

Respiratory System

This is the chapter slice "The Respiratory System - Lungs" from the full lesson plan "Senses, Nervous & Respiratory Systems" How long is a nerve cell? How are our lungs like a train station? We answer these questions and much more in our second resource on the human body. Curriculum-based material written in an easy-to-understand way makes this a hit for teachers and students alike. Loaded with information on the brain, spinal cord and nerves, students will learn the main parts of the nervous system and how each works. Also investigate the organs of the five senses, and then take a trip around the respiratory system! Find out exactly where air goes when we breathe it in, and then out. Reading passages, comprehension questions, hands-on activities and color mini posters are provided. Also included: Crossword, Word Search, Test Prep and Final Quiz. All of our content is aligned to your State Standards and are written to Bloom's Taxonomy and STEM initiatives.

It is rare indeed for one book to be both a first-rate classroom text and a major contribution to scholarship. The Pathway for Oxygen is such a book, offering a new approach to respiratory physiology and morphology that quantitatively links the two. Professionalism in science has led to a compartmentalization of biology. Function is the domain of the physiologist, structure that of the morphologist, and they often operate with vastly disparate concepts and procedures. Yet the performance of the respiratory system depends both on structural and on functional properties that cannot be separated. The first chapter of The Pathway for Oxygen engages the student with the design and function of the vertebrate respiratory organs from a comparative viewpoint. The second chapter adds to that foundation the link between cell energetics and oxygen needs of the whole animal. With Chapter 3 the excitement begins-- new ideas, fresh attacks on old problems, and a fuller account of the power of the quantitative approach. Dr. Weibel has pioneered. The Pathway for Oxygen will be read eagerly by medical students, graduate students, advanced undergraduates in zoology--and by their professors.

"Engaging text and informative images help readers learn about their respiratory system" --

Describes the respiratory system and how it works.

Respiratory System Diseases

20 Fun Facts About the Respiratory System

An Analysis of the Interplay between Anatomy, Structure, Breathing and Fractal Dynamics

Describes the anatomy, function, mechanics, diseases, and disorders of the human respiratory system.

This is an integrated textbook on the respiratory system, covering the anatomy, physiology and biochemistry of the system, all presented in a clinically relevant context appropriate for the first two years of the medical student course. One of the seven volumes in the Systems of the Body series. Concise text covers the core anatomy, physiology and biochemistry in an integrated manner as required by system- and problem-based medical courses. The basic science is presented in the clinical context in a way appropriate for the early part of the medical course. There is a linked website providing self-assessment material ideal for examination preparation.

In an informative and easy-to-understand look at the respiratory system, the author discusses what this body system is and what organs are involved in its various processes. She discusses the potential health problems that can affect the respiratory system, such as cancer, pneumonia, and emphysema, as well as ways to keep healthy and problem-free. Little-known facts about the respiratory system are also included.

Illustrates the respiratory system from the frontal sinus to the diaphragm. Includes views of the paranasal sinuses, larynx, and bronchopulmonary segments. Also shows the structure of intrapulmonary airways and the cross section of alveolus. Discusses the conducting system, lungs and pleurae, ventilation and gas exchange.

Senses, Nervous & Respiratory Systems: The Respiratory System - Lungs Gr. 5-8

The Human Respiratory System

Respiratory System, The

Following the familiar, easy to use at a Glance format, and now in full-colour, The Respiratory System at a Glance is an accessible introduction and revision text for medical students. Reflecting changes to the content and assessment methods used in medical education and published clinical recommendations, this at a Glance provides a user-friendly overview of the respiratory system to encapsulate all that the student needs to know. This new edition of The Respiratory System at a Glance: Integrates both basic and clinical science - ideal for systems-based courses Includes both the pathophysiology and clinical aspects of the respiratory system Features more case studies, updated and colour figures, and new chapters on the epidemiology of respiratory disease, public health issues, and Sarcoidosis Includes self-assessment questions and answers and an appendix of tables of standard values Provides a simple 'one-stop' easy to use course and revision text

Colorful graphics, engaging text, and fun, close-up photographs invite young readers to become familiar with their respiratory system. In this book, readers will learn how their nose, mouth, trachea, and lungs work together to breathe in and out. Simple diagrams highlight major parts of the respiratory system. Bronchi, bronchioles, and alveoli are also described, as well as the exchange of oxygen and carbon dioxide. In addition, readers will learn about nutrition, exercise, and safety to keep their respiratory system healthy. Features include a table of contents, fun facts, diagrams, health tips, a glossary with phonetics, and an index. Buddy Books is an imprint of ABDO Publishing Group.

