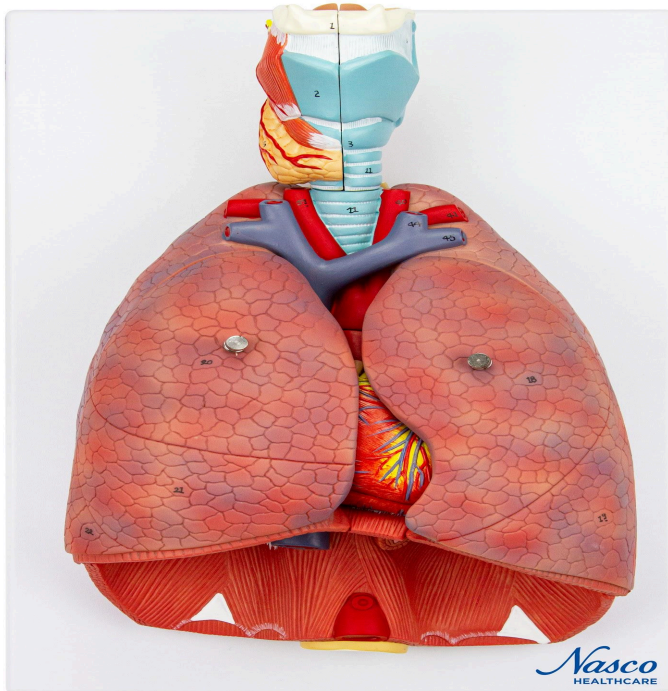
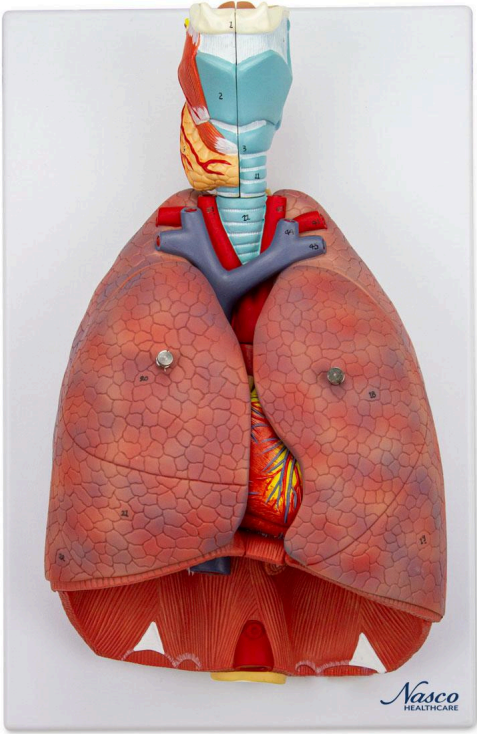
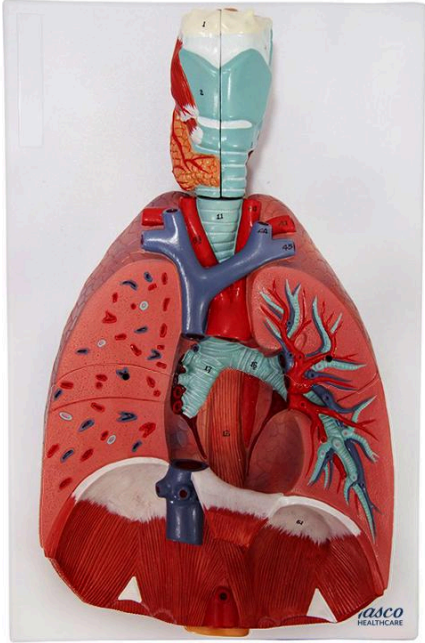
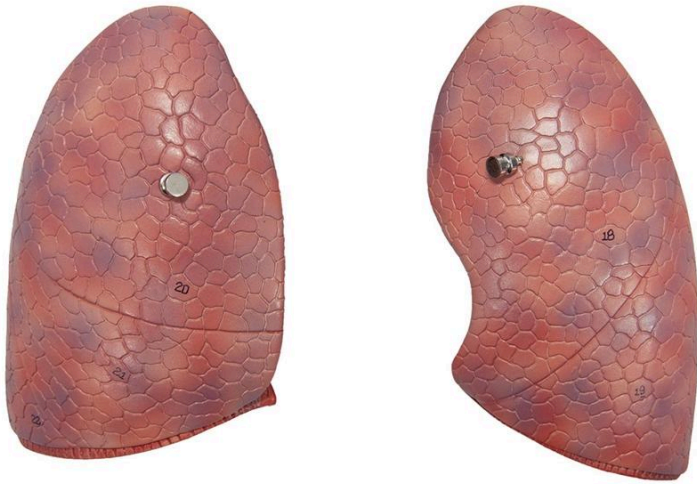


