

Course: Anatomy and Physiology

Course Number: 2000350

Title: Understanding Human Anatomy and Physiology, 5th edition

Author: Mader

Publisher: Glencoe/McGraw-Hill

Copyright: 2005

Online Resources used in Correlations

These resources are made available for the instructor and/or student and are referenced within the correlation. They are available via the Online Learning Center (OLC):

www.mhhe.com/florida/maderap5

User Name: rvwmaderap5

Password: glencoe

PowerWeb: http://highered.mcgraw-hill.com/sites/0072935154/student_view0/powerweb.html

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Online Learning Center Chapter Resources/OLC: http://highered.mcgraw-hill.com/sites/0072935154/student_view0/chapter1/

Interactive Lab Exercises/Lab Exercises: http://highered.mcgraw-hill.com/sites/0072935154/student_view0/interactive_lab_exercises.html

Animation Activities/Animations: http://highered.mcgraw-hill.com/sites/0072935154/student_view0/animation_activities.html



**CORRELATION
SUNSHINE STATE STANDARDS
& GRADE LEVEL EXPECTATIONS**

SUBJECT/COURSE: Anatomy and Physiology

COURSE CODE NUMBER: 2000350

SUBMISSION TITLE: Understanding Human Anatomy and Physiology, 5th Edition by Mader © 2005

PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 1. Demonstrate Effective Implementation of Scientific Habits of Mind

STRAND: No strand

STANDARD: No standard

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
No benchmark. References to intended outcome.	LM 1-8 (I)				

*In depth/Mentioned



**CORRELATION
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SUBJECT/COURSE: Anatomy and Physiology

COURSE CODE NUMBER: 2000350

SUBMISSION TITLE: Understanding Human Anatomy and Physiology, 5th Edition by Mader © 2005

PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 2. Apply knowledge of the nature of science, scientific methodology, and historical context to solve problems, and employ safe and effective use of laboratory technologies.

STRAND: H. The Nature of Science

STANDARD: 1. The student uses the scientific processes and habits of mind to solve problems.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
SC.H.1.4.1 know that investigations are conducted to explore new phenomena, to check on previous results, to test how well a theory predicts, and to compare different theories.	<i>LM 1-8 (M)</i>	<u>POWERWEB</u> <u>Unit 1</u> —Articles 1, 2, 4, 5	<u>POWERWEB</u> <u>Unit 1</u> —Articles 1, 2, 4, 5 – <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 1</u> —Articles 1, 2, 4, 5	
SC.H.1.4.2 know that from time to time, major shifts occur in the scientific view of	<i>LM 254 (M)</i>	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5 – <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5	

how the world works, but that more often the changes that take place in the body of scientific knowledge are small modifications of prior knowledge.		<u>Unit 2</u> -article 8	<u>Unit 2</u> -article 8 – <u>Quiz</u>	<u>Unit 2</u> -article 8	
SC.H.1.4.3 understand that no matter how well one theory fits observations, a new theory might fit them as well or better, or might fit a wider range of observations, because in science, the testing, revising, and occasional discarding of theories, new and old, never ends and leads to an increasingly better understanding of how things work in the world, but not to absolute truth.	<i>LM 1-8 (M)</i>	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5 <u>Unit 2</u> -article 8	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5 - <u>Quiz</u> <u>Unit 2</u> -article 8 - <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5 <u>Unit 2</u> -article 8	
SC.H.1.4.4 know that scientists in any one research group tend to see things alike and that therefore scientific teams are expected to seek out the possible sources of bias in the design of their investigations and in their data analysis.	<i>LM 1 (M)</i>	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5 <u>Unit 2</u> -article 8	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5 - <u>Quiz</u> <u>Unit 2</u> -article 8 - <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4, 5 <u>Unit 2</u> -article 8	
SC.H.1.4.5 understand that new ideas in science are	<i>LM 1 (M)</i>	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4,	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4,	<u>POWERWEB</u> <u>Unit 1</u> —articles 1, 2, 4,	