Through engaging text, readers learn about the human body l s respiratory system. Topics include the nose, sinuses, windpipe, bronchial tree, throat, tonsils, larynx, and lungs. Readers learn that snot keeps the lining of the body l s airways from drying out and that the diaphragm is the main respiratory muscle. A detailed diagram allows readers to follow a molecule of oxygen through the respiratory system. Kid-friendly text introduces respiratory problems, such as the common cold and influenza, and diseases, such as asthma and lung cancer. Also highlighted are ways to keep the respiratory system in good shape. Full-color photos, medical models, phonetics, glossary, and index enhance the text.

Respiratory system and artificial ventilation are key topics when considering the main aspects of Anaesthesiology and Critical Care Medicine. This book includes contributions by an international panel of authors. It collects valuable expertise to illustrate principles, and to study results and case experiences on respiratory physiopathology, respiratory mechanics, respiratory functions monitoring, artificial ventilation and diagnostic radiology in respiratory dysfunction failure.

The Respiratory System

Structure and Function in the Mammalian Respiratory System

Respiratory System and Artificial Ventilation

Discusses what the respiratory system is, how it works, and how it may be affected by various diseases.

Respiratory System, 2nd Edition provides a concise and highly visual approach to the basic sciences and clinical pathology of this body system. This volume in The Netter Collection of Medical Illustrations (the CIBA "Green Books") has been expanded and revised by Dr. David Kaminsky to cover important topics like pulmonary hypertension, COPD, asthma, drug-resistant TB, modern endoscopic and surgical techniques, and more. Classic Netter art, updated illustrations, and modern imaging make this timeless work essential to your library. Access rare illustrations in one convenient source from the only Netter work devoted specifically to the respiratory system. Get a complete overview of the respiratory system through multidisciplinary coverage from physiology and biochemistry to adult and pediatric medicine and surgery. Gain a quick understanding of complex topics from a concise text-atlas format that provides a context bridge between primary and specialized medicine. Grasp the nuances of the pathophysiology of today's major respiratory conditions—including pulmonary hypertension, COPD, asthma, environmental lung disease, sleep disorders, infections of the immunocompromised, neonatal breathing disorders, and drug-resistant TB, and modern endoscopic and surgical techniques—through advances in molecular biology and radiologic imaging. Benefit from the expertise of the new editor, David Kaminsky, MD, who contributes significant experience in asthma and general pulmonary and critical care medicine, and his team of world class contributors. Clearly see the connection between basic and clinical sciences with an integrated overview of normal structure and function as it relates to pathologic conditions. Apply a visual approach—with the classic Netter art, updated illustrations, and modern imaging—to normal and abnormal body function and the clinical presentation of the patient. Tap into the perspectives of an international advisory board for content that reflects the current global consensus.

This graphic nonfiction book introduces the respiratory system in the human body. The Building Blocks of Life Science volumes feature whimsical characters to guide young readers through topics exploring the human body systems. Full-page or full-spread diagrams detail the different parts of each body system. The science is as sound as the presentation is fun! The volumes include a glossary, an additional resource list, and an index. Several spreads in each volume are illustrated with photographs to help clarify concepts and facts.

Books prepared as per NORCET, AIIMS, RRB, ESIC, DSSSB, JIPMER, PGIMER, GMERS, COH-GUJARAT etc. FAQs & IMP Topics are Covered Highly Successful Team Chosen Contents Also Available in English, Gujarati & Hindi

The Respiratory System E-Book

Diagnostic Evaluation of the Respiratory System

The Science of the Lungs and Respiratory System

This book is a practical guide to the diagnosis of respiratory disorders, helping clinicians recognise signs and symptoms, decide on the most appropriate diagnostic tests, and to interpret the results. Divided into four sections, the book covers respiratory system assessment, evaluation of respiratory function, diagnostic imaging, and invasive diagnostic techniques. The imaging section includes radiograph, computed tomography, angiography, and ultrasonography. The invasive diagnostic procedures section covers bronchoscopy, lung biopsy, transbronchial needle aspiration and more. Video-assisted thoracic surgery as a diagnostic tool is also discussed. Authored by recognised expert Professor Claudio Sorino from University of Palermo, this useful manual is enhanced by clinical images and figures. Key Points Practical guide to diagnosis of respiratory disorders. Helps clinicians recognise signs and symptoms, choose appropriate diagnostic tests and interpret results Includes chapter on video-assisted thoracic surgery as a diagnostic tool Authored by recognised expert from University of Palermo

