

Basic Anatomy & Physiology

Media Type: Microsoft® PowerPoint® Presentation

Duration: 110 slides

Goal: To define anatomy and physiology and introduce its components, as well as to illustrate how the systems function.

Description: Understanding the role and functions of basic anatomy and physiology are important in understanding human health. This presentation showcases the roles of each level of organization and how they function. It also describes essential medical terms used in anatomy and physiology.

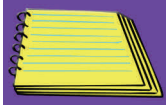
Objectives:

1. To examine the fields of anatomy and physiology.
2. To illustrate the different methods of dividing the body.
3. To discover the meanings of various directional terms and scientific prefixes and suffixes.
4. To distinguish the organization levels of the body.

Horizontal Alignment

Core-Subject Area	Foundation Concept	Basic Understanding
Math	<i>Geometrical Figures, Principles and Applications</i>	<ul style="list-style-type: none">• Graphical relationships• Lines, patterns and shapes
Language Arts	<i>Application of Writing Skills</i>	<ul style="list-style-type: none">• Composition mechanics• Descriptive, informative and creative writing• Organizing logical arguments• Brainstorming• Utilizing reference materials• Vocabulary Enhancement
	<i>Analysis of Text, Literature and Information</i>	<ul style="list-style-type: none">• Reading/content literacy• Critical thinking• Expression of thought and ideas• Developing listening and comprehension skills• Creating visual representations
Science	<i>Scientific Thinking and Investigating</i>	<ul style="list-style-type: none">• Field and laboratory investigations• Compare/contrast findings
	<i>Scientific Law and Principles</i>	<ul style="list-style-type: none">• Cycles, structures and processes• Principles of biology, anatomy and physiology• Human development

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Lesson Plan

Student and Teacher Notes are available to print in outline format. You can access these documents under the “Printable Resources” section. If student licenses have been purchased, an interactive version of the Student Notes is available in the “Interactive Activities” section. If printing the full PowerPoint® is desired, you may download the file and print the handouts as needed.

Class 1: Pass out *Basic Anatomy & Physiology Vocabulary Handout*. Show slides 1 to 28 of *Basic Anatomy & Physiology - Essential Medical Terminology* segment. Have students begin the *Medical Terminology Match Up Activity*.



Slides
1-28

Class 2: Remind students to continue using the *Vocabulary Handout*. Show sides 29 to 56 of *Basic Anatomy & Physiology - Essential Medical Terminology* segment. Follow the segment with its *Assessment*. Have students start working on the *Basic Anatomy & Physiology Lab Book: Essential Medical Terminology Project*.



Slides
29-56

Class 3: Show slides 57 to 80 of *Basic Anatomy & Physiology - Levels of Organization* segment. Have students complete the *Basic Anatomy & Physiology Lab Book: Essential Medical Terminology Project*.



Slides
57-80

Class 4: Remind students to continue using the *Vocabulary Handout*. Show slides 81 to 102 of *Basic Anatomy & Physiology - Levels of Organization* segment. Have students begin *Levels of Organization Poster Activity*.



Slides
81-102

Class 5: Show slides 103 to 110 of *Basic Anatomy & Physiology - Levels of Organization* segment. Follow the segment with its *Assessment*. Have students start working on the *Basic Anatomy & Physiology Lab Book: Levels of Organization Project*.



Slides
103-110

Class 6: Review the previous days’ materials. Administer the *Basic Anatomy & Physiology Final Assessment*. Have students complete and bind their *Basic Anatomy & Physiology Lab Books*.



Lesson Links

Human Anatomy

- www.innerbody.com

Anatomy

- <http://www.nlm.nih.gov/medlineplus/>



Career & Technical Student Organizations

Future Business Leaders of America

- Digital Design & Promotion

Family, Career & Community Leaders of America

- Interpersonal Communications
- Nutrition and Wellness

SkillsUSA

- Health Knowledge Bowl
- Medical Math
- Medical Terminology



Career Connections

Using the *Career Connections Activity*, allow students to explore the various careers associated with this lesson. See the *Activity* for more details. *If student licenses have been purchased:* Students will select the interviews to watch based on your directions. *If only a teacher license is purchased:* Show students all the career interviews and instruct them to only complete the interview form for the required number of interviews.

- iCEV50839, Tim Smith, Change Nurse, Covenant Medical Center
- iCEV50840, Robert Curlee, Licensed Vocational Nurse, Covenant Medical Center
- iCEV50841, Kathy Chauncey, Ph.D., Associate Professor, Health Sciences Center, Texas Tech University

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Lab Activities

Medical Terminology Match Up

Directions:

Students will learn essential medical terminology associated with anatomy and physiology by matching the essential medical terms with their definitions.

Levels of Organization Poster

Directions:

Students will better understand the individual phases of the levels of organization by constructing a poster which analyzes the individual phases.



Projects

Basic Anatomy & Physiology Lab Book Project: Essential Medical Terminology

Directions:

Students will develop a lab book which will contain all the diagrams they make throughout the *Basic Anatomy & Physiology* lessons. Students should have a three-ring binder or folder with brads to store the diagrams they create. Students will develop a plane of reference, body cavities, body quadrants, body membranes, directional terminology, anterior regional terms and posterior regional terms diagrams to be placed in the *Basic Anatomy & Physiology Lab Book*.

Basic Anatomy & Physiology Lab Book Project: Levels of Organization

Directions:

Students will develop levels of organization, cell, epithelial tissue, muscular tissue, muscle tissues and nervous tissue diagrams to be placed in the *Basic Anatomy & Physiology Lab Book*.