_\_\_ pleura - membrane that \_\_\_\_\_ lungs
- Pleural \_\_\_\_\_ (potential space between)

**\_\_\_\_\_ Membranes (peri=around, cardi=heart)**

- \_\_\_\_\_ pericardium - membrane that forms sac \_\_\_\_\_ the heart
- \_\_\_\_\_ pericardium - membrane on heart's \_\_\_\_\_
- Pericardial \_\_\_\_\_ (potential space between)

**\_\_\_\_\_ Membranes**

- \_\_\_\_\_ peritoneum - \_\_\_\_\_ the walls of the abdominopelvic cavity
- \_\_\_\_\_ peritoneum - membranes that \_\_\_\_\_ each organ {Viscera - organs within the cavity}
- Peritoneal \_\_\_\_\_ (potential space between)



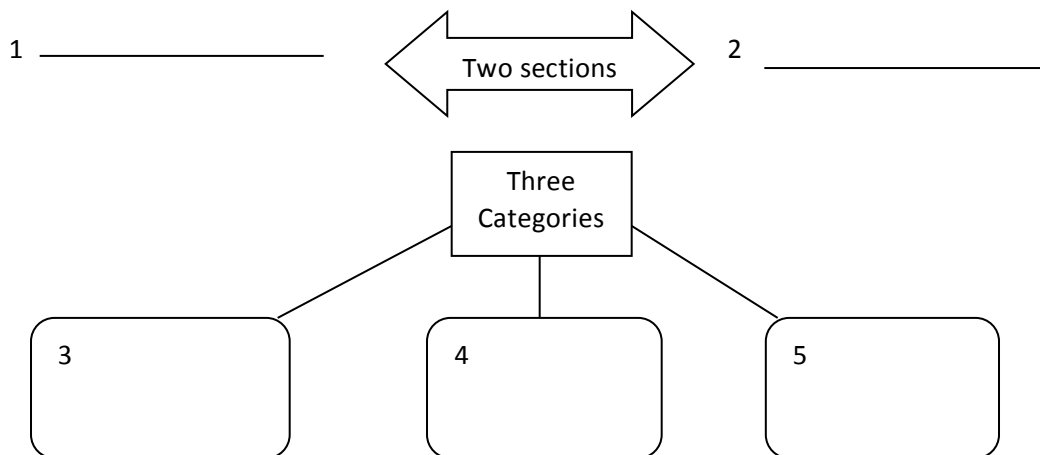
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**Organ Systems:** divided into \_\_ categories

1. Body \_\_\_\_\_
  - \_\_\_\_\_ Function: regulate body temperature, protection. Organs: skin, hair, nails, glands
2. \_\_\_\_\_ & Movement
  - \_\_\_\_\_: Function: framework. Organs: Bones
  - \_\_\_\_\_: Function: movement, posture, body heat. Organs: muscles
3. Integration & \_\_\_\_\_
  - \_\_\_\_\_: Function: sensory, communication. Organs: brain, spinal cord, nerves, sense organs (eyes, ears, taste...)
  - \_\_\_\_\_: Function: metabolism. Organs: glands (pituitary, thyroid, reproductive...)
4. \_\_\_\_\_
  - \_\_\_\_\_: Function: movement of substances. Organs: heart, vessels, blood
  - \_\_\_\_\_: Function: movement of fats and fluids, immunity. Organs: lymph nodes, thymus, spleen
5. Absorption & \_\_\_\_\_
  - \_\_\_\_\_: Function: breakdown and absorb nutrients. Organs: mouth...stomach...intestines
  - \_\_\_\_\_: Function: Oxygen in, Carbon dioxide out. Organs: nose...trachea...lungs
  - \_\_\_\_\_: Function: remove waste. Organs: kidneys, bladder, urethra
6. \_\_\_\_\_: Function: to produce offspring. Organs: Male: testes...penis. Female: ovaries...uterus