The Human Respiratory System combines emerging ideas from biology and mathematics to show the reader how to produce models for the development of biomedical engineering applications associated with the lungs and airways. Mathematically mature but in his infancy as far as engineering uses are concerned, fractional calculus is the basis of the methods chosen for system analysis and modelling. This reflects two decades' worth of conceptual development which is now suitable for bringing to bear in biomedical engineering. The text reveals the latest trends in modelling and identification of human respiratory parameters with a view to developing diagnosis and monitoring technologies. Of special interest is the notion of fractal structure which is indicative of the large-scale biological efficiency of the pulmonary system. The related idea of fractal dimension represents the adaptations in fractal structure caused by environmental factors, notably including disease. These basics are linked to model the dynamical patterns of breathing as a whole. The ideas presented in the book are validated using real data generated from healthy subjects and respiratory patients and rest on non-invasive measurement methods. The Human Respiratory System will be of interest to applied mathematicians studying the modelling of biological systems, to clinicians with interests outside the traditional borders of medicine, and to engineers working with technologies of either direct medical significance or for mitigating changes in the respiratory system caused by, for example, high-altitude or deep-sea environments.

Discusses the parts that make up the human respiratory system, what can go wrong, how to treat those illnesses and diseases, and how to stay healthy.

Describes the various parts of the respiratory system and how they work, and discusses asthma, lung cancer and other lung diseases, and related topics.

Your Respiratory System Works!

Why Do I Feel Out of Breath?

Breathtaking Respiratory System

A True Book explores the respiratory system, explaining why and how people breathe, how each organ works, and how certain diseases can influence respiration. Reprint.

"How does oxygen reach our cells? What does our body do with the carbon dioxide it produces? Each breath we take demonstrates the marvel of the human lungs and respiratory system. This accessible book gives inquisitive readers an inside look at this essential bodily function. Engaging graphics and concise language create a reader-friendly experience that will attract even those who are reluctant to study science materials. Fun, easy-to-follow flowcharts summarize key concepts at the end of each chapter, ensuring that readers are able to visualize and retain essential information. This unique, visually rich approach to learning will make this book stand out in any library."

Simple text, photographs, and diagrams introduce the respiratory system and its purpose, parts, and functions.

Did you know the average adult takes 12 to 20 breaths per minute when not doing physical activity? Adults take between 17,000 and 23,000 breaths per day. Discover more fascinating facts in Respiratory System, a title in the Body Systems series. Each title in Body Systems guides readers through the fascinating inner workings of the human body. The human body contains several complex systems that work closely together to support life and allow the body to function properly. Each book explores the characteristics and interactions of these systems, their makeup, and their importance. This is an AV2 media enhanced book. A unique book code printed on page 2 unlocks multimedia content that brings the book to life. This book comes alive with audio, video, weblinks, slideshows, activities, quizzes, and much more.

Basic science and clinical conditions

Easy to Understand

The Respiratory System at a Glance

Approximately ten years have elapsed since the second volume of the International Life Sciences Institute (ILSI) Monographs on Pathology of Laboratory Animals, Respiratory System, was first completed. New in formation of interest to pathologists has developed at a rather remark able pace during these years. Exceptional progress has been made in the routine identification of enzymes and cell products in respiratory cells. A better understanding has developed on the functions of cells of the respiratory tract and of the mechanisms involved in cell metabolism, particularly those involving toxins and carcinogens. Clear concepts have developed concerning the significance of pathologic lesions, particularly in the upper respiratory tract and their relation to human health and risk assessment. Standardized nomenclature has developed significantly dur ing the 10-year period since the first edition and is being utilized on an international basis. This has resulted in significant improvement in com munication of pathologic data to regulatory agencies and in scientific publications worldwide. This monograph series and others sponsored by ILSI have had significant effects on these improved communications and the international acceptance of standardized nomenclature. In this sec ond edition, new formats have been used where more appropriate for the subjects to be covered.