<p>limited by the context in which they are conceived, are often rejected by the scientific establishment, sometimes spring from unexpected findings, and usually grow slowly from many contributors.</p>		<p>5 <u>Unit 2</u>-article 8</p>	<p>5 - <u>Quiz</u> <u>Unit 2</u>-article 8 - <u>Quiz</u></p>	<p>5 <u>Unit 2</u>-article 8</p>	
<p>SC.H.1.4.6 understand that, in the short run, new ideas that do not mesh well with mainstream ideas in science often encounter vigorous criticism and that, in the long run, theories are judged by how they fit with other theories, the range of observations they explain, how well they explain observations, and how effective they are in predicting new findings.</p>		<p><u>POWERWEB</u> <u>Unit 1</u>—articles 1, 2, 4, 5 <u>Unit 2</u>-article 8</p>	<p><u>POWERWEB</u> <u>Unit 1</u>—articles 1, 2, 4, 5 - <u>Quiz</u> <u>Unit 2</u>-article 8 - <u>Quiz</u></p>	<p><u>POWERWEB</u> <u>Unit 1</u>—articles 1, 2, 4, 5 <u>Unit 2</u>-article 8</p>	
<p>SC.H.1.4.7 understand the importance of a sense of responsibility, a commitment to peer review, truthful reporting of the methods and outcomes of investigations, and making the public aware of the findings</p>	<p><i>LM 1 (M)</i></p>				



**CORRELATION
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SUBJECT/COURSE: Anatomy and Physiology **COURSE CODE NUMBER:** 2000350

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PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 2. Apply knowledge of the nature of science, scientific methodology, and historical context to solve problems, and employ safe and effective use of laboratory technologies.

STRAND: H. The Nature of Science

STANDARD: 2. The student understands that most natural events occur in comprehensible, consistent patterns.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
SC.H.2.4.1 know that scientists assume that the universe is a vast system in which basic rules exist that may range from very simple to extremely complex, but that scientists operate on the belief that the rules can be discovered by careful, systemic study.	LM 323-326 (I)	<u>POWERWEB</u> <u>Unit 1</u> —Articles 1, 2, 4, 5	<u>POWERWEB</u> <u>Unit 1</u> —Articles 1, 2, 4, 5 - <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 1</u> —Articles 1, 2, 4, 5	
SC.H.2.4.2 know that	LM 287-290 (I)				

scientists control conditions in order to obtain evidence, but when that is not possible for practical or ethical reasons, they try to observe a wide range of natural occurrences to discern patterns.					
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SUBJECT/COURSE: Anatomy and Physiology

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PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 3. Demonstrate use of correct anatomic terminology for body regions, planes, and directions

STRAND: No strand

STANDARD: No standard

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
No benchmark. References to intended outcome.	3-7, (I) 14(M), 106 (I) LM 9-20 (I)	<u>ESP</u> <u>Levels of organization—</u> <u>introduction</u> <u>ANIMATIONS</u> <u>Anatomy - Animation</u>	<u>ESP</u> <u>Levels of organization—</u> <u>introduction – Quiz</u> <u>ANIMATIONS</u> <u>Anatomy – Quiz</u>		<u>ESP</u> <u>Levels of organization—</u> <u>introduction – Topic Review</u> <u>OLC</u> <u>Chapter 1—labeling, flashcards</u>

*In depth/mentioned



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GRADE: 9-12

INTENDED OUTCOME: 4. Demonstrate understanding of cell function and structure in healthy and diseased tissue.

STRAND: F. Processes of Life

STANDARD: 1. The student describes patterns of structure and function in living things.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
References to intended outcome, strand, standard.	<p>12(M) 36-52, 70-71, 73-75, 86-87-88, 136, 208-213, 214, 218-219 (I) 221(M) 257, 258-263 (I)</p>	<p><u>ESP</u> <u>Level of organization</u>—introduction; cell structure; cell function; cell division</p> <p><u>ANIMATIONS</u> Biological molecules, cells – <u>Animation</u></p>	<p><u>ESP</u> <u>Level of organization</u>—introduction; cell structure; cell function; cell division – <u>Quiz</u></p> <p><u>ANIMATIONS</u> Biological molecules, cells – <u>Quiz</u></p>	<p><u>POWERWEB</u> <u>Unit 3</u>—Articles 12, 13 <u>Unit 4</u>—Articles 22, 25, 26, 32, 36</p>	<p><u>ESP</u> <u>Level of organization</u>—introduction; cell structure; cell function; cell division - <u>Topic Review</u></p> <p><u>Lab exercises</u> cell size, active transport, cell-cell</p>

