

Compare and Contrast



<http://www.caudata.org/daphnia/>



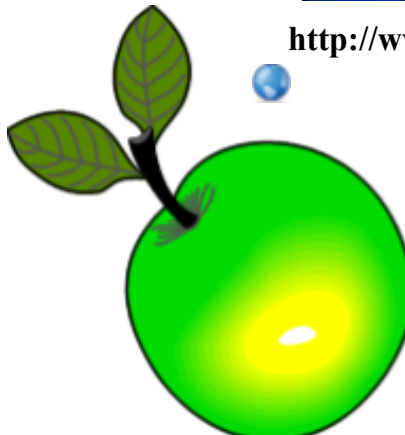
When _____ classified animals in the 1700's, he counted _____. There are now over a million.

Many animals are important to each other. Give an example.

_____ -they cannot make
their own _____



<http://www.imagequest3d.com/photos/zooplankton/index.htm>



_____ -They can perform
rapid, complex
_____. Some can walk,
swim, _____, run, and _____



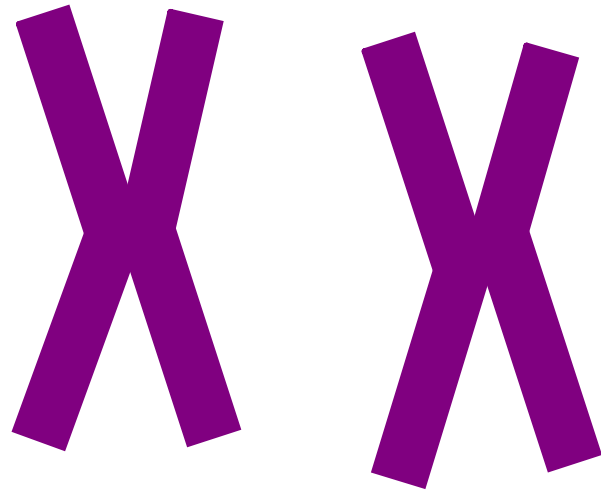
Multicellularity-all animals are _____, some are microscopic and some are as big as city buses. There is little _____ in cell size.



<http://www.caudata.org/daphnia/>



Diploidy-animals have _____
copies of each chromosome, one
from the _____ and one from the
mother



Sexual Reproduction-
almost all animals
_____ sexually

Absence of _____ wall- of the
multicellular organisms only
animals _____ a cell wall

Choose an animal and give evidence for each of the following.

