

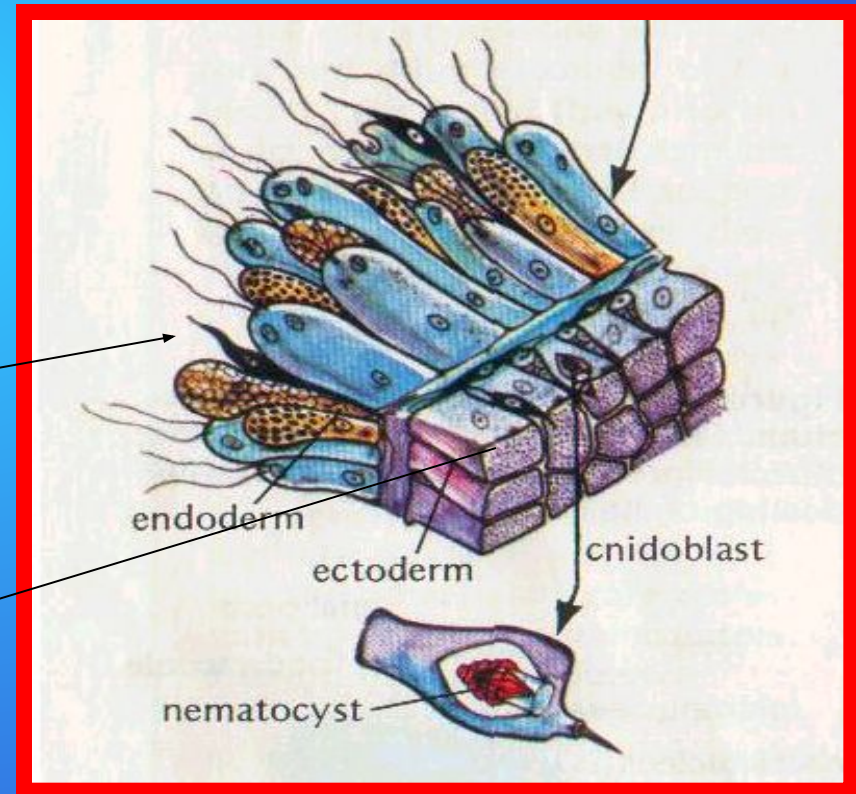
# Hayvanlar



# *Haywanlar maşgalasy*

## Haywanlaryň häsiýetleri

1-Haywanlar köp öýjikli eukarýotik organlardyrlar.

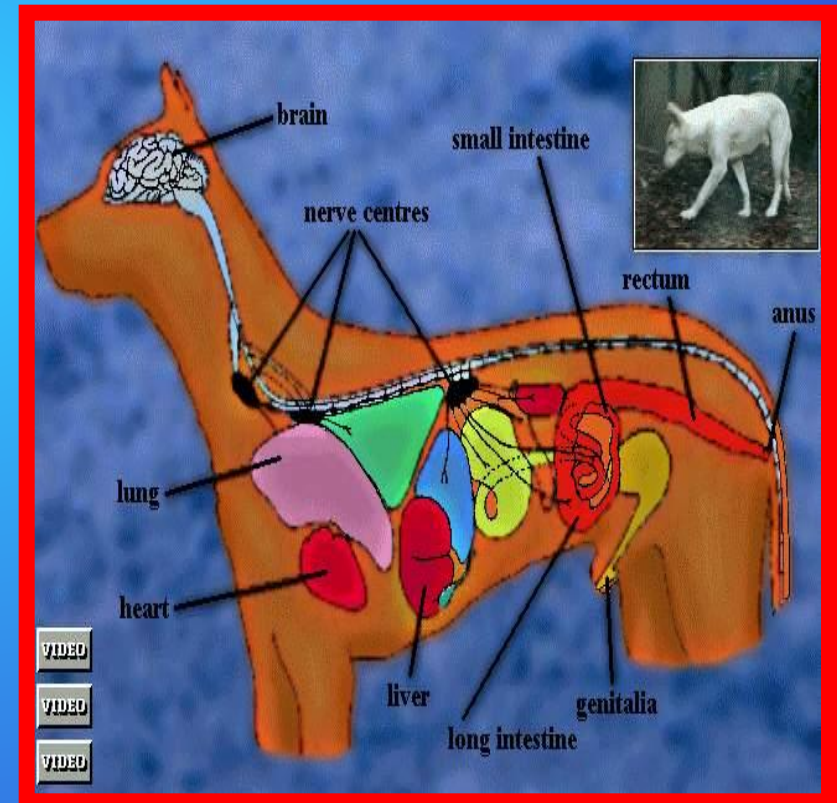


Eukarýotik  
öýjik

**2- Hemme haýwanlar hetetrop  
we olar öz iýmitlerini başga  
organizimlardan alýarlar.**



3-Olar hereket edýän organlardyr,  
we olar muskular we nerw  
sistemlaryna bölünýärler..



