

There are six important function to tissues and organs:

digestion

respiration

circulation

conduction of nerve impulses

support

excretion

Oct 12 - 11:11 AM

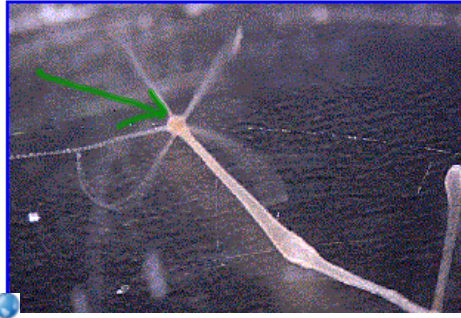
## Digestion

Single cell organisms digest their food inside their cells.

~~Other~~ <sup>All</sup> animals use digestive enzymes outside of their cells.

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Gastrovascular cavity-  
a digestive cavity with one opening.



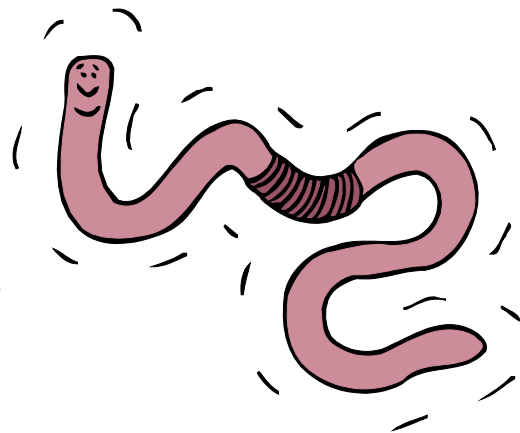
hydra

<http://www.ucmp.berkeley.edu/cnidaria/hydrozoa.html>

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Other animals have a digestive  
tract with 2 openings  
(mouth and anus)

This system allows for  
specialization



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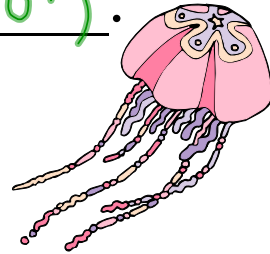
## Respiration

Respiration is the uptake of Oxygen and the release of Carbon dioxide

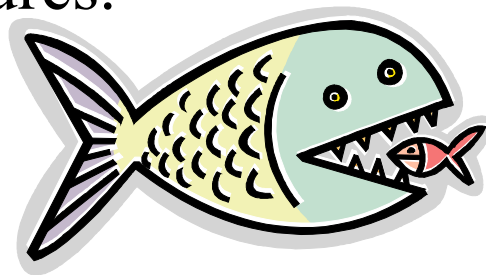
It can only take place across a moist surface.

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Simple animals use diffusion.



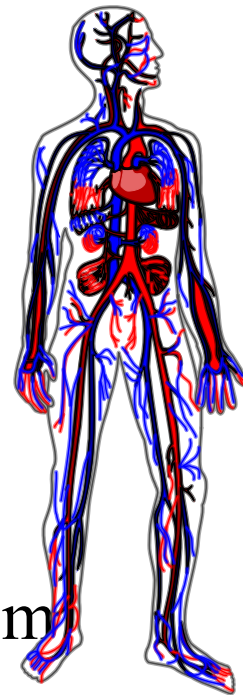
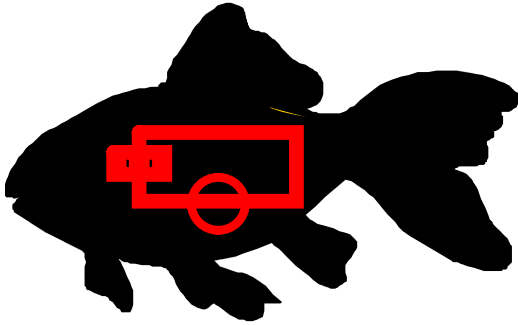
Complex animals have specific respiratory structures.



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## Circulation

Open circulatory system

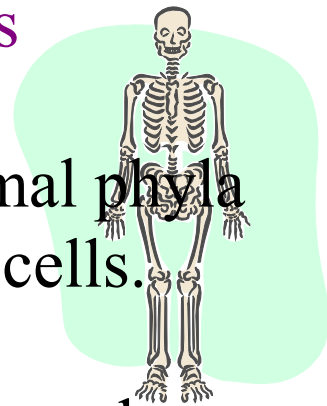


Closed circulatory system

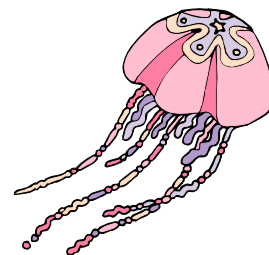
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## Conduction of nerve impulses

Members of all the major animal phyla except Sponges have nerve cells.



Nerve net- all cells are similar and linked together



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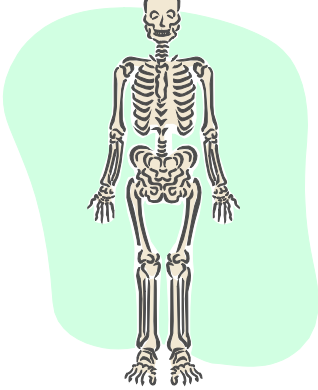
## Support

Hydrostatic skeleton- water that is contained under pressure in a closed cavity. jellyfish, water balloon

Exoskeleton-a rigid external skeleton  
insects, lobster

Endoskeleton- hard material within the animal  
human, dog

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Endo



Hydro



Exo

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Excretion  
Removal of  
wastes produced  
by cellular  
metabolism