### Section Homework (145)

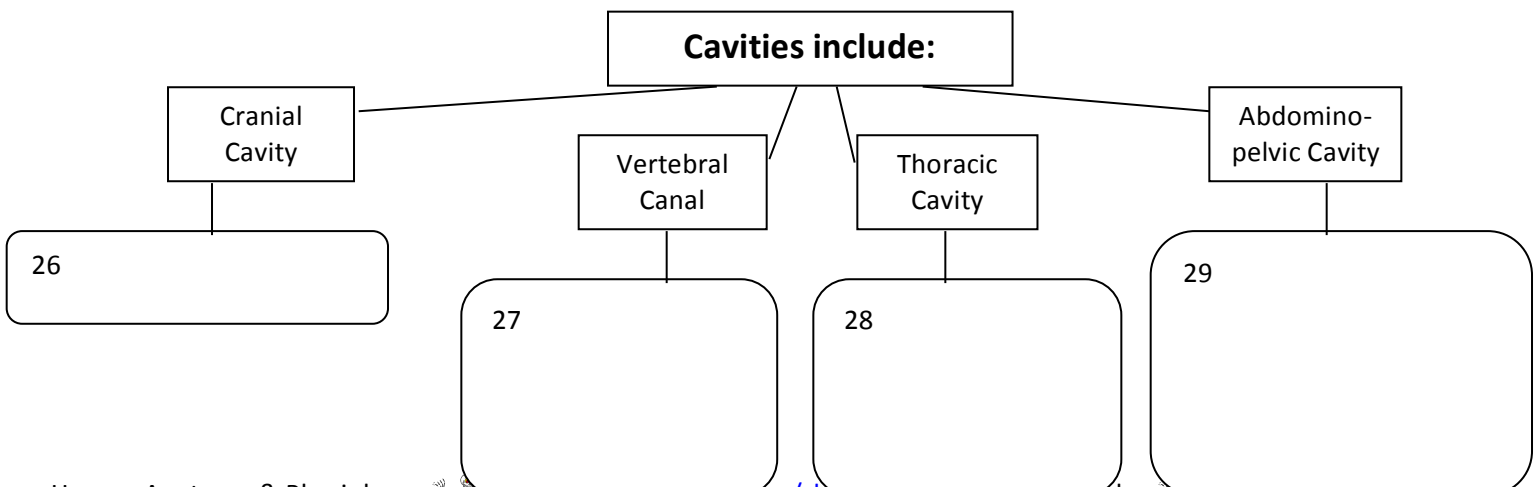
Human body is organized into (5 points)



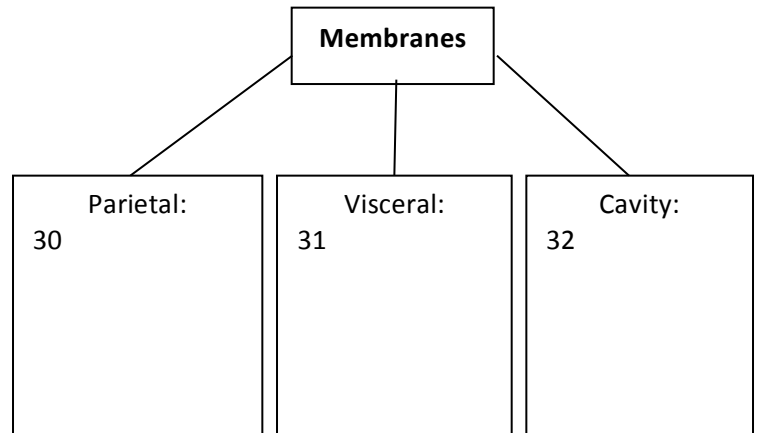
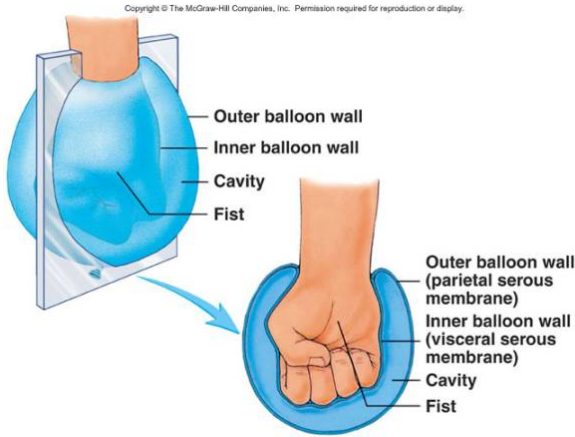
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**Match the definition to the correct term. 1pt each**