# 4- Köp haywanlar jynsly köpelyärler, käbirleri bolsa jynssyz köpelyärler.



Jynsly köpeliş

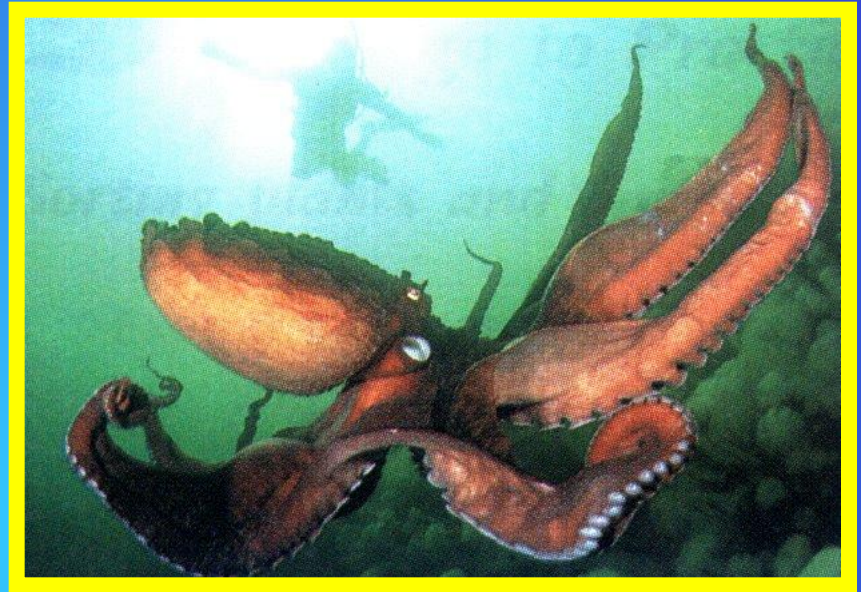


Jynssyz köpeliş

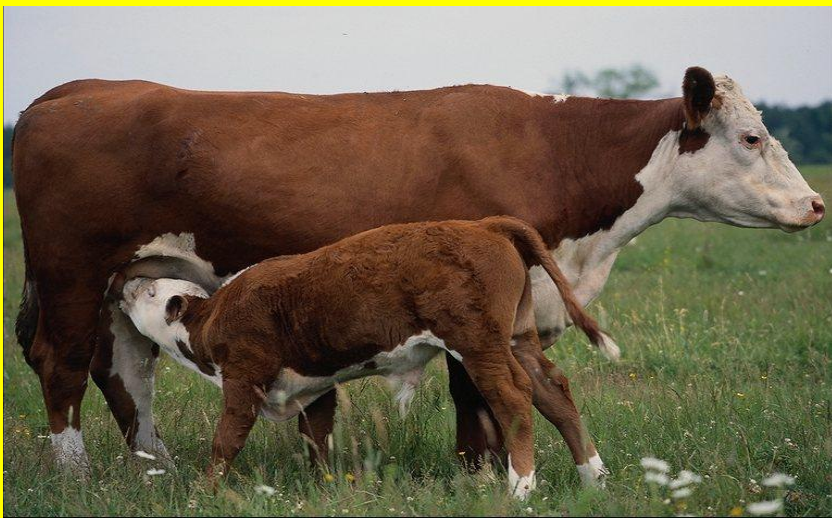
# Haywanlar maşgalasy.

