

There are six important function to tissues and organs:

digestion

respiration

circulation

conduction of nerve impulses

support

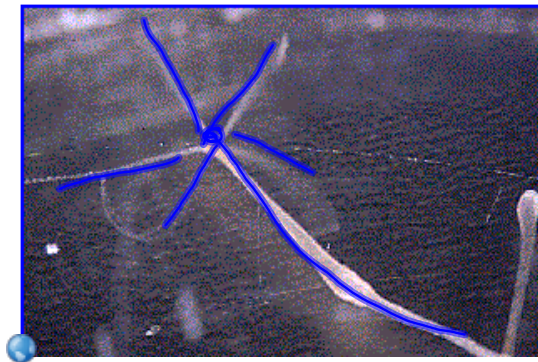
excretion

Digestion

Single cell organisms digest their food inside their cells.

Other animals use digestive enzymes outside of their cells.

Gastrovascular cavity-
a digestive cavity with 1 opening.



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

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

This system allows for specialization.

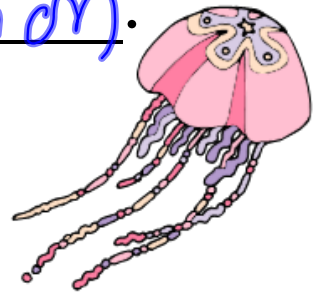


Respiration

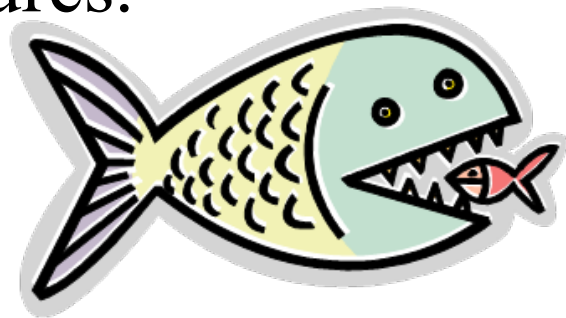
Respiration is the uptake of Oxygen and the release of Carbon dioxide.

It can only take place across a moist surface.

Simple animals use diffusion.

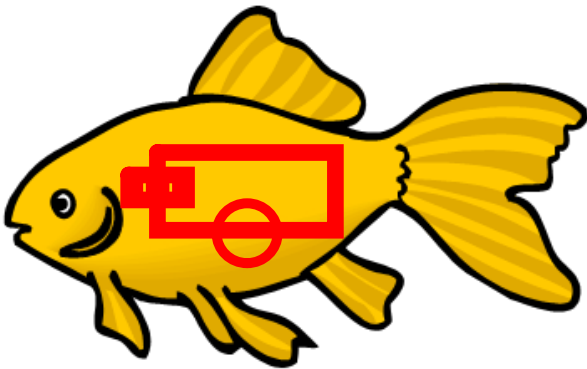


Complex animals have specific "breathing" structures.



Circulation

closed circulatory system

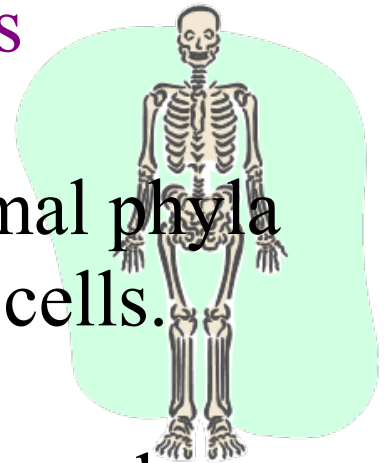


open circulatory system



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

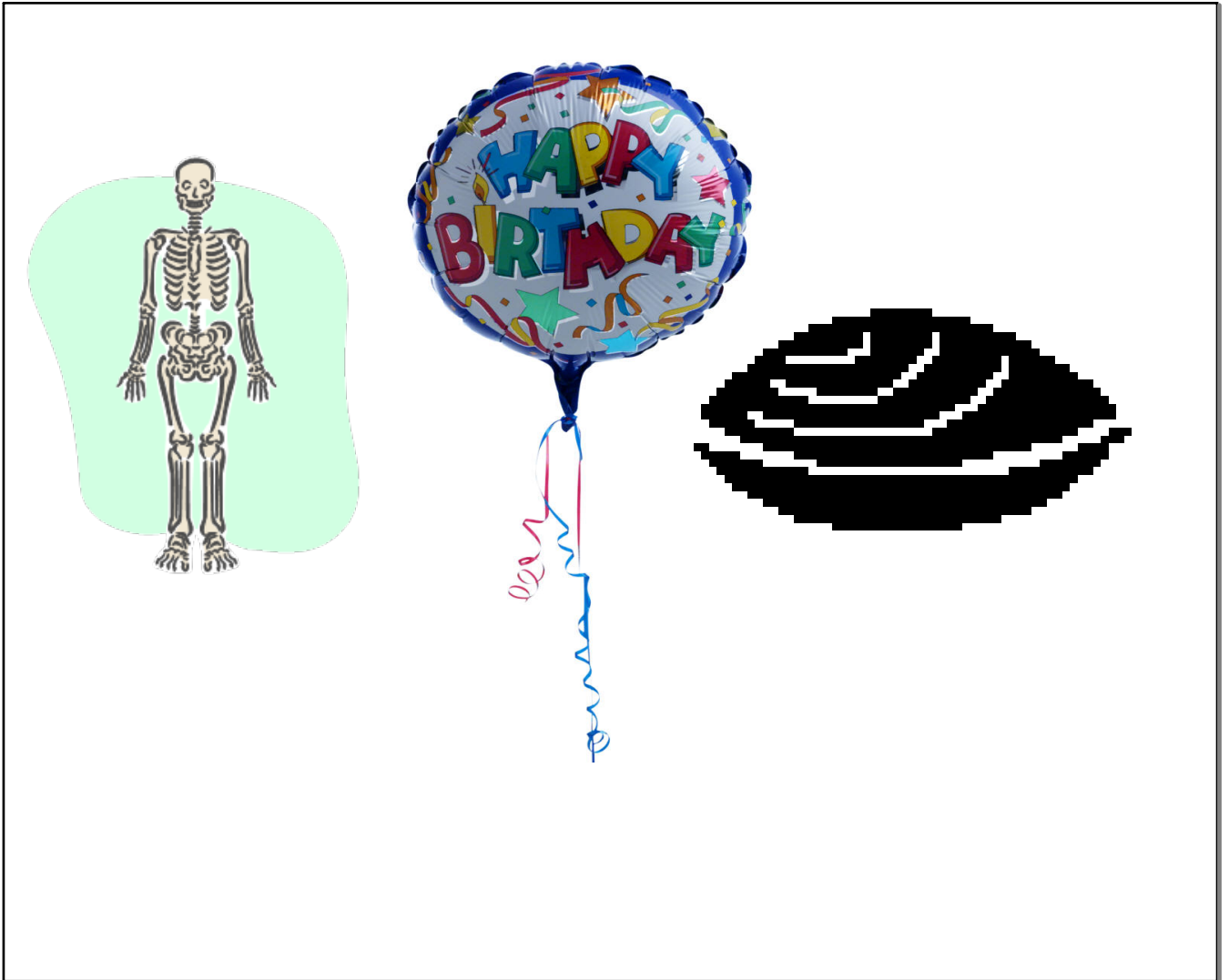


Support

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

Exoskeleton-a rigid external skeleton
clam, lobster, ant

Endoskeleton- hard material within the animal
lion, human



Excretion
Removal of
wastes produced
by cellular
metabolism