

There are six important function to tissues and organs:

digestion

respiration

circulation

conduction of nerve impulses

support

excretion

Oct 12 - 11:11 AM

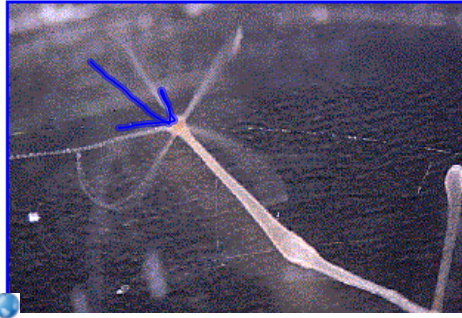
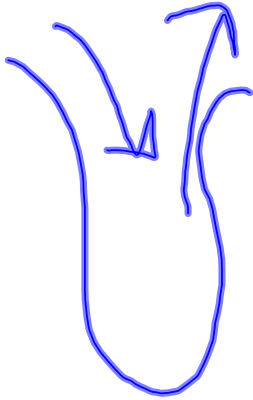
Digestion

Single cell organisms digest their food inside their cells.

~~Other~~ ^{All} animals use digestive enzymes outside of their cells.

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Gastrovascular cavity-
a digestive cavity with one opening.



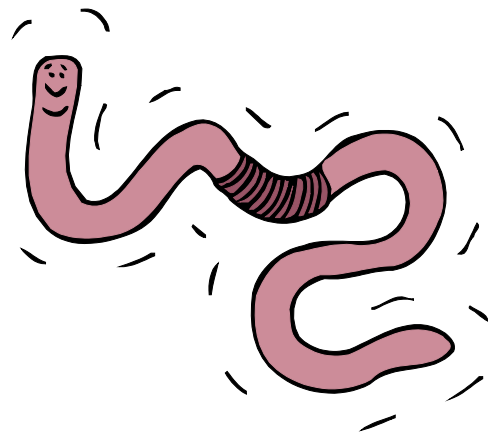
Hydra

<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

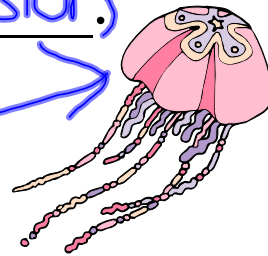
Respiration is the uptake of Oxygen and the release of carbon dioxide

It can only take place across a moist surface.

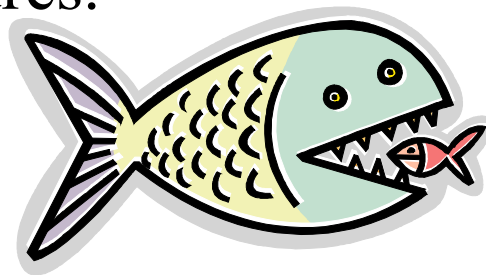
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Simple animals use diffusion

jellyfish →



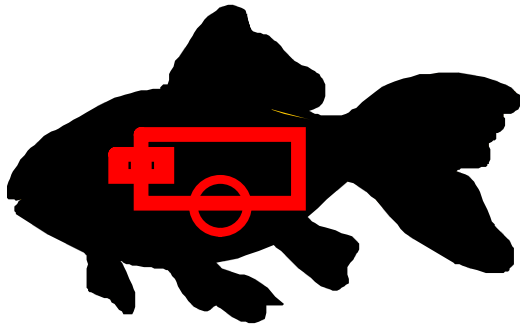
Complex animals have specific respiratory structures.



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Circulation

Open circulatory system



blood
is
in
something
↓

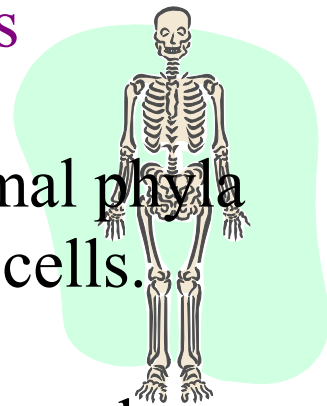
Closed circulatory system



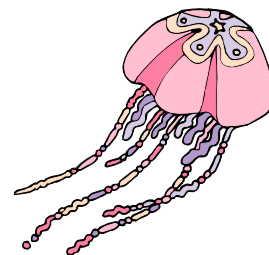
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Conduction of nerve impulses

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



Nerve net- all cells are similar and linked together



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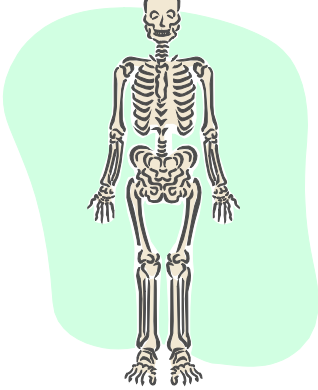
Support

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

Exoskeleton- a rigid external skeleton insects, clam

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