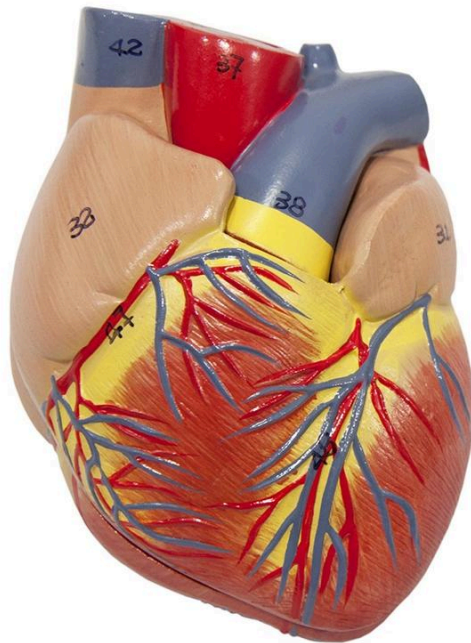
**MG30888 | HUMAN LUNG WITH LARYNX, 7
PARTS**



Nasco HEALTHCARE







A life-size reproduction of the complete human respiratory system, showing the larynx, lungs, and heart. The model is composed of 7 parts, with the larynx dissected along a sagittal plane, the lungs dissected along a frontal plane, and the heart divided into 2 parts.

Applications:

Ideal for detailed study of the human respiratory system, including the larynx, lungs, and heart. Used in anatomy, physiology, and pathophysiology classes, as well as for training healthcare professionals.

Technical Differentiators:

- * Life-size reproduction for detailed visualization of structures.
- * Larynx dissected along a sagittal plane for exposure of internal structures.
- * Lungs dissected along a frontal plane for analysis of pulmonary anatomy.
- * Heart divided into 2 parts for study of cardiac chambers and valves.

3D Technology and Augmented Reality:

Our anatomical models offer an innovative visual complement through information cards that activate 3D models viewable in augmented reality (AR). This exclusive interactive platform stimulates learning, allowing for comparative analysis of anatomical structures and offering opportunities for continuing education in anatomy, physiology, and pathophysiology.



Technical Specifications:

- * Scale: Life-size
- * Number of Parts: 7
- * Structures Represented: Larynx, lungs, and heart.

Main Structures:

Left Upper Lobe: The left upper lobe is one of the two main divisions of the left lung, responsible for a significant portion of respiratory capacity and gas exchange. Its anatomy is adapted to maximize the efficiency of ventilation and blood perfusion.

Right Upper Lobe: The right upper lobe is one of the three divisions of the right lung. It is crucial for blood oxygenation and carbon dioxide removal, playing a vital role in overall respiratory function.

Right Middle Lobe: Present only in the right lung, the right middle lobe is located between the upper and lower lobes. It contributes to respiratory function and is separated from the other lobes by pleural fissures.

Left Lower Lobe: The left lower lobe is the largest division of the left lung, occupying the lowest portion of the thoracic cavity. It plays a fundamental role in breathing and gas exchange.

Right Lower Lobe: The right lower lobe is the largest division of the right lung, located in the lower part of the thoracic cavity. This lobe is essential for respiratory function and for the efficient exchange of oxygen and carbon dioxide.

Diaphragm: The diaphragm is a large, dome-shaped skeletal muscle located at the base of the thoracic cavity, separating it from the abdominal cavity. Its main function is breathing, contracting to increase the volume of the thoracic cavity and allow air to enter the lungs.

Brachiocephalic Trunk: The brachiocephalic trunk is the first and largest branch of the aortic arch. It divides into the right subclavian and right common carotid arteries, supplying blood to the right arm, neck, and head.

Internal Jugular Vein: The internal jugular vein is one of the main veins in the neck, responsible for draining blood from the brain, face, and neck. It runs alongside the carotid artery and the vagus nerve.

Subclavian Vein: The subclavian vein is a large vein located below the clavicle, responsible for draining blood from the arm and upper chest. It joins the internal jugular vein to form the brachiocephalic vein.



Left Subclavian Artery: The left subclavian artery is an important blood vessel that supplies blood to the left arm, neck, and part of the chest. It originates directly from the aortic arch and continues as the axillary artery.

Other structures can be verified directly on the physical piece or in the interactive 3D model.