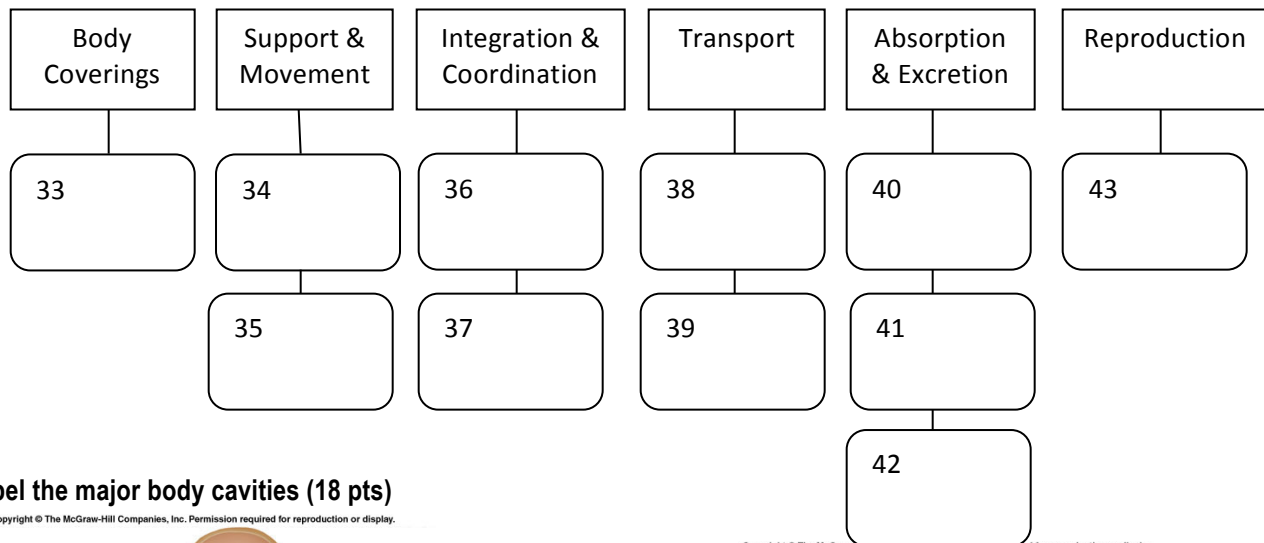
6. Organs found within body cavities, especially in the abdomen	A. Axial
7. Cavity containing the eyes and associated skeletal muscles and nerves	B. Appendicular
8. A serous membrane that lines the abdominal cavity and encloses the abdominal viscera	C. Cranial Cavity
9. Pertaining to the upper and lower limbs	D. Vertebral Canal
10. Serous membranes that enclose the lungs and line the chest wall	E. Thoracic Cavity
11. Space within the nose	F. Abdominopelvic Cavity
12. Serous membrane that surrounds the heart	G. Viscera
13. Cavity that houses the skull	H. Diaphragm
14. Tissues and organs of the thoracic cavity that form a septum between the lungs	I. mediastinum
15. The portion of the abdominopelvic cavity enclosed by the hip bones	J. Abdominal Cavity
16. Pertaining to the head, neck, and trunk	K. Pelvic Cavity
17. Cavity containing the teeth and tongue	L. Oral Cavity
18. Cavity containing the middle ear bones	M. Nasal Cavity
19. Cavity that contains the heart, lungs and mediastinum	N. Orbital Cavities
20. Portion of the abdominopelvic cavity that contain the stomach, liver, spleen, gallbladder, kidneys, and most of the small and large intestines	O. Middle Ear Cavities
21. Pertaining to the wall of a cavity	P. Parietal
22. Contains the spinal cord within the sections of the backbone	Q. Visceral
23. Pertaining to the contents of a body cavity	R. Pleural Membranes
24. The space between the diaphragm and the lower portion of the trunk of the body	S. Pericardial Membranes
25. A sheet like structure largely composed of skeletal muscle and connective tissue that separates thoracic and abdominal cavities	T. Peritoneal Membranes



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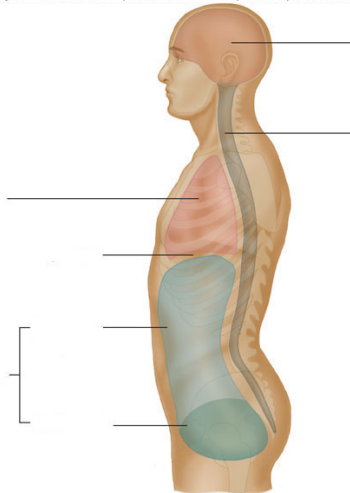


**Organ Systems**



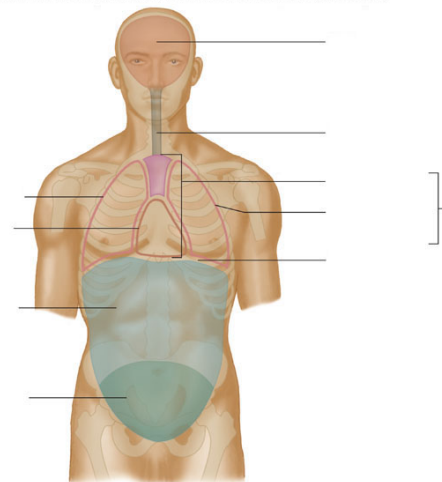
**43. Label the major body cavities (18 pts)**

