

PHYLUM: ANNELIDA

EXAMPLE: EARTHWORM

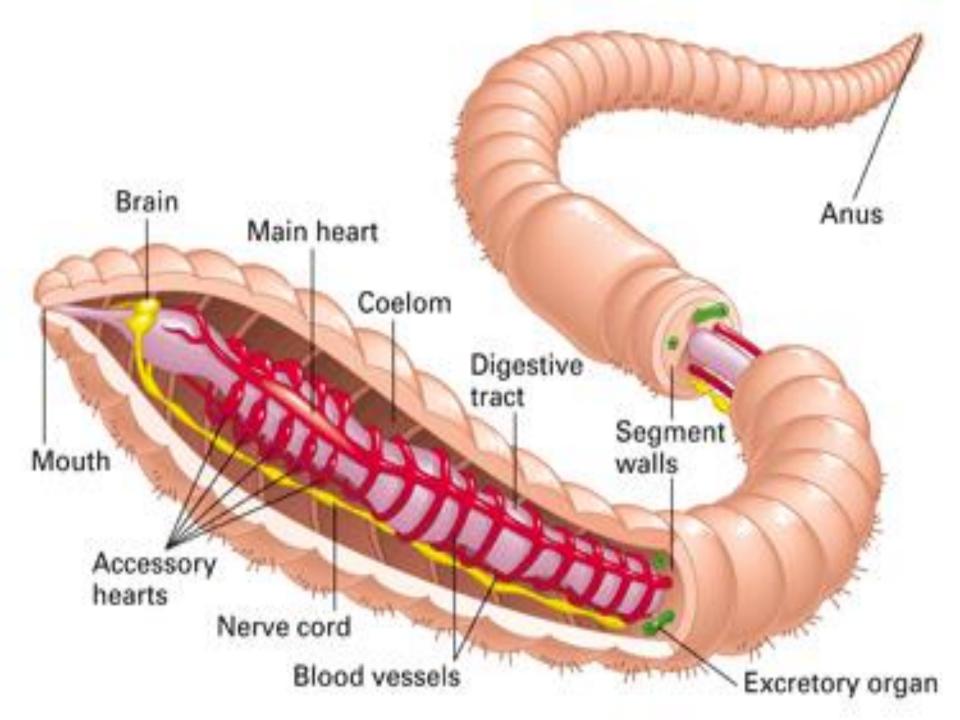
CLASSIFICATION FEATURES

- **SYMMETRY** Bilateral.
- **CEPHALIZATION** Cephalized.
- **EMBRYO TISSUE** Triploblastic.
- COELOM Coelomate.
- **GUT OPENINGS** Through gut.
- **BLOOD** Is in a closed system, with a number of little pseudo-hearts. (*Pseudo = pretend*).



ADDITIONAL INFORMATION

- Bodies are round. Segments are separated internally by membranes. Organs are closed inside the segments.
- A through-gut passes through all the segments.
- Gaseous exchange occurs through moist skin.
- Everything is transported in a closed blood system.
- The Coelom acts as a hydrostatic skeleton, and allows the outer body to move separately from the gut.
- Using bristles as anchors, it allows for locomotion.
- EarthWorms eat through moist soil at night.
- Each body has both genders they each swap sperm when they meet another worm. Each stores it to fertilize their own eggs with it later.



QUESTIONS Page 30

Question 1

5 X [1] = [5]

3. Through-gut

1. Closed

- 2. Clitellum
- 4. Chaetae/Bristles

5. Hydrostatic

Question 2

1. *Annelida* [1]

[1]

