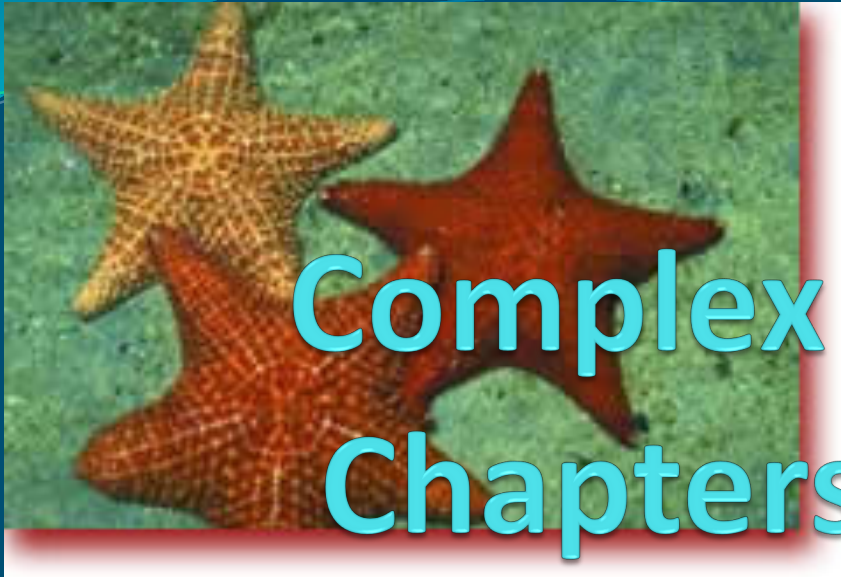


# Complex Invertebrates: Chapters 27, 28 and 29





# 27-1 Mollusks



## I. What is a Mollusk?

A. Phylum Mollusca Origin:  
from Latin Molluscus = soft

B. Contains animals that look  
and act very differently from  
each other

C. Mollusks: Soft-bodied  
animal that have an internal or  
external shell

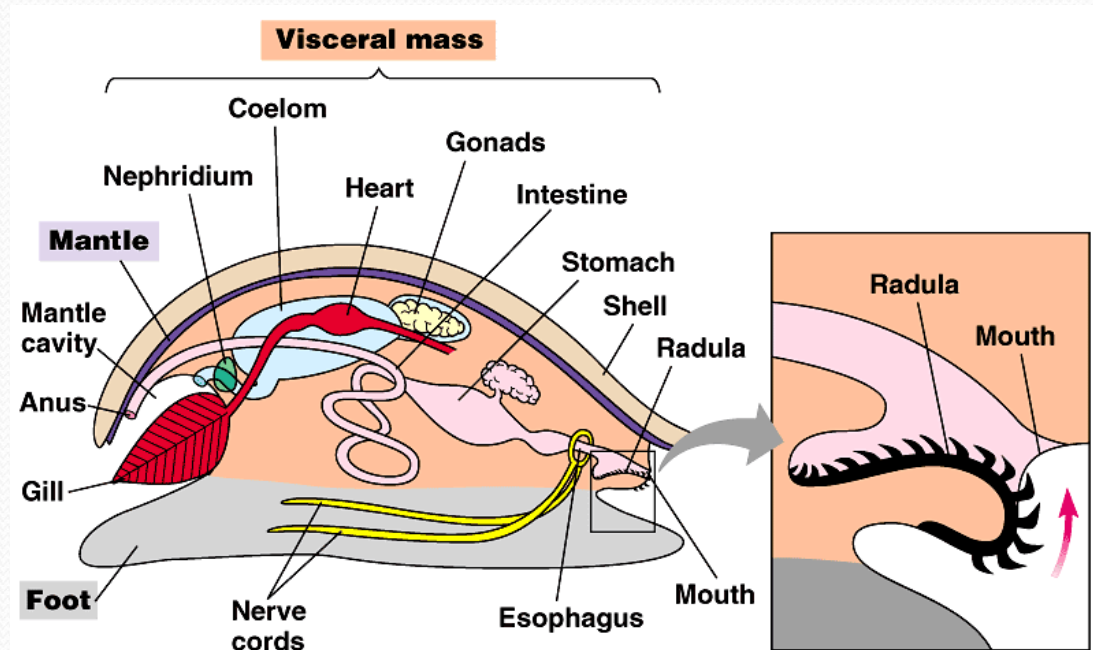


[VIDEO](#)