Heterotrophic

Mobility

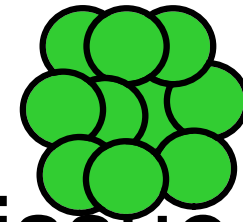
Multicellular

Diploidy

Lacking Cell Walls

Sexual Reproduction

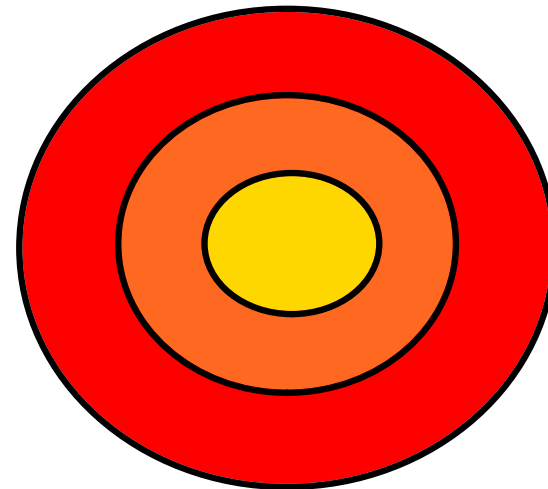
Blastula-hollow ball of cells



Ectoderm-_____ layer of tissue

Mesoderm-_____ layer of tissue