An elementary-level exploration of the human body's respiratory system, focused on structures, function, diseases, and God's wonderful designs Fast facts and important discoveries that help medical professionals understand the mechanisms of our lungs, sinus cavities, and diaphragm Find out why the common cold isn't so common after all. Hundreds of viruses can cause the over 1 billion cases of the "common" cold each year! With a loud piercing wail, most of us entered this world as a crying baby taking in our first big breath of air. Breathe in. Breathe out. You hardly notice your respiratory system at work every minute, day and night, awake or asleep, without fail. From our first breath to our last, breathing is truly essential to life. Come on a captivating odyssey through the wind tunnels of the body and be prepared to be amazed! What happens when we hold our breath? What powers the over 23,000 breaths each of us takes daily? The surface area of the alveoli in your lungs alone could cover the surface of an entire tennis court! Breeze in and learn more about these and the other incredible examples in the God's Wondrous Machine series with The Breathing Respiratory System.

Did you know all the air you breathe in passes through a special filtration system? It is one of the many ways the respiratory system keeps your body running smoothly! In this title, leveled text explains how the respiratory system works both inside and outside the body while vibrant photos and diagrams keep young readers engaged.

How do we breathe and why do we need oxygen? Your lungs work hard to keep oxygen flowing through your blood. This book explains how the respiratory system functions to take in the air we need to live.

Guide - Respiratory System - 2021-14

Netter Collection of Medical Illustrations: Respiratory System E-Book

Basic Science and Clinical Conditions

This book proposes an introduction to the mathematical modeling of the respiratory system. A detailed introduction on the physiological aspects makes it accessible to a large audience without any prior knowledge on the lung. Different levels of description are proposed, from the lumped models with a small number of parameters (Ordinary Differential Equations), up to infinite dimensional models based on Partial Differential Equations. Besides these two types of differential equations, two chapters are dedicated to resistive networks, and to the way they can be used to investigate the dependence of the resistance of the lung upon geometrical characteristics. The theoretical analysis of the various models is provided, together with state-of-the-art techniques to compute approximate solutions, allowing comparisons with experimental measurements. The book contains several exercises, most of which are accessible to advanced undergraduate students.

Describes the various parts of the human respiratory system and then explains how that system brings fresh oxygen into the body and carries carbon dioxide to the lungs to be expelled.

Oxygen is one of the most essential needs for life on Earth, and respiration is how living things use it. But there's a lot more going on in this seemingly simple process than you might think. The respiratory system is in some ways the most underappreciated of the body systems, since it works 24/7, mostly without being noticed, and never gets a single moment's rest. In this book, readers discover the most fascinating facts about respiration, the structure of the lungs, and even some of the seemingly gross processes that happen in their body!

Describes the anatomy and functions of the respiratory system and examines respiratory diseases and how they affect the rest of the body.

The Pathway for Oxygen

The Respiratory System in Equations

Respiratory System

The Respiratory System at a Glance is a concise, readily accessible introduction and revision text for medical students. Part of the At a Glance series, the book uses one page of illustrations and one page of text per topic to explain subjects in an easy to understand and clear manner. This book is an invaluable resource for all medical students, as well as students of nursing and other allied health professions who need an introduction to the respiratory system. It will also be an indispensable resource and revision aid for Junior Doctors and Respiratory nurses. Review quotes of the first edition: 'An excellent book' **** Student review on Amazon.co.uk 'Suddenly it's all so simple ...I thoroughly recommend this book.' GKT Gazette, Autumn 2003 '.the book provides a succinct yet easy-to-follow approach' Cambridge Medical Magazine, Autumn 2003 '. this book would be an excellent purchase for any undergraduate medical student' 4th year, Imperial Medical School

Both communicable and noncommunicable diseases of the respiratory system are an increasing healthcare problem despite medical advances. This book aims at unraveling the mechanisms and improving the treatment of pulmonary pathologies, ranging from such common conditions like influenza and related viral infections, functional lung dysfunction, to lung lesions and others. Chapters present late-breaking findings in the diagnostics, pharmacotherapy, and clinical evidence-based decision-making to provide results that can be used to improve healthcare and quality of life. Extending new knowledge and exploring recent medical advances, the book will hopefully help enrich research and clinical experience regarding important respiratory issues. The book is intended for general practitioners and all professionals engaged in the pulmonary field, from basic scientists to clinical investigators.

Aimed principally at those on the 'new' medical curriculum, this textbook on the respiratory system covers the structure and function of the system and its major diseases. It offers integrated coverage of the structure, function and major diseases of the respiratory system.

Describes the workings of the respiratory system and its functions. Also discusses respiratory problems and how they can be avoided

Anatomy - Respiratory System/Lower Respiratory Tract

Learning About the Respiratory System

Describes the anatomy and function of the human respiratory system, and explains how and why people can have difficulty breathing.