

The Hierarchy of Structure in Animals

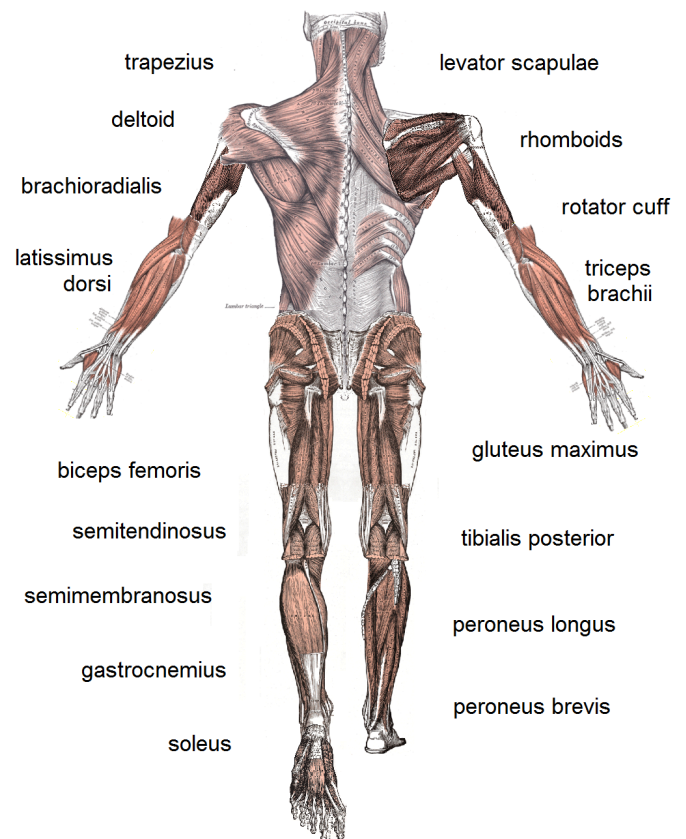
Just like the Amoeba, or single-celled animals, all multicellular animals need to perform some basic functions to keep themselves alive;

Organ systems help divide up the various functions to be accomplished so they can specialize in each of these activities.

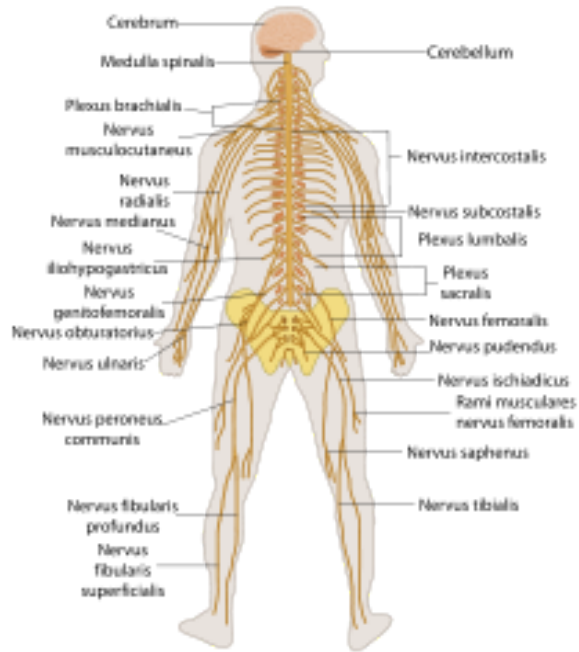
Organization level:	Made of:
Organism	
Organ systems	
Organs	
Tissues	
Specialized cells	

A few of the main organ systems within animal bodies include;

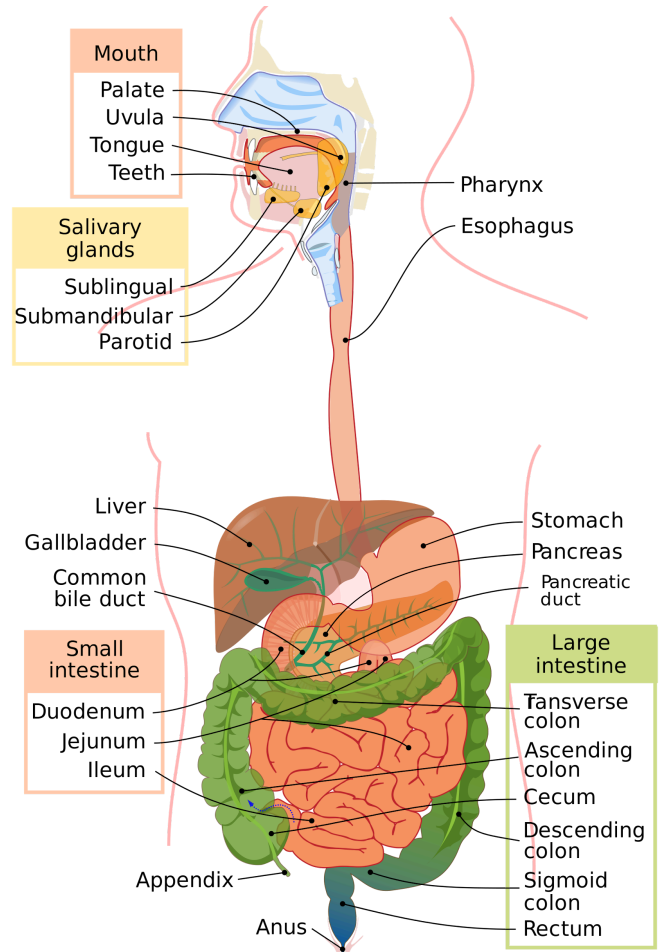
Musculoskeletal system:



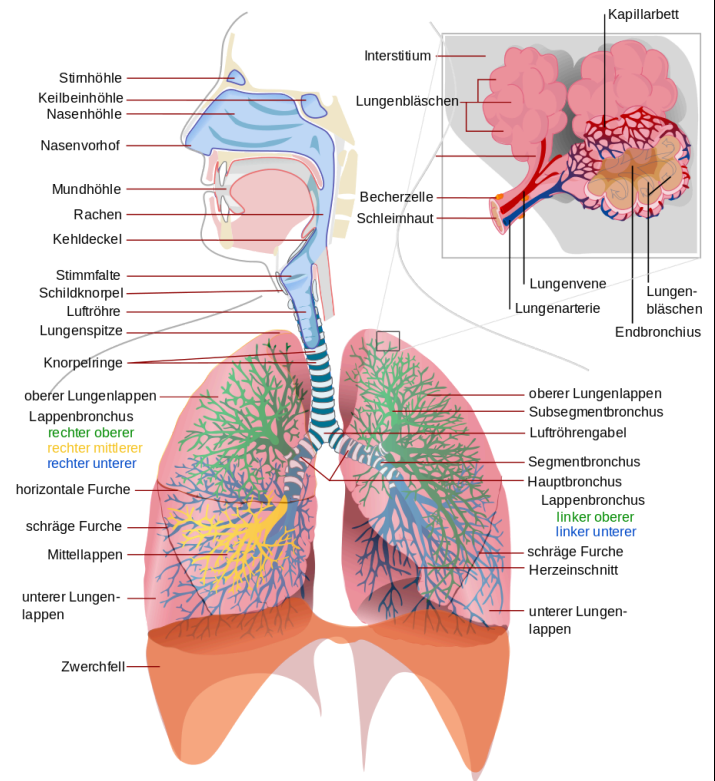
Nervous system:



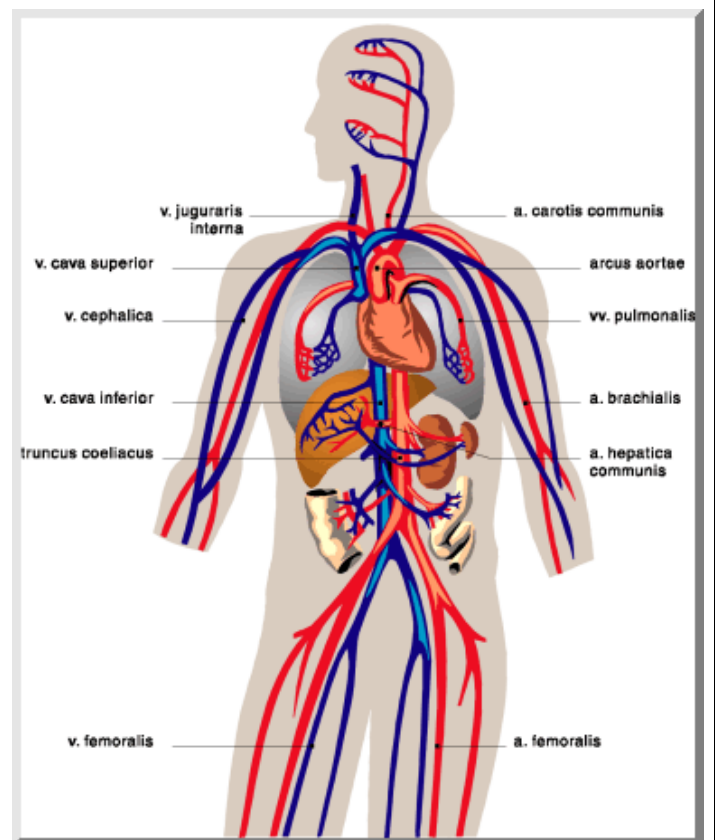
Digestive System:



Respiratory system:



Circulatory system:



Organs – what do they do?

Tissues: jot down the list of different tissues from page 76.