Smart Tags:

Designed to provide comprehensive training in the healthcare field, with interactive simulations covering Heart and Lung exams. This solution assists in the development of diagnostic skills in different clinical scenarios, allowing professionals and students to explore and enhance their skills with greater safety and accuracy.

Heart sound recognition: Recognize 23 unique heart sounds with different patient postures and tools.

- Apex, Normal S1 S2, Supine, Bell
- Apex, Split S1, Supine, Bell
- Apex, S4, LLD, Bell
- Apex, Mid Systolic Click, Supine, Bell
- Apex, S3, LLD, Bell
- Apex, Early Systolic Murmur, Supine, Bell
- Apex, Mid Systolic Murmur, Supine, Bell
- Apex, Late Systolic Murmur, Supine, Bell
- Apex, Holosystolic Murmur, Supine, Bell
- Apex, Systolic Click & Late Systolic Murmur, LLD, Bell
- Apex, S4 & Mid Systolic Murmur, LLD, Bell
- Apex, S3 & Holosystolic Murmur, LLD, Bell
- Apex, OS & Diastolic Murmur, LLD, Bell
- Aortic, Normal S1 S2, Sitting, Bell
- Aortic, Systolic Murmur & Absent S2, Sitting, Bell
- Aortic, Early Diastolic Murmur, Sitting, Bell
- Aortic, Systolic & Diastolic Murmur, Sitting, Bell
- Pulmonary, Single S2, Supine, Diaphragm
- Pulmonary, Split S2 Persistent, Supine, Diaphragm
- Pulmonary, Split S2 Transient, Supine, Diaphragm
- Pulmonary, Ejection Systolic Murmur & Transient Split S2, Supine, Diaphragm
- Pulmonary, Split S2 & Ejection Systolic Murmur, Supine, Diaphragm
- Pulmonary, Ejection Systolic Murmur & Single S2 & Ejection Click, Supine, Diaphragm

Lung sound recognition: Recognize 15 lung sounds and breathing pattern analysis.

- Agonal Breathing
- Asthma Wheezing
- Bronchial
- Bronchovesicular



- Crackles - Coarse
- Crackles - Fine
- Crackles - Pulmonary Edema
- Crackles - Bronchiectasis
- Death Rattle
- Inspiratory Stridor
- Pleural Rubs
- Rhonchi - Low-Pitched Wheezes
- Vesicular - Normal
- Wheeze
- Wheeze-COPD

Virtual Patient Monitor: Provides an immersive and realistic training environment for healthcare students. It allows instructors to customize parameters for various vital signs, empowering students to interpret signals, develop critical thinking, and enhance their clinical reasoning skills through realistic scenarios.

Customizable Vital Signs

- Blood Pressure
- SpO2
- Heart Rate

ECG Interpretation: Train on 18 diverse ECG scenarios, including: Atrial Fibrillation, Ventricular Tachycardia and Heart Blocks. The monitor also simulates synchronized pulses with ECG for truly realistic cardiology training.

ECG Patterns

- Sinus Rhythm
- Atrial Extrasystole
- Atrial Flutter
- Atrial Fibrillation
- Paroxysmal Supraventricular Tachycardia (PSVT)
- Ventricular Extrasystole
- Ventricular Tachycardia (VT)
- Ventricular Fibrillation (VF)
- First-Degree Atrioventricular Block (AVB)
- Second-Degree Atrioventricular Block
- Third-Degree Atrioventricular Block (Complete Block)
- Long QT Syndrome
- ST Segment Elevation
- ST Segment Depression
- T Wave Inversion
- Left Ventricular Hypertrophy (LVH)
- Right Ventricular Hypertrophy (RVH)



- Wolff-Parkinson-White Syndrome (WPW)

Breathing Patterns

- Normal
- Dyspnea
- Apnea
- Cheyne-Stokes
- Biot
- Kussmaul

About Anatomical Models:

They are developed with resin replication technology, addressing the scarcity of natural anatomical pieces for teaching and research. They present all the essential morphological characteristics with excellent cost-benefit, resistance, manual painting, and numbering for precise identification of structures.

List of all visible structures:

- Left upper lobe
- Right upper lobe
- Right middle lobe
- Left lower lobe
- Right lower lobe
- Diaphragm
- Brachiocephalic trunk
- Internal jugular vein
- Subclavian vein
- Left subclavian artery
- Pulmonary trunk
- Cricoid cartilage
- Trachea
- Trachea
- Thyroid cartilage
- Hyoid bone
- Thyroid gland
- Superior laryngeal nerve
- Thyrohyoid membrane
- Esophagus