Anterior cavity (front cavity)

- The anterior cavity is split into the *thoracic cavity* and *abdominal cavity*
- The *thoracic cavity* is split into two pleural cavities (each housing one lung), and the pericardial cavity (houses the heart).
    - *Pleurisy* : inflammation of the membrane surrounding the lungs (not the pleural cavity membrane but the lung membrane?), caused by infection
- The *abdominal cavity* is at the abdomen, and its lower section is also known as the *pelvic cavity*.
- The thoracic and abdominal cavities are separated by the *diaphragm*, which is just below the nipples.

Posterior cavity (back cavity)

- Quite small in comparison with the anterior cavity
- The posterior cavity is split into the *cranial cavity* and the *vertebral/spinal cavity*
- The *cranial cavity* houses the skull, while the *spinal* cavity houses vertebrae, spinal cord, etc

Tissue membranes

Tissue membranes are layers of connective tissue that protect, separate, and allow communication between body structures. They are often involved when things 'go wrong', and are essential for diagnosing and treating health problems.

- *Serous membranes* line and lubricate internal body cavities (i.e., body cavities closed to the exterior of the body) by producing serum, reducing the friction between organs. Such cavities include the peritoneal, pleural, and pericardial cavities.

- *Mucous membranes* line the digestive, respiratory, urinary, and reproductive tracts, ducts, and regions exposed to the outside world. They are coated with the secretions of mucous glands, thus lubricating tract surfaces and capturing debris such as bacteria, dirt, foreign particles, etc (things you don't want inside your body!).

- *Synovial membranes* line joint cavities (e.g., that of the knee) and produce the lubricating fluid within the joint. These do not contain an epithelial tissue layer.

- *Cutaneous membranes* form the outer covering (i.e., skin)

An aside on *epithelial tissue* (source: Wikipedia): epithelial tissue is a thin, continuous, protective layer of cells with little extracellular matrix. It lines the outer surfaces of many internal organs, the corresponding inner surfaces of body cavities, and inner surfaces of blood vessels. Serous, mucous, and cutaneous membranes all contain an epithelial tissue lining, whereas synovial membranes do not. Epithelial tissues lack blood or lymph supply, and are supplied by nerves.

The integumentary system (skin)

The integumentary system (from *integumentum* - Latin for 'a covering') is an organ system that includes skin, hair, nails, and glands. It has many functions, including protection from dehydration, protection from injury, defending against microorganisms, regulating body temperature, vitamin D synthesis, and providing information about the external environment via sensation. The skin has two main layers - the epidermis and dermis.