Tissue type	function

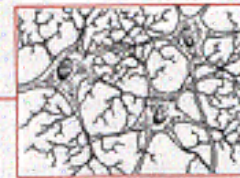
EPITHELIAL



MUSCLE (Skeletal)



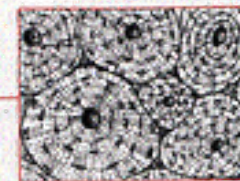
Nervous



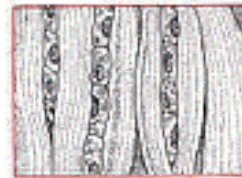
**CONNECTIVE
Cartilage**



Bone



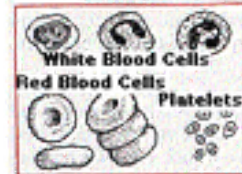
Tendon



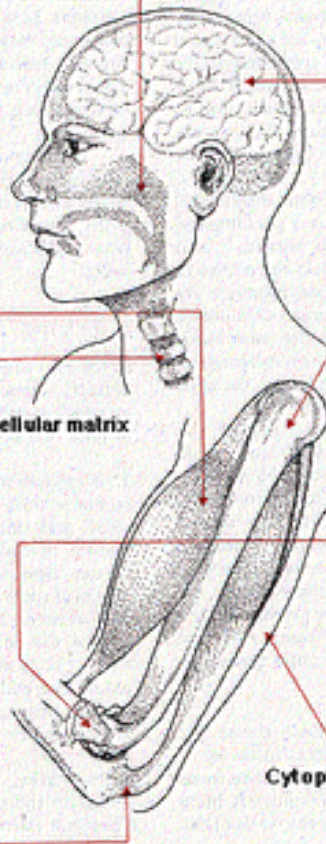
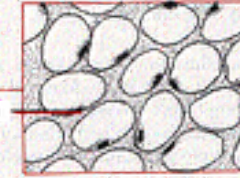
Ligament



BLOOD



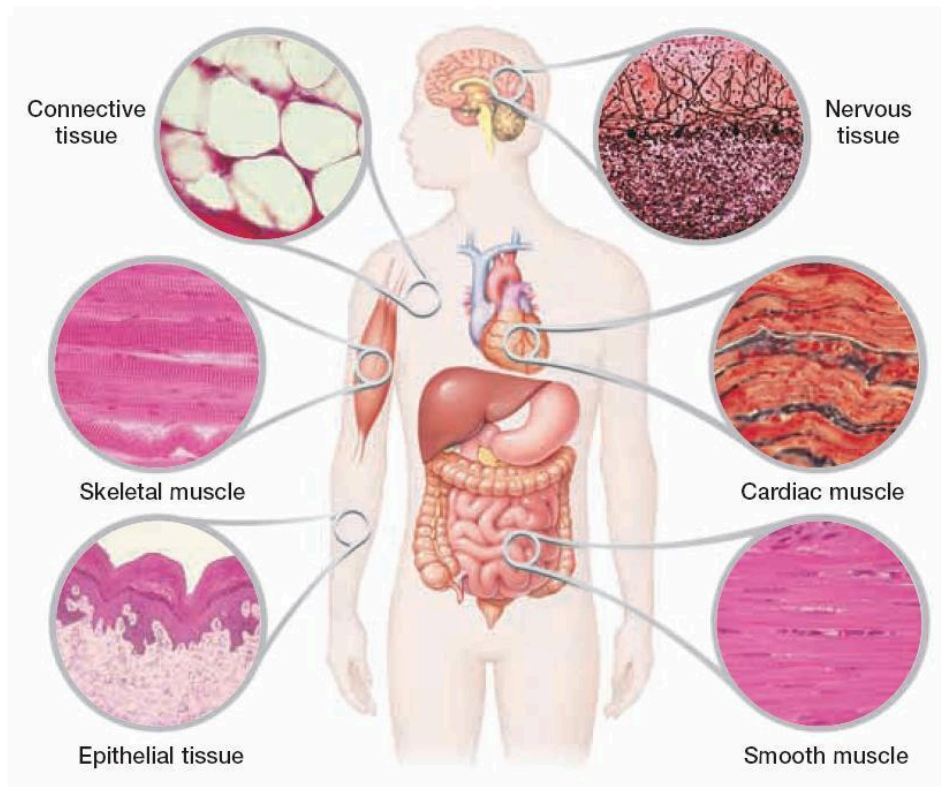
Adipose Tissue




Extracellular matrix

Cytoplasm

Human Body Tissues



Assign page 69

 **CHECK YOUR LEARNING**

1. (a) Draw a diagram to show the levels of organization in the human body.

(b) Give one example for each level. K/U C

2. What does an organ system do? K/U

3. In what ways are single-celled organisms like a cell in the human body? In what ways are they different? K/U

4. How are tissues and organs related? K/U

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CHECK YOUR LEARNING

1. Choose a function that all living things must perform. Describe the organ system that performs this function. K/U C
2. Why are organs such as the lungs, heart, and stomach made up of many different kinds of specialized cells rather than only one kind? K/U
3. Most animals have many of the same organ systems. T/I A
 - (a) Why do you think there are not many different kinds of organs and systems when animals are so different?
 - (b) How might life in different environments affect these basic organ systems?

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CHECK YOUR LEARNING

1. List the four types of tissue and give an example of each. Describe its function and where it can be found. K/U C
2. Name and describe the three types of muscle. Give an example of each type. K/U C
3. How is connective tissue different from the other kinds of tissues? Give an example. K/U C
4. Why is it important that some types of muscles can contract and relax without our having to think about it? K/U C