- Haywanlar oňurgasy barlar we oňurgasy ýoklar diýip iki bölege bölünýärler. Olar:
  - **Oňurgasyzlar** (oňurgasy bolmaýan)
  - **Oňurgalylar** (oňurgasy bolan)

# Oñurgasyzlar



# Oñurgalylyar





# Oňurgasyzlaryň häsiýetleri

1. Olaryň oňurgadan ýasalan içki süňkleri ýok.
2. Olar suwda hem-de gumda ýaşayarlar.
3. Köp oňurgasyzlar junsly, käbirleri bolsa jynssyz köpelyärler.

# Oňurgasylaryň Görnüşleri

1.Gubka

2.Coelenteratlar

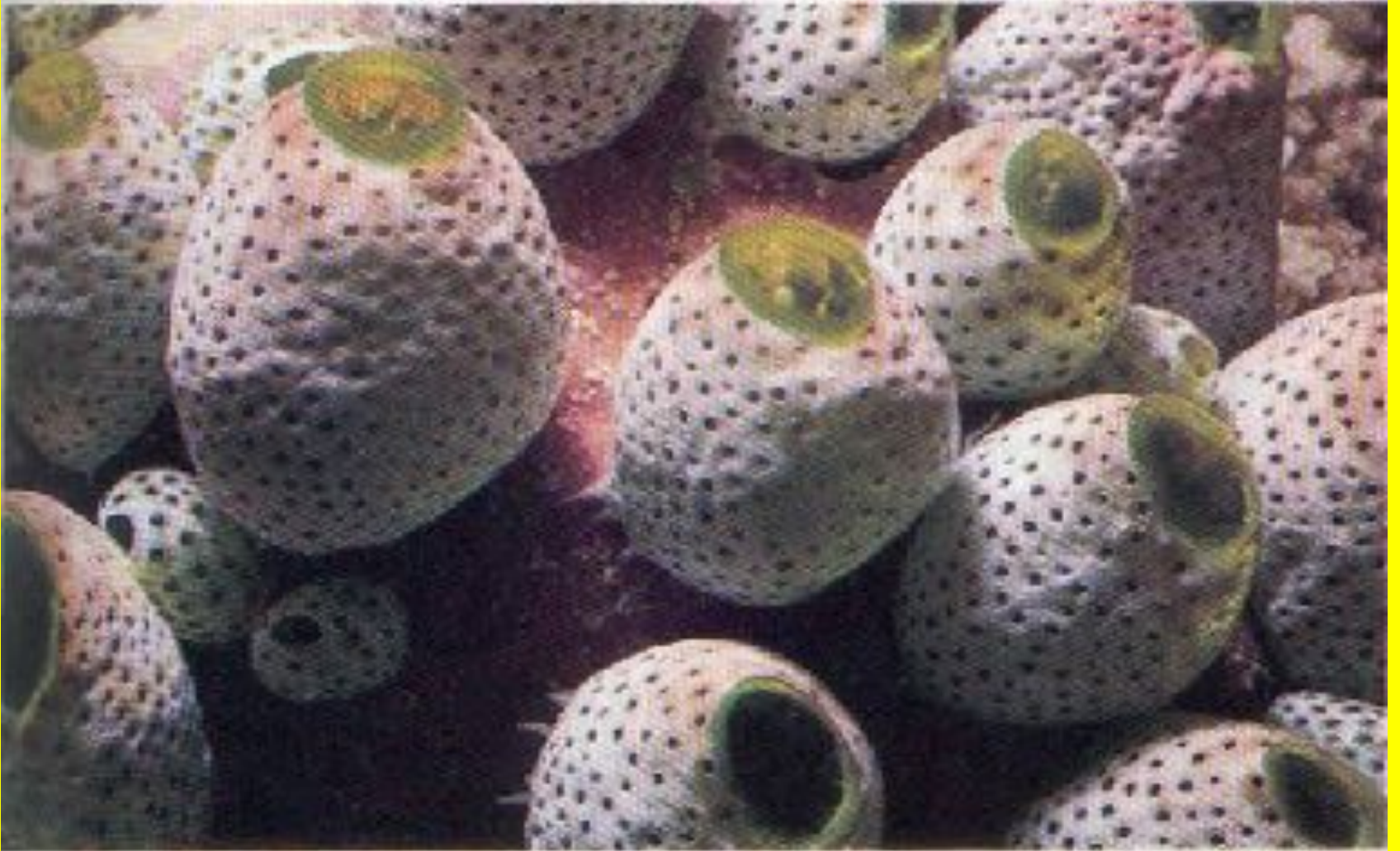
3.Gurçuklar

4.Aýaklylar

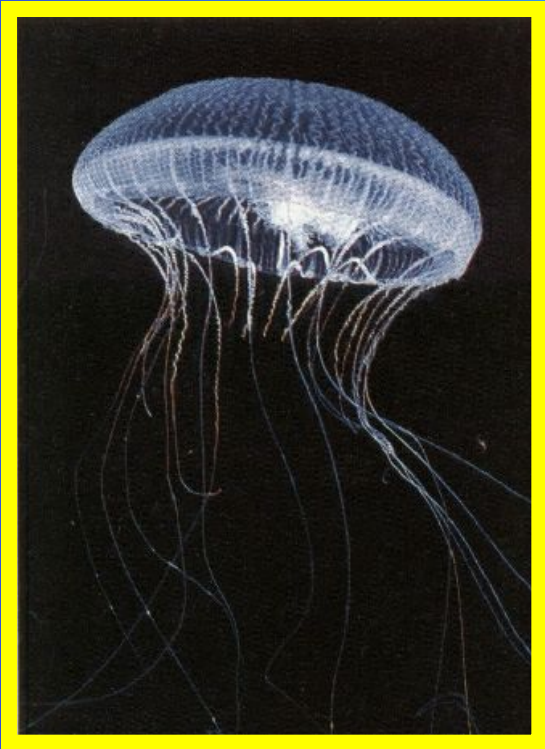
5.Molýuska

6.Derisiňňileri

# Gubka



# Coelentererlar



Medusa



Gidra



Suw oty