		<p><u>POWERWEB</u> Unit 3—Articles 12, 13</p> <p>Unit 4—Articles 22, 25, 26, 32, 36</p>	<p><u>POWERWEB</u> Unit 3—Articles 12, 13 - <u>Quiz</u></p> <p>Unit 4—Articles 22, 25, 26, 32, 36 - <u>Quiz</u></p>		<p>interactions, mitosis</p> <p><u>OLC</u> Chapters 3, 4, 11, 13— flashcards & labeling</p>
<p>SC.F.1.4.3 know that membranes are sites for chemical synthesis and essential energy conversions.</p>	<p>38-41, 43-45, 120-121 (I)</p>	<p><u>ESP</u> Levels of organization-- molecules of life; membrane functions, cell functions, cell division</p> <p><u>ANIMATIONS</u> Biological molecules, cells - <u>Animation</u></p> <p><u>POWERWEB</u> Unit 3—Articles 12, 13</p> <p>Unit 4—Articles 22, 25, 26, 32, 36</p>	<p><u>ESP</u> Levels of organization-- molecules of life; membrane functions, cell functions, cell division – <u>Quiz</u></p> <p><u>ANIMATIONS</u> Biological molecules, cells – <u>Quiz</u></p> <p><u>POWERWEB</u> Unit 3—Articles 12, 13 - <u>Quiz</u></p> <p>Unit 4—Articles 22, 25, 26, 32, 36 - <u>Quiz</u></p>	<p><u>POWERWEB</u> Unit 3—Articles 12, 13</p> <p>Unit 4—Articles 22, 25, 26, 32, 36</p>	<p><u>ESP</u> Levels of organization— molecules of life; membrane functions, cell functions, cell division – <u>Topic Review</u></p> <p><u>Lab exercises</u>— cell size, active transport, cell-cell interaction, mitosis, thermodynamics, enzymes, oxidative respiration, meiosis, constructing genetic map, DNA fingerprinting, reading DNA, gene regulation, restriction map</p> <p><u>OLC</u> Chapters 2,3, 4— flashcards & labeling</p>

<p>SC.F.1.4.5 know that complex interactions among the different kinds of molecules in the cell cause distinct cycles of activity governed by proteins.</p>	<p>28-29, 46-52, 214 (I)</p>	<p><u>ESP</u> <u>Levels of organization--</u> molecules of life; membrane functions, cell functions, cell division</p> <p><u>ANIMATIONS</u> <u>Biological molecules, cells - Animation</u></p> <p><u>POWERWEB</u> <u>Unit 3—Articles 12, 13</u> <u>Unit 4—Articles 22, 25, 26, 32, 36</u></p>	<p><u>ESP</u> <u>Levels of organization--</u> molecules of life; membrane functions, cell functions, cell division – <u>Quiz</u></p> <p><u>ANIMATIONS</u> <u>Biological molecules, cells – Quiz</u></p> <p><u>POWERWEB</u> <u>Unit 3—Articles 12, 13 - Quiz</u> <u>Unit 4—Articles 22, 25, 26, 32, 36 - Quiz</u></p>	<p><u>POWERWEB</u> <u>Unit 3—Articles 12, 13</u> <u>Unit 4—Articles 22, 25, 26, 32, 36</u></p>	<p><u>ESP</u> <u>Levels of organization—</u> molecules of life; membrane functions, cell functions, cell division – <u>Topic Review</u></p> <p><u>Lab exercises—</u> cell size, active transport, cell-cell interaction, mitosis, thermodynamics, enzymes, oxidative respiration, meiosis, constructing genetic map, DNA fingerprinting, reading DNA, gene regulation, restriction map</p> <p><u>OLC</u> Chapters 2,3, 4--flash cards & labeling</p>
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SUBMISSION TITLE: Understanding Human Anatomy and Physiology, 5th Edition by Mader © 2005

PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 5. Demonstrate Understanding of Homeostasis

STRAND: F. Processes of Life

STANDARD: 1. The student describes patterns of structure and function in living things.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
References to intended outcome, strand, standard.	10-12,78-79 (I) 81-82, 111(M), 136-137 (I) 138(M), 158-159, (I) 161(M) 186-203 (I) 205(M) 215 (I) 221(M) 233, 238, 248-249 (I) 251(M),	<u>ESP</u> <u>Support & movement</u> —skeletal system <u>Integration & Coordination</u> —endocrine system <u>Transport</u> —blood, cardiovascular, blood vessels	<u>ESP</u> <u>Support & movement</u> —skeletal system - <u>Quiz</u> <u>Integration & Coordination</u> —endocrine system - <u>Quiz</u> <u>Transport</u> —blood, cardiovascular, blood	<u>POWERWEB</u> <u>Unit 4</u> —Articles 21, 22, 23, 24, 25, 28, 29 <u>Unit 5</u> —Articles 40, 43, 46, <u>Unit 6</u> —Articles 47, 48, 49, 51	<u>ESP</u> <u>Support & movement</u> —skeletal system – <u>Topic Review</u> <u>Integration & Coordination</u> —endocrine system – <u>Topic Review</u> <u>Transport</u> —blood, cardiovascular, blood