## II. Form and Function in Mollusks

A. Body plan have 4 basic parts:

1. *Foot*
2. *Mantle*
3. *Shell*
4. *Visceral Mass*



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## B. Foot

1. Usually contains the mouth and other structures associated with feeding



2. Many different shapes:

a) Flat -- for crawling



b) Spade-shaped -- for burrowing

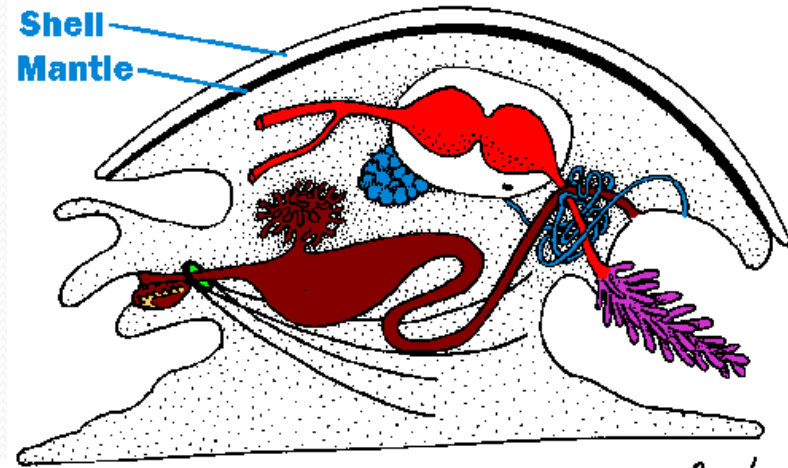
c) Tentacles -- for capturing prey





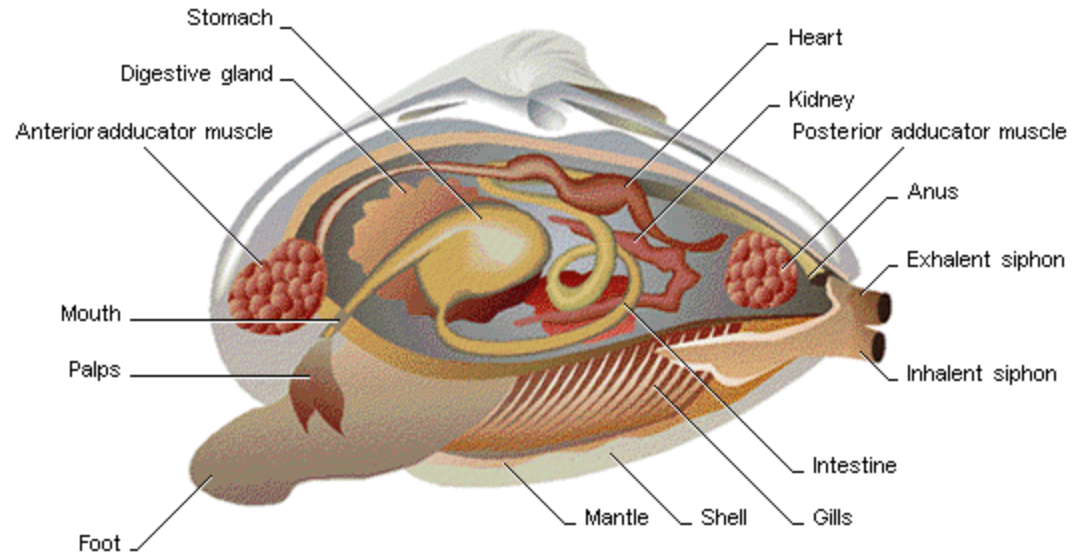
**C. Mantle:** *Thin, delicate tissue layer that covers most of a mollusk's body*

