

The study of human anatomy



**ASSIGN
BUSTER**

physiology The scientific study of the functions of living organisms is called “percussion” study method tapping on a body surface then listening to the echo to diagnose health abdominal Region, thoracic Region Identify the subdivisions of the trunk plasma membrane The structure that encloses a cell and controls the traffic of molecules in and out of a cell is the _____. molecule two or more atoms joined by chemical bonds would form a/an _____? lower limbs, upper limbs, cervical region Identify the appendicular region components lateral the directional term that indicates farther away from the midline of the body is _____? auscultation in performing a physical examination the act known as listening is known as _____? crural, femoral, pedal Identify the areas included in the lower limb palpation taking a pulse by feeling the radial artery is known as mediastinum the region between the lungs is known as the standing upright, feet flat on floor, palms directed forward Identify the statements that describe a person in anatomical position cranial cavity the brain is contained within the _____? axial appendicular the two major body regions are the _____ and _____ regions organelle a microscopic structure in a cell that carries out individual functions peritoneum the double-layered serous membrane found in the abdominal pelvic region is anatomy the study of the makeup and organization of the body structures is called organ a structure composed of at least two different tissues, with recognizable boundaries, and with discrete function. pleura the serous membrane around each lung is the _____? superior the directional term that means “above” is _____? superior to the abdominal cavity is _____ the pelvic cavity axial region the major body region that includes the head, neck, and trunk is the _____. organism the term that indicates a single complete individual is _____. appendicular region the

upper and lower limbs compose the _____ of the body. The basic structural and functional unit of life is the _____. Gross anatomy, the field that focuses on bodily structures that can be observed without magnification is called _____. Inspection, observing the condition of skin and nails by sight is an example of which method of study? -logy. The suffix “-____” means “the study of”.

Atom, the smallest particle of matter with unique chemical properties. Tissue, an aggregation of cells and extracellular materials, which perform discrete function, is known as a/an _____. Prono, the anatomical term that describes a person laying face down is: distal, the directional term that indicates being farther away from the point of attachment is: right and left. A sagittal plane divides the body into _____ portions. The scientific study of the functions of living organisms is physiology. Two or more atoms joined by chemical bonds is a molecule. The directional term that indicates farther away from the midline of the body is lateral. Taking a pulse by feeling the radial artery is palpation. The region between the lungs is the mediastinum. An organ system is a group of organs working together for a coordinated function. It is an _____. Comparative anatomy, the study of more than one species in order to observe the structural similarities and differences is known as _____. X-ray, the imaging technique known as radiography involves the use of _____. Tapping on a body surface then listening to the echo to diagnose health is “percussion” study method. The double-layered serous membrane found in the abdominal and pelvic regions is the peritoneum. Taking a pulse by feeling the radial artery is palpation. In performing a physical examination, the act known as listening is auscultation. The field that focuses on bodily structures that can be observed without magnification is gross anatomy. A microscopic structure in a cell that carries out individual functions is an organelle. The directional term

<https://assignbuster.com/the-study-of-human-anatomy/>

that indicates being farther away from the point of attachment distal The structure that encloses a cell and controls the traffic of molecules in and out of a cell plasma membrane a structure composed of at least two different tissues, with recognizable boundaries, and with discrete function. organization process palp-touch, feel auscult-listen the directional term that indicates “above” superior Functional Morphology Chapter Definition: Not just the structure of organs, but the functional reasons behind it. History of Anatomy Older than any written language, earliest books written by 1) Aristotle, 2) Galen, 3) Avicenna 1) Aristotle the Greek Philosopher (384-322 BCE) 2) Galen the Greek physician (129-c. 199 CE) 3) Avicenna the Persian physician (Ibn Sina, 980-1037 CE) Modern Anatomy 16th Century. Andreas Vesalius Flemish physician (1514-64) questioned the accuracy of the earlier authorities and commissioned the first accurate anatomical illustrations for his book, *De Humani Corporis Fabrica* (On the Structure of the Human Body, 1543) The tradition begun by Vesalius has been handed down to us through such famous contemporary works as Gray’s Anatomy, Frank Netter’s Atlas of Human Anatomy, and many others, to the richly illustrated textbooks used by college students today. *De Humani Corporis Fabrica* (On the Structure of the Human Body, 1543) the first accurate anatomical illustrations Cadaver Chapter Definition: Deceased Body Present Anatomy New techniques of study continually produce exciting new insights into human structure, and anatomists have discovered far more about the human body in the last century than in the 2, 500 years before. Anatomy now embraces several subdisciplines that study human structure from different perspectives. Gross Anatomy Chapter Definition the study of structure visible to the naked eye Gross Anatomy Method surface observation, dissection, X-

