Sponges have been used since ancient times



• The Greeks used them in their <u>helmets</u>.

 $_{\odot}$ The Romans used them for paintbrushes and <u>MOPS</u>.

The early classification put sponges with <u>plants</u>.
When they started to use <u>microscopes</u> they discovered the similarities to animals.





- Asymmetrical
- Sessile- non mobile

- Sponges do not have $\pm issues$
- or <u>organs</u>.
- Sponge cells can recognize other sponge cells



• Spongin-makes up the skeleton on the sponge. It is a flexible <u>*Protein*</u> 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 <u>regenerate</u> when cut into pieces
They reproduce by breaking off <u>fragments</u>

Many sponges are <u>her maphrodife</u> The egg and sperm are produced at different times so they <u>don't</u> self fertilize