Sponges have been used since ancient times



The Greeks used them in their
helmets
The Romans used them for

paintbrushes and $MOP \stackrel{<}{>}$

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

ragments.

Many sponges are
<u>hermaphrodite</u>.
The egg and sperm are produced at different times so they <u>Cannot</u> self fertilize