**D. Visceral Mass**  
contains: *Internal organs*



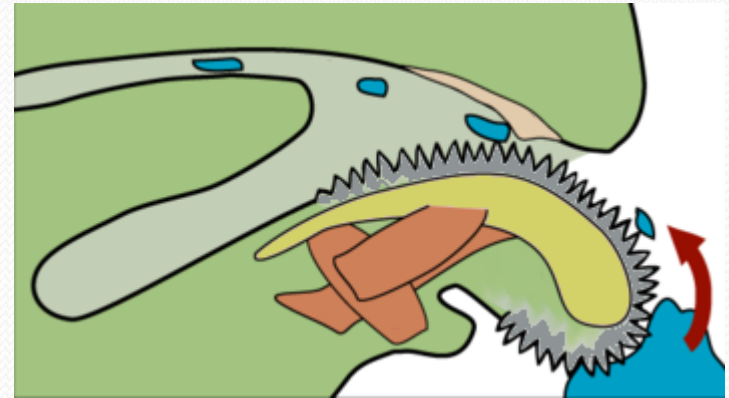
Livingstone, © BIOIDAC.

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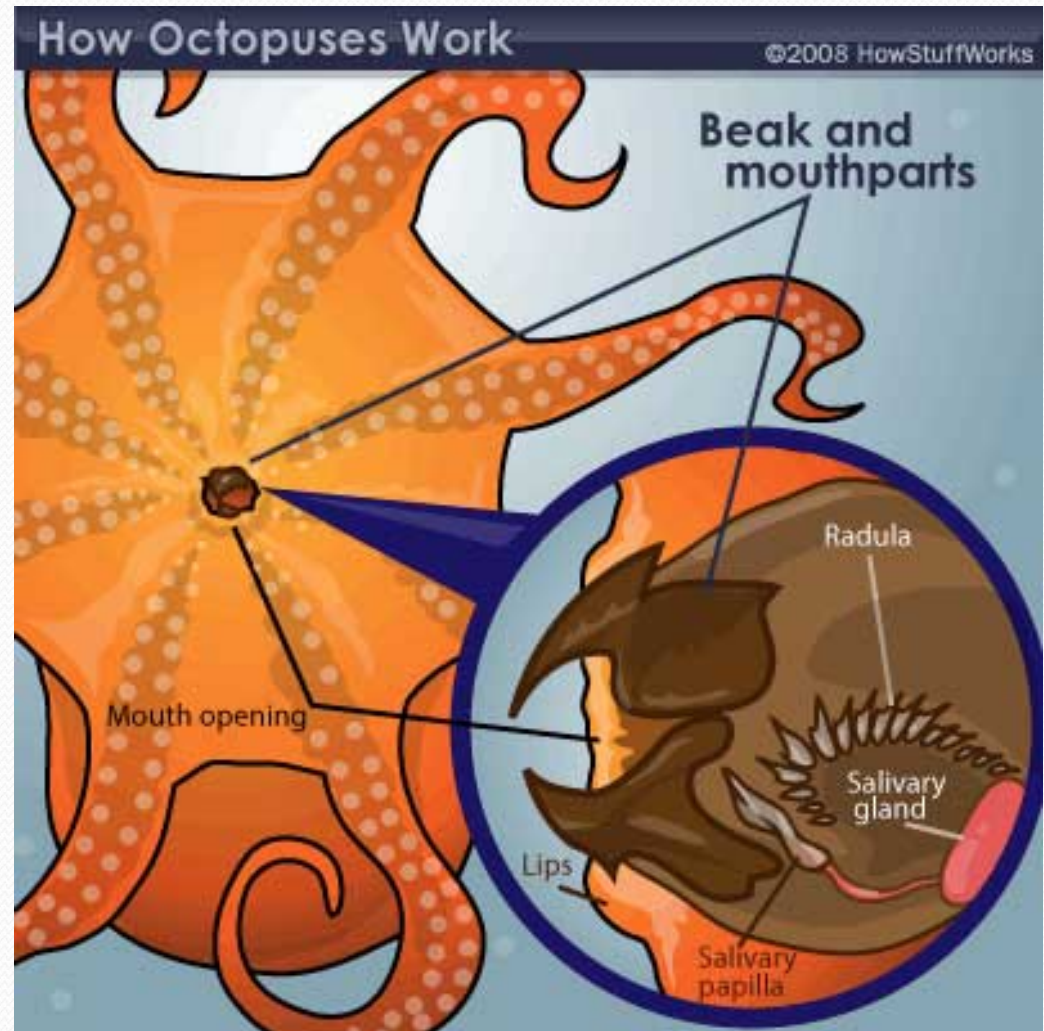
## E. Radula:

