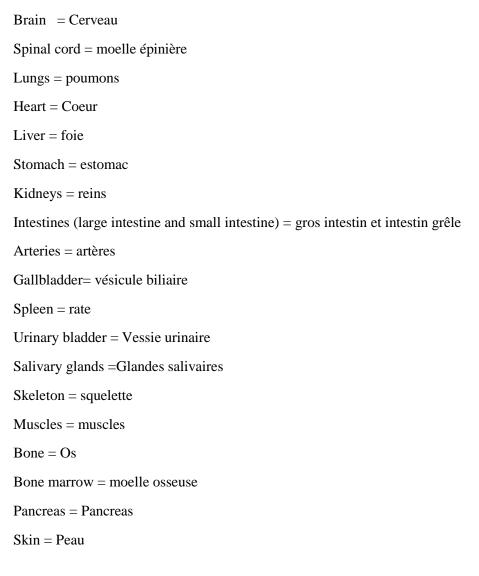
## I Internal Organs of the Human Body



- **-The nervous system** includes the central nervous system (CNS) and peripheral nervous system (PNS). The CNS is made up of the brain and spinal cord, whereas the PNS is made up of the somatic and autonomic nervous systems.
- **-The liver** is the principal site of xenobiotic metabolism immediately after their absorption from the gastrointestinal tract. The liver also has the highest supply of biotransformation enzymes of all organs in the body. Therefore, it has a key role in xenobiotic detoxification and protection against chemical toxicity.

## **II Laboratory tools**

Eye wash

Emergency shower

-On a laboratory bench we find Glassware (Flask, Beaker, Burette, Test tubes, Reagent bottle, separating funnel ...) Pipette / Micropipette / Tips/ Eppendorf Spatula / Watch glass/ Analytical Balance is used to weigh small amounts of samples and reagents samples and reagents. / Some samples and reagents need to be stored at low temperature such in the fridge or the freezer wash bottles Bunsen burner is used to sterilize pieces of equipment and to produce a radial sterile field around it, mostly used in microbiology laboratories. Microscope/confocal microscope/electronic microscope Hot plate Magnetic stirrer Water bath Centrifuge spectrophotometer / microplate reader/ analytical balance electric homogenizer / potter homogenizer Safety equipment's: Lab glasses Lab coats Nitrile gloves

**Fume hood:** Fume hoods are a type of laboratory enclosures, primarily used for protection against gases, chemical splatter, carcinogens and other volatile compounds. Hoods generally use a duct system that exhausts the contaminated air within the hood into the atmosphere

A biosafety cabinet (BSC) is a ventilated enclosure that protects the user, environment, and product. It traps biohazardous, pathogens and infectious agents in a filtration exhaust system using high-efficiency particulate air (HEPA) filters. The cabinet discharges microbe-free exhaust air back into the lab.