Arthropoda (Subphylum Uniramia)

FIGURES TO KNOW:

Phylum Arthropoda (Subphylum Uniramia):

Table 8. I - 20 orders in two subclasses; know the 9 Pterygota in caps.
Fig. 8.1 - types and stages of the two types of metamorphosis
Fig. 8.2 - know that insect mouthparts are appendages, too.
Fig. 8.3 - label & know all
Fig 8.4 - ganglia
Fig. 8.5 - body tagma, all parts except leg parts
Fig. 8.6 - all
Fig. 8.8 - be impressed with the extensiveness of the insect tracheal system
Fig. 8.9 - all, except sperm duct
Fig. 8.10 - all, except ventral nerve cord, ganglion, lateral oviduct & genital atrium
Appendix C (p180-183)- use as reference to help with the 9 insect orders
**ARTHROPODA**

Subphylum #3: UNIRAMIA  (3 classes)

- **Class 1: Chilopoda**
  - Centipedes
    - 1 pair walking legs per segment
    - Predatory
    - Venomous

- **Class 2: Diplopoda**
  - Millipedes
    - 2 pair of walking legs
    - Herbivorous
    - Poisonous

- **Class 3: Insecta**  
  - (2 subclasses)
    - **Subclass 1: PTERYGOTA**
      - 6 walking legs
      - Tracheae/tracheoles
      - Malpighian tubules
    - **Subclass 2: APTERYGOTA**
      - Silverfish
      - Wingless
      - Ametabolous no metamorphosis
      - Primitive

**Division:**

- **EXOPTERYGOTA**
  - Hemimetabolous
  - Egg – nymph - adult
  - Wings develop on OUTside
  - Isoptera  Termites
  - Hemiptera  True bugs
  - Odonata  Dragonflies & Damselflies
  - Homoptera  Aphids, Cicadas & Leafhoppers
  - Orthoptera  Grasshoppers, Crickets, Cockroaches & Mantids

- **ENDOPTERYGOTA**
  - Holometabolous
  - Eggs – larva – pupa - adult
  - Wings develop on INside
  - Diptera  Flies
  - Coleoptera  Beetles
  - Lepidoptera  Butterflies & moths
  - Hymenoptera  Ants, bees & wasps