<https://assignbuster.com/the-study-of-human-anatomy/>

Rays, and MRI scans

Surface Anatomy Chapter Definition the external surface of the body. especially important in conducting a physical examination of a patient.

Radiologic anatomy the study of internal structure, using X-rays and other medical imaging techniques

MRI scans entails examination of a two-dimensional image of a thin “ slice” through the body.

Systemic anatomy the study of one organ system at a time and is the approach taken by most introductory textbooks such as this one

Regional anatomy the study of multiple organ systems at once in a given region of the body, such as the head or chest

Histopathology is the microscopic examination of tissues for signs of disease

histology 1. the microscopic structure of tissues and organs.

2. The study of such structure

Cytology the study of the structure and function of individual cells

Ultrastructure Structure at or near the molecular level, made visible by the transmission electron microscope. refers to fine detail

comparative anatomy chapter definition the study of more than one species in order to examine structural similarities and differences and analyze evolutionary trends

inspection study method chapter definitions simply looking at the body’s appearance in careful detail, as in performing a physical examination or making a clinical diagnosis from surface appearance. Observations of the skin and nails, for example, can provide clues to such underlying problems as vitamin deficiencies, anemia, heart disease, and liver disease. Physical examinations involve not only looking at the body for signs of normalcy or disease, but also touching and listening to it

Palpation chapter definition feeling a structure with the hands, such as palpating a swollen lymph node or taking a pulse

Auscultation chapter definition listening to the natural sounds made by the body, such as heart and lung sounds

dissection chapter definition the careful cutting and

separation of tissues to reveal their relationships. The very words anatomy and dissection both mean “cutting apart”; until the nineteenth century, dissection was called “anatomizing.” exploratory surgery opening the body and taking a look inside to see what was wrong and what could be done about it. Any breach of the body cavities is risky, however, and most exploratory surgery has now been replaced by medical imaging techniques radiology The branch of medicine concerned with imaging is Radiologic methods high-energy ionizing radiation such as X-rays or particles called positrons. These penetrate the tissues and can be used to produce images on X-ray film or through electronic detectors. The benefits of ionizing radiation must always be weighed against its risks. It is called ionizing because it ejects electrons from the atoms and molecules it strikes. This effect can cause mutation and trigger cancer. Thus, ionizing radiation cannot be used indiscriminately. Used judiciously, however, the benefits of a mammogram or dental X-ray substantially outweigh the small risk. These are: noninvasive imaging techniques they do not involve any penetration of the skin or body orifices Invasive imaging techniques may entail inserting ultrasound probes into the esophagus, vagina, or rectum to get closer to the organ to be imaged, or injecting substances into the bloodstream or body passages to enhance image formation Radiography the process of photographing internal structures with X-rays Radiography facts first performed in 1895. Until the 1960s, this was the only widely available imaging method; even today, it accounts for more than 50% of all clinical imaging. X-rays pass through the soft tissues of the body to a photographic film or detector on the other side, where they produce relatively dark images. They are absorbed, however, by dense tissues such as bones, teeth,

tumors, and tuberculosis nodules, which leave the image lighter in these areas. The term X-ray also applies to a photograph (radiograph) made by this method. Radiography is commonly used for dentistry, mammography, diagnosis of fractures, and examination of the chest. Radiopaque substance that absorbs X-rays and can visualize hollow organs by filling them. a radiopaque Hollow organs can be visualized by filling them with Barium sulfate is given orally for examination of the esophagus, stomach, and small intestine, or by enema for examination of the large intestine angiography the examination of blood vessels. Substance given by injection for this. Disadvantages of Radiography images of overlapping organs can be confusing and slight differences in tissue density are not easily detected. In addition, X-rays present the aforementioned risks of ionizing radiation.