1. A tongue-shaped structure used in feeding
2. A layer of flexible skin covered with tiny teeth
3. Acts like sandpaper to scrape/tear off food





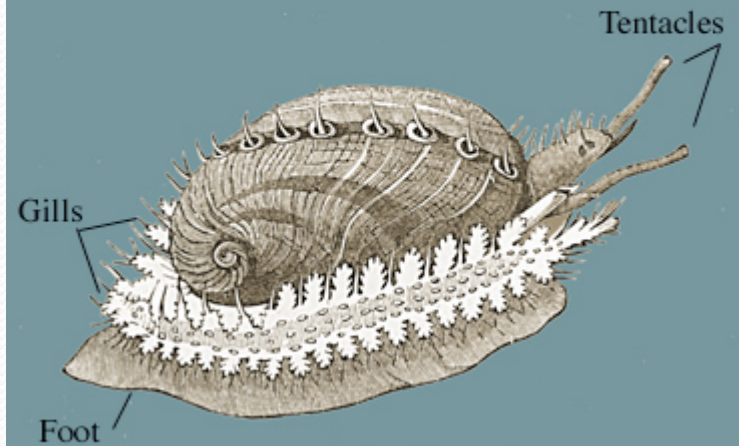
F. Carnivores have a radula or sharp *jaws*; some produce *poisons* subdue prey



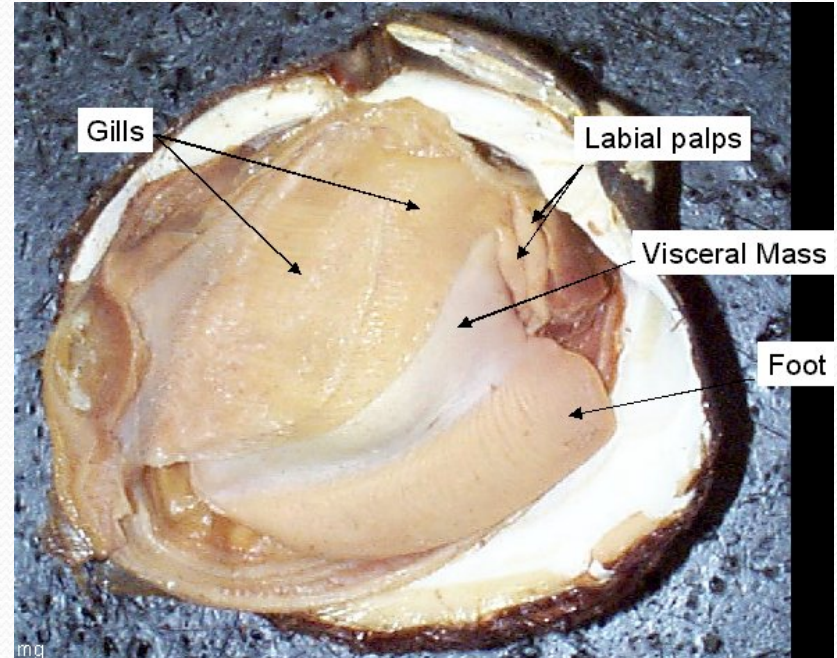


G. Filter feeders use *gills* to sift food from water. *Mucus* and *cilia* on gills trap plankton and move it to *mouth*

The Abalone,  
*Haliotis tuberculata*



(after Lankester, 1906)





## H. Respiration

1. Aquatic species: use gills inside the mantle

2. Land species: mantle cavity is lined with blood vessels, folded and kept moist so  $O_2$  can enter cells