Endoderm-_____ layer of tissue



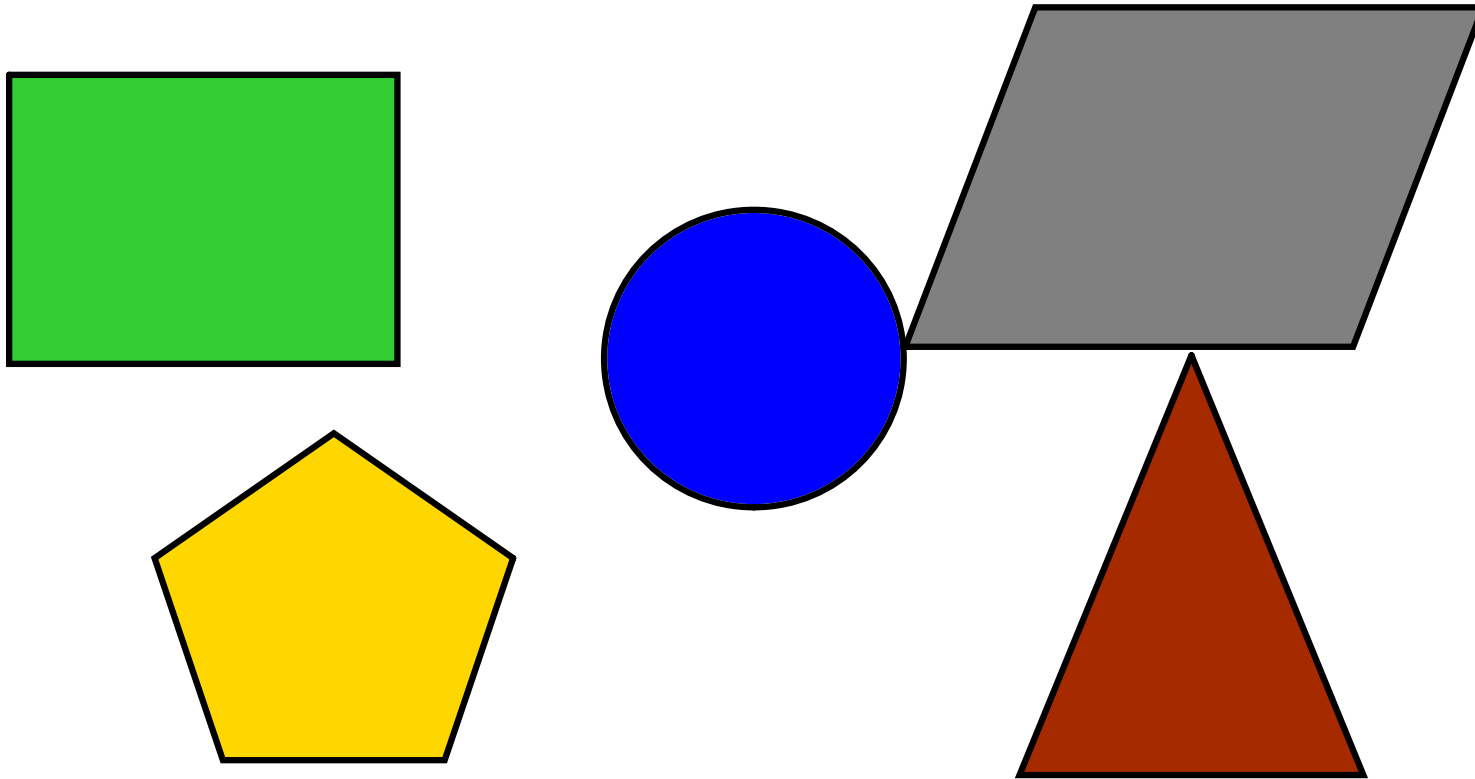
Ecto

Meso

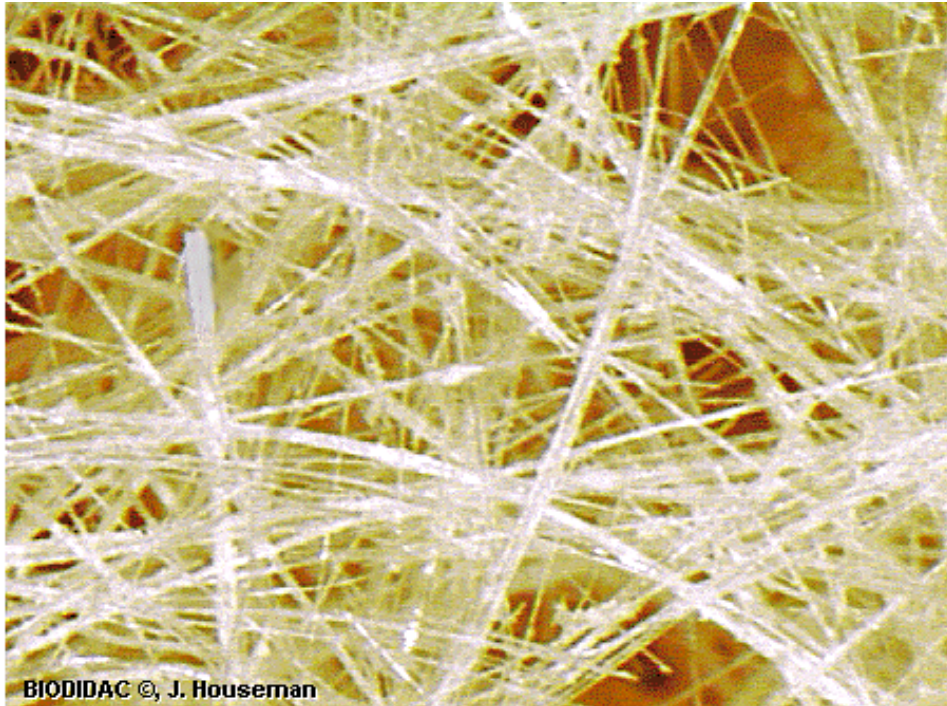
Endo

Muscles		Lungs	Glands
	Skeleton		Nervous
Veins	Skin	Eyes	Stomach
			System

Body Plan- a term used to describe an animals shape.