# Gurçuklar



Segmented worm



Ýasy  
gurçuklar

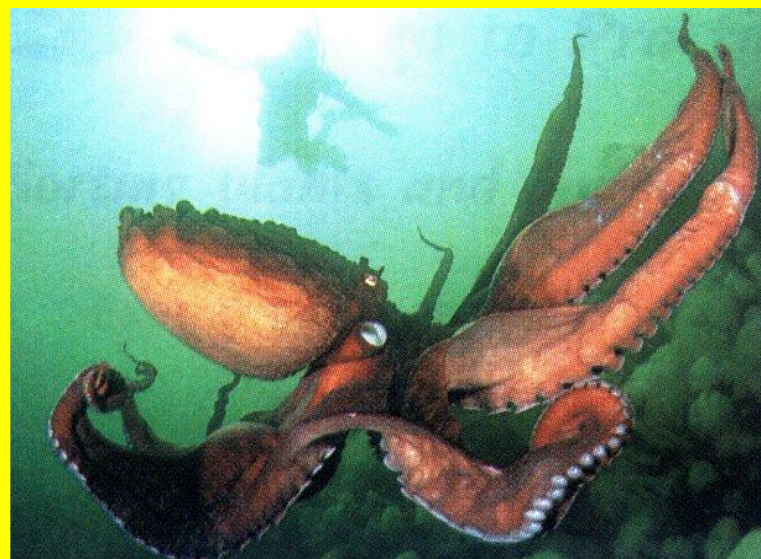


Tegelek  
gurçugy

# Aýaklylar



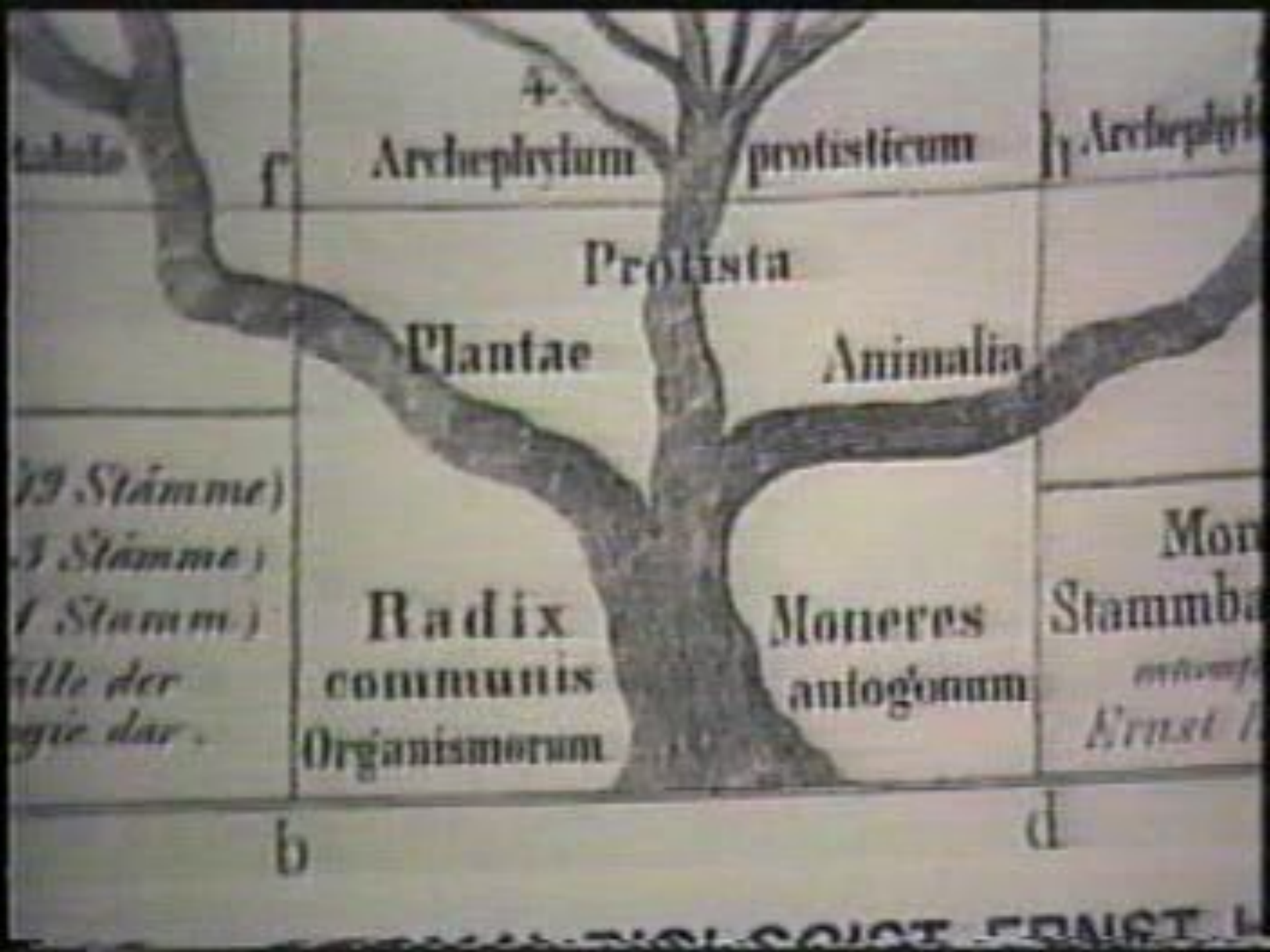
# Molýuskalar



# Derisîññiler

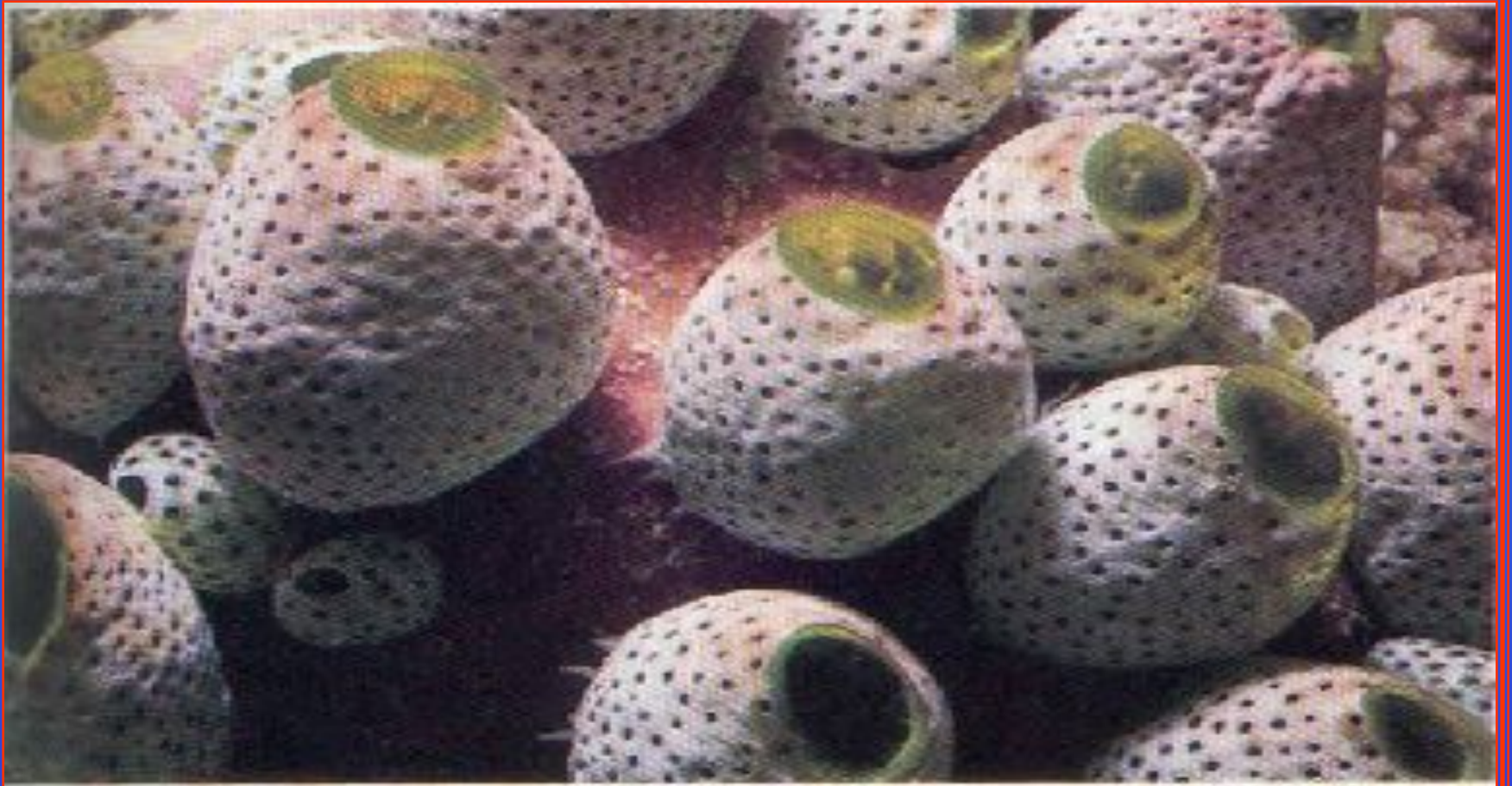






