

Sponges have been used since ancient times



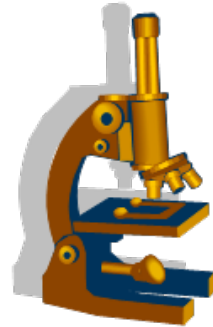
- The Greeks used them in their helmets.

- The Romans used them for paintbrushes and mops.



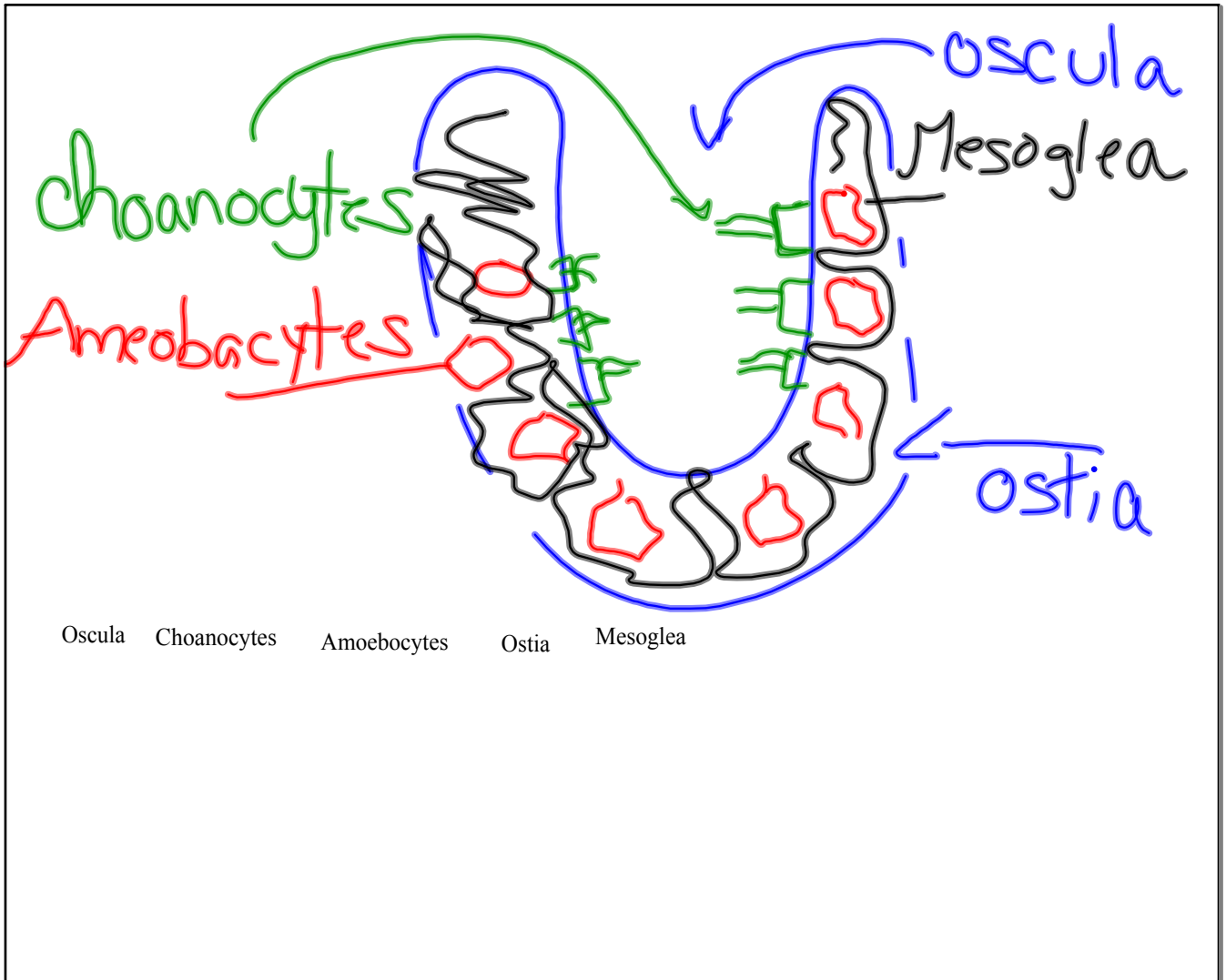
- The early classification put sponges with plants.

- When they started to use microscopes they discovered the similarities to animals.



- <sup>without</sup> Asymmetrical
- Sessile- non mobile

- Sponges do not have tissues or organs.
- Sponge cells can recognize other sponge cells



- Spongin-makes up the skeleton on the sponge. It is a flexible protein fiber.
- Spicules- tiny needles of silica and calcium carbonate

## Calcareous

have  
spicules  
made of  
calcium  
carbonate

## Glass

have  
spicules  
made of  
silica

## Demosponge

made of  
spongin

## Reproduce asexually and sexually

- Sponges regenerate when cut into pieces
  - They reproduce by breaking off fragments.



- Many sponges are hermaphrodites.
  - The egg and sperm are produced at different times so they can't self fertilize