Asymmetrical-_____ in shape



<http://cas.bellarmine.edu/tietjen/images/HEXA004P.GIF>



_____ symmetry- body parts all
arranged around a _____axis



<http://www.cyhaus.com/marine/anemone.htm>

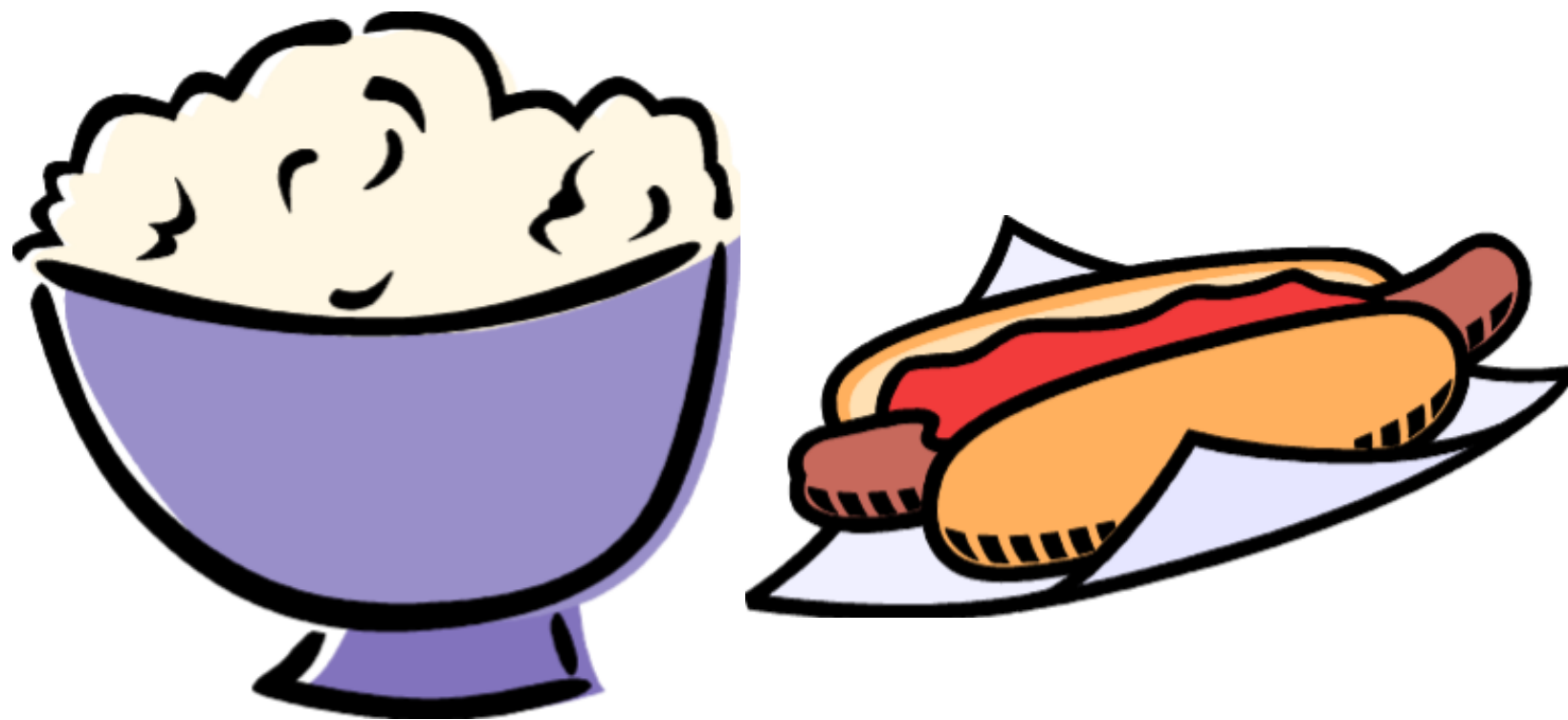


Bilateral Symmetry- distinct
_____ and _____ halves





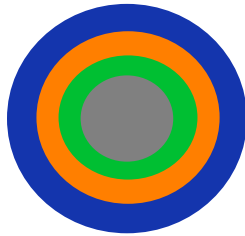




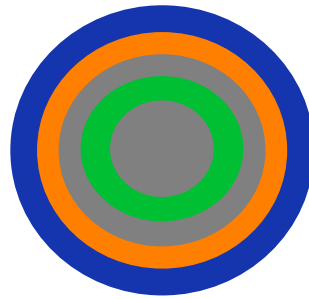


Bilaterally symmetrical animals have one of three basic body plans.