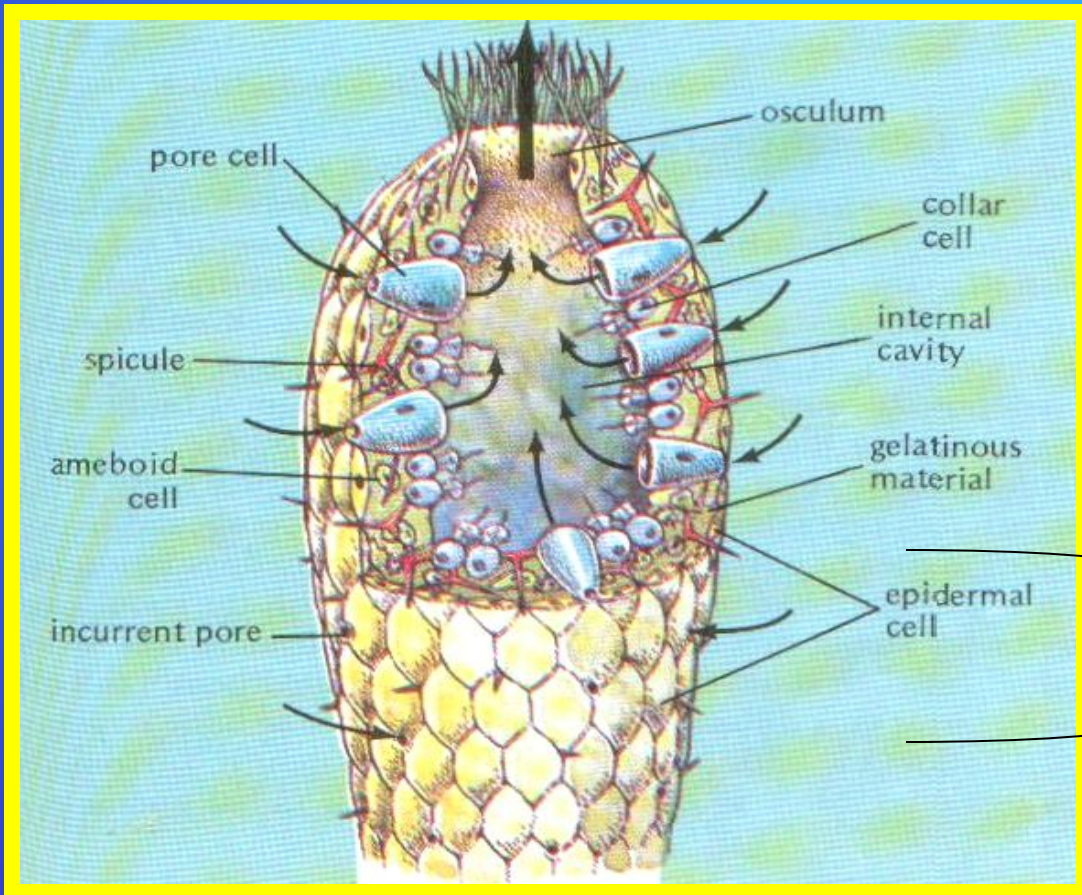
# Gubka

Gubkalar görnüşinden



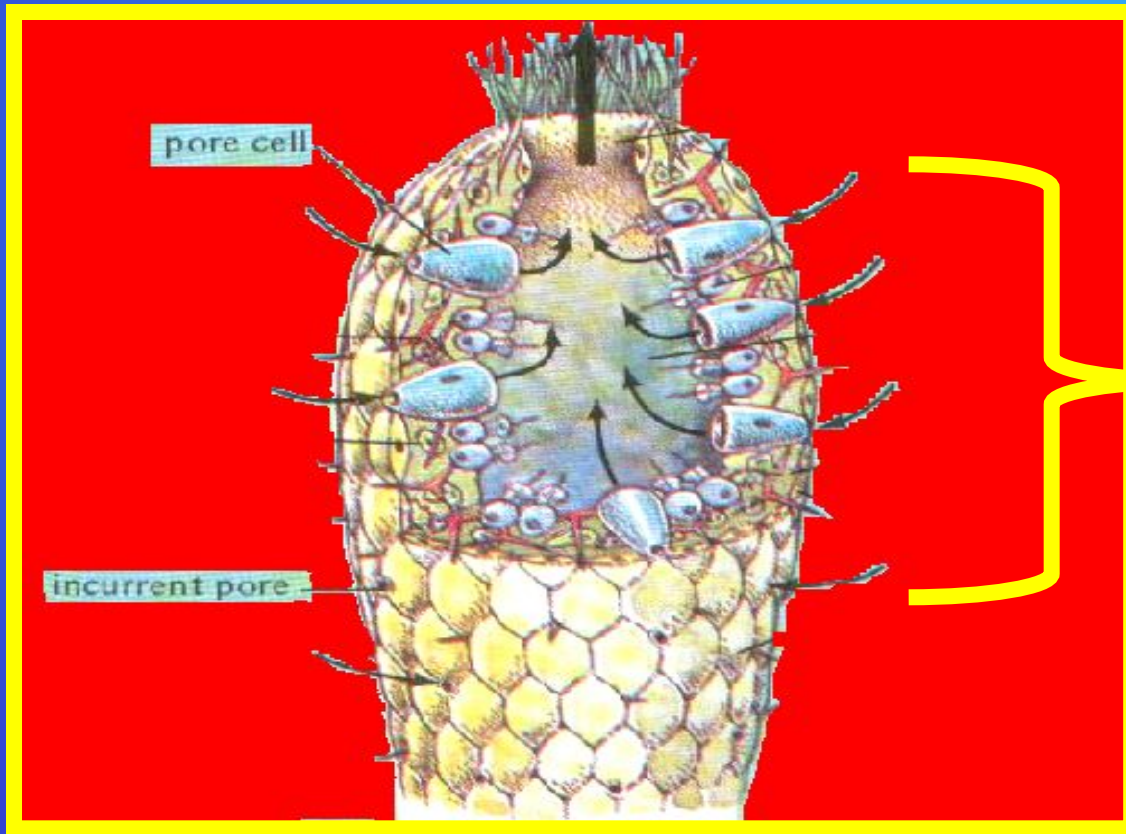
# Umumy häsiýetler

1-Gubkalar iň ýönekeý köp öýjikli haýwanlardyr.