2. Bilateral

earthworm

excretory
tubules

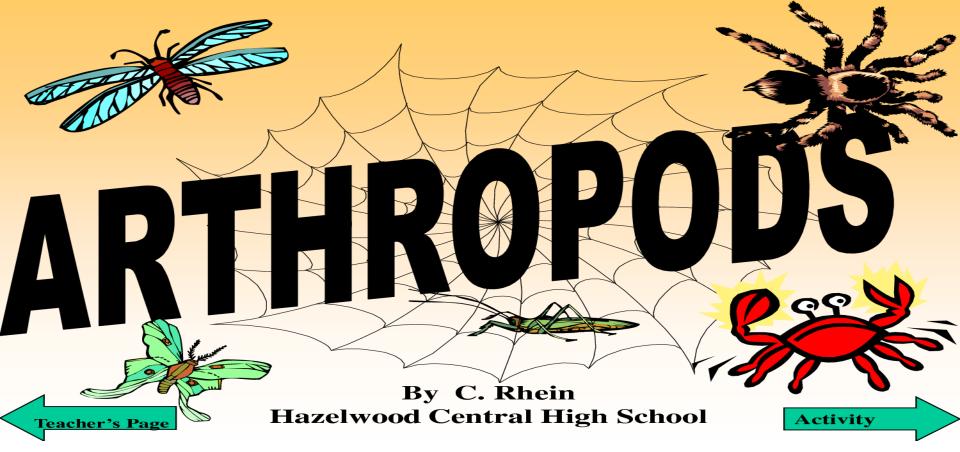
intestine

mouth pharynx esophagus crop gizzard excretory
pores

anus

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- 3. Cephalisation. Definite front and back. Definite top and bottom. Can be motile (move). [4]
- 4. Has coelom. Has through-gut. Has gas-exchange surface (its skin). Has blood. Has better defined head. Has hydrostatic skeleton. [3]



PHYLUM: ARTHROPODA

EXAMPLES (See page 35 for Details):

INSECTA – ARACHNIDA –

CRUSTACEA – MYRIAPODA

CLASSIFICATION FEATURES

- SYMMETRY Bilateral.
- **CEPHALIZATION** Cephalized.
- EMBRYO TISSUE Triploblastic.
- COELOM Coelomate.
- GUT OPENINGS Through gut.
- **BLOOD** Open system.



ADDITIONAL INFORMATION

- Invertebrates. (See their roles on Page 36).
- ExoSkeleton is made of chitin they need to moult for growth to occur. Eyes and antenna are used by them as senses.
- Bodies have segments, with jointed appendages (legs).
- Excretion and reproduction systems are found in the coelom.
- Specialized mouth parts are at the start of throughgut.
- MetaMorphosis = its body plan changes during its life-cycle (like a **worm** transforms into a **butterfly**).

All arthropods have:

- A hard skeleton on the outside of their body
- Jointed legs

Arthropods

2 pairs of antennae 5 or more pairs of legs 3 pairs of legs 1 or two pairs of wings No antennae 4 pairs of legs Many segments with legs on

Crustaceans



Insects

Spiders



Centipedes Millipedes





QUESTIONS Page 31

Question 1

- - 4. Through-gut
- 1. ExoSkeleton 2. HaemoCoels
 - 5. Abdomen

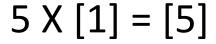
1. C

2. D

$$4 \times [2] = [8]$$

3. B

4. B



3. Antenna







PHYLUM CHORDATA



EXAMPLES:

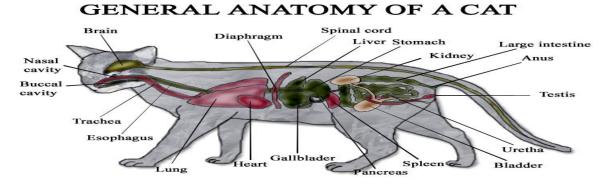
OSTEICHTHYES (fish) - AMPHIBIA -

REPTILIA – AVES (bird) – MAMMALIA

CLASSIFICATION FEATURES

- SYMMETRY Bilateral.
- CEPHALIZATION Cephalized.
- EMBRYO TISSUES Triploblastic.
- COELOM Coelomate.
- GUT OPENINGS Through gut.
- BLOOD Closed system.

ADDITIONAL INFORMATION



- Chordata are a very diverse group of (mostly) vertebrates.
- It is the most advanced and successful group out of all of them.
- The head (cephalisation) has the most senses on it, and there is a centralized brain inside the skull.
- They have a very efficient and specialised digestive system.

Phylum Chordata

- Classes:
 - Amphibia
 - Reptilia
 - Aves
 - Fish
 - Mammalia