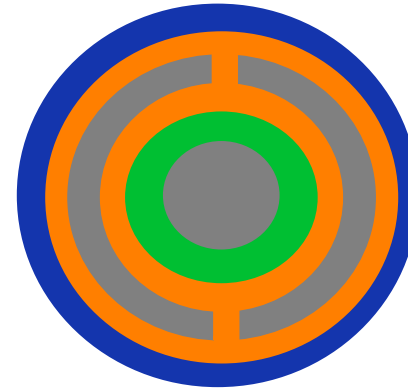
Body Cavity Types



Acelomates



Pseudocoelomates



Coelomates

Key

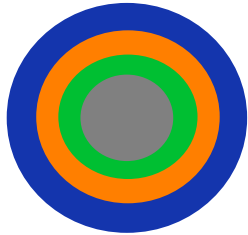
Gut, cavity

Mesoderm

Endoderm

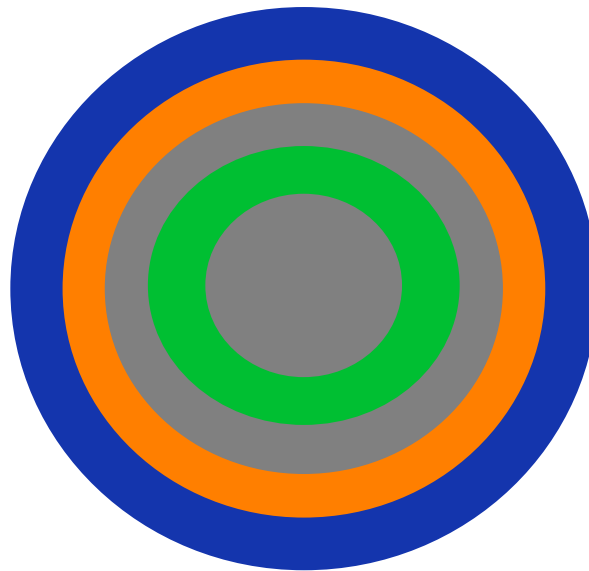
Ectoderm

Acelomates- animals with no body cavity

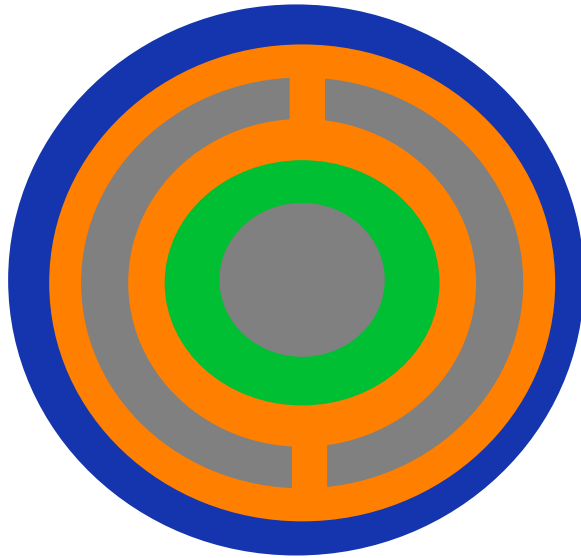


The space between the gut and the wall is completely filled with tissue.

Pseudocoelomates- have a body cavity located between the mesoderm and the endoderm.



Coelomates- a body cavity located entirely within the mesoderm.



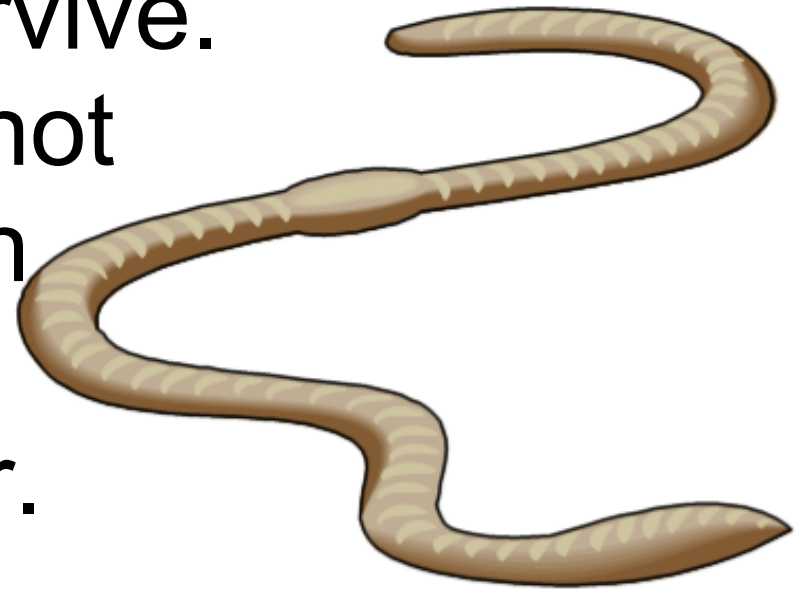
The gut and other organs are suspended in the coelom.

Advanced organism show
segmentation.

Where is the segmentation in humans?

In an earthworm each segment repeats many of the organs so injured animals can still survive. The segments are not independant though materials still pass from one to another.

How?



Phylum	Evolutionary Milestone
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Chordata	
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Echinodermata	
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Arthropoda	
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Annelida	
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Mollusca	
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Nematoda	
----------	--

Platyhelminthes	
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Cnidaria	
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Porifera	
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Jointed Appendages	Segmentation
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Pseudocoelom	Bilateral Symmetry
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Coelom	Tissues	Multicellularity
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Deuterostomes	Notocord
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