the function is different.

**** Fish gill-** A simple multifunctional epithelium.
1. Respiration
2. Ion balance [mt rich]
3. Acid-base balance
4. Waste Excretion Example nitrogenous waste

Does all these different jobs that in other animals are associated with separate organs. Despite what we have as an architectural simple organ- its physiologically highly complex. **90% simple squamous epithelial cells- pavement cells [respiratory cells] and 10% simple cuboidal epithelial cells- chloride cells. Everything is responsible for nitrogenous waste excretion. Pavement- respiration and chloride is to do with ion balance.**

—> Extracellular components

Non-cellular components

Body fluids- Eumetazonas- contain 2 fluid compartments
intracellular space- within cells
extracellular space- outside cell [this space is divided up into blood plasma [3L in human body] and interstitial fluid [11L]]

Extracellular Structural elements- Supportive material
-loose connective "tissue"
-bone
-cartilage
-cuticle

—> Body Plans

Feature that has enabled us to distinguish between major animal groups. Cellular forms for Example. A couple of different things that are important for us to recognize when looking at animals across different phyla.

Example difference between a Flatworm, Mollusc and a Fish. Architecturally they're different even though they superficially look the same.