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(a)

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(b)

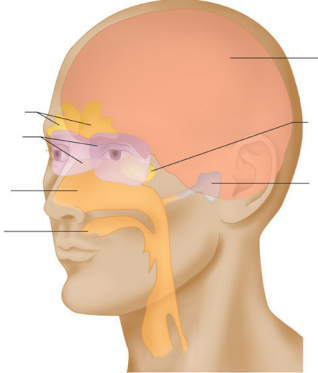


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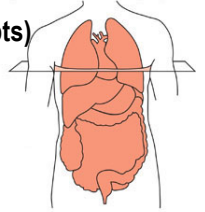
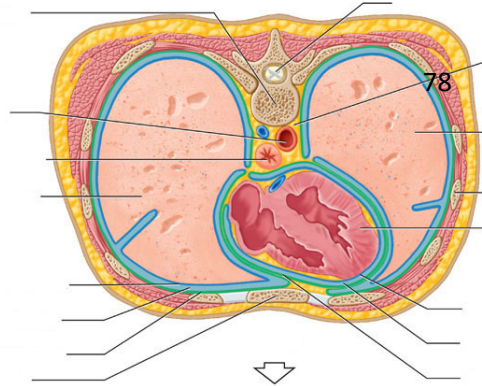
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**44. Label the cavities of the head (7pts)**

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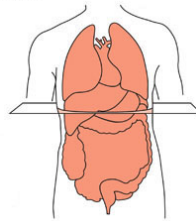
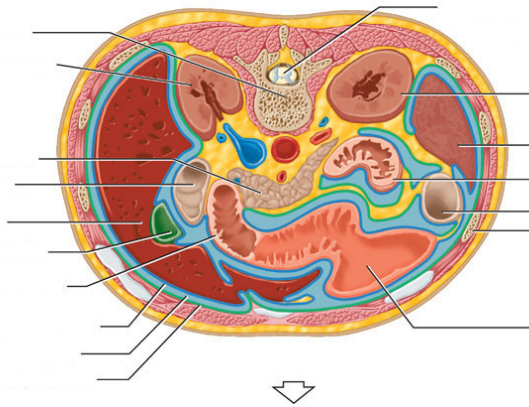


**45. Label the transverse section through the thorax (17 pts)**



**46. Label the transverse section through the abdomen (18 pts)**

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47. List the components of the axial appendicular cavities. (2pts) \_\_\_\_\_

48. List the contents of the thoracic cavity. (2pts) \_\_\_\_\_

49. List the contents of the abdominopelvic cavity. (2pts) \_\_\_\_\_

50. List the four smaller cavities of the body. (2pts) \_\_\_\_\_

51. The walls of the thoracic cavity are lined with a membrane called the \_\_\_\_\_. (1pt)

52. The lungs are covered by the \_\_\_\_\_. (1pt)

53. Why is the pleural cavity called a potential space? (2pts) \_\_\_\_\_



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54. Name and describe the membranes covering the heart. (2pts) \_\_\_\_\_

55. The linings of the abdominopelvic cavity are the \_\_\_\_\_ and the \_\_\_\_\_. (2pts)

56. Structure and function of organ systems. Fill in the following table. (20pts)

Function	Organ system(s)	Functions
Support & movement	_____ _____	_____ _____ _____ _____
Integration & coordination	_____ _____	_____ _____ _____
Transport	_____ _____	_____ _____ _____
Absorption & Excretion	_____ _____ _____	_____ _____ _____ _____ _____ _____
Reproduction	_____	_____ _____ _____ _____

57. What does *viscera* mean? (1pt) \_\_\_\_\_

58. In health, body parts interact to maintain homeostasis. Illness can threaten the maintenance of homeostasis, requiring treatment. What treatments might be used to help control a patient's (a) body temperature, (b) blood oxygen concentration, and (c) water content? (3 pts.) \_\_\_\_\_

59. Suppose two individuals develop benign (noncancerous) tumors that produce symptoms because they occupy space and crowd adjacent organs. If one of these persons has the tumor in the abdominopelvic cavity, which person would be likely to experience symptoms first? Why? (2pts) \_\_\_\_\_