Köp  
öýjikler

**Gubkalaryň köp deşikleri bar bolany üçin olara gubkalar diýilýär.**



Deşikli  
öýjikler

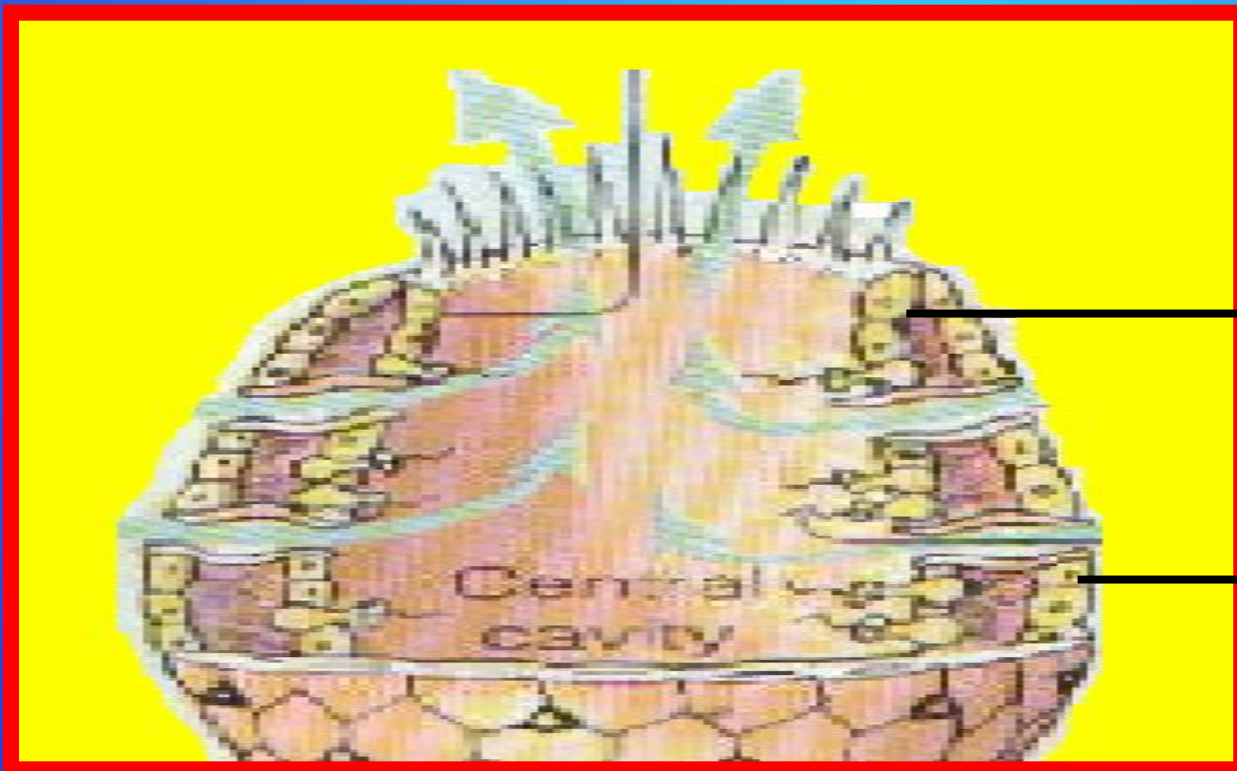
**3. Hemme gupkalar suwdaky jandarlar. Köpüsi duzly suwda käbirleri bolsa arassa suwda ýaşaýarlar.**



**5-Olaryň iki sany gurluşy bar.  
Olar:**

**Ektoderma:** Daşky gurluş

**Endoderma:** Içki gurluş



Içki  
gurluş

Daşky  
gurluş

6. Köp gubkalar  
**pyntyklamak**  
hemde **regenerasiýa**  
arkaly jynssyz  
köpelyärler.

7. Gubkalar  
**plankton** haýwanlar  
bilen  
iýmitlenýärler.