	270-271 (I) 272-273(M) 283, 290-291, 304, 312-313 (I) 321(M) 330-333, 336-337 (I) 340(M) 348, 354-356, 364-365 (I) 367 (M)	<u>Absorption & Excretion</u> <u>Reproduction & Development</u> <u>Circulatory system, endocrine system, reproduction - Animation</u> <u>POWERWEB</u> <u>Unit 4</u> —Articles 21, 22, 23, 24, 25, 28, 29 <u>Unit 5</u> —Articles 40, 43, 46, <u>Unit 6</u> —Articles 47, 48, 49, 51	vessels - <u>Quiz</u> <u>Absorption & Excretion - Quiz</u> <u>Reproduction & Development - Quiz</u> <u>Circulatory system, endocrine system, reproduction – Quiz</u> <u>POWERWEB</u> <u>Unit 4</u> —Articles 21, 22, 23, 24, 25, 28, 29 - <u>Quiz</u> <u>Unit 5</u> —Articles 40, 43, 46 - <u>Quiz</u> <u>Unit 6</u> —Articles 47, 48, 49, 51 – <u>Quiz</u>		vessels – <u>Topic Review</u> <u>Absorption & Excretion – Topic Review</u> <u>Reproduction & Development – Topic Review</u> <u>Lab exercises</u> —thermodynamics, hemoglobin, evolution of heart <u>OLC</u> Chapters 1, 6, 7, 12,13, 15, 17— flashcards & labeling
SC.F.1.4.1 know that the body processes involve specific biochemical reactions governed by biochemical principles.	12, 74-75, 78, 116-121, 215 (I) 221 (M) 258-263, 285, 310-311, 315, 316-317 (I)	<u>ESP</u> <u>Levels of organization--chemistry; molecules of life;</u> <u>Absorption & excretion</u>	<u>ESP</u> <u>Levels of organization--chemistry; molecules of life - Quiz</u> <u>Absorption & excretion - Quiz</u>	<u>POWERWEB</u> <u>Unit 3</u> —Articles 12, 13 <u>Unit 4</u> — Articles 22, 25, 26, 32, 36	<u>ESP</u> <u>Levels of organization--chemistry; molecules of life – Topic Review</u> <u>Absorption & excretion – Topic Review</u>

		<p><u>POWERWEB</u> <u>Unit 3</u>—Articles 12, 13</p> <p><u>Unit 4</u>— Articles 22, 25, 26, 32, 36</p>	<p><u>POWERWEB</u> <u>Unit 3</u>—Articles 12, 13 - <u>Quiz</u></p> <p><u>Unit 4</u>— Articles 22, 25, 26, 32, 36 - <u>Quiz</u></p>		<p><u>Lab exercises</u> —cell size, active transport, cell-cell interaction, mitosis, enzymes, oxidative respiration</p> <p><u>OLC</u> Chapters 2, 3, 4, 13, 15 --flashcards & labeling</p>
<p>SC.F.1.4.4 understand that biological systems obey the same laws of conservation as physical systems.</p>	<p>12 (I)</p>	<p><u>ESP</u> <u>Levels of organization</u>--chemistry; molecules of life; membrane functions</p> <p><u>ANIMATIONS</u> Chemistry, biological molecules, cells - <u>Animation</u></p> <p><u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5</p> <p><u>Unit 3</u>—Articles 12, 13</p> <p><u>Unit 4</u>— Articles 25, 26, 32, 26</p>	<p><u>ESP</u> <u>Levels of organization</u>--chemistry; molecules of life; membrane functions – <u>Quiz</u></p> <p><u>ANIMATIONS</u> Chemistry, biological molecules, cells – <u>Quiz</u></p> <p><u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5 - <u>Quiz</u></p> <p><u>Unit 3</u>—Articles 12, 13- <u>Quiz</u></p> <p><u>Unit 4</u>— Articles 25, 26, 32, 26 - <u>Quiz</u></p>	<p><u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5</p> <p><u>Unit 3</u>—Articles 12, 13</p> <p><u>Unit 4</u>— Articles 25, 26, 32, 36</p>	<p><u>ESP</u> <u>Levels of organization</u>--chemistry; molecules of life; membrane functions – <u>Topic Review</u></p> <p><u>Lab exercises</u> —cell size, active transport, cell-cell interaction, mitosis, enzymes, oxidative respiration</p> <p><u>OLC</u> Chapters 2, 3, 4—flashcards</p>



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SUBMISSION TITLE: Understanding Human Anatomy and Physiology, 5th Edition by Mader © 2005

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GRADE: 9-12

INTENDED OUTCOME: 6. Demonstrate knowledge of genetics, development, growth, and maturation of the human body and its systems.

STRAND: F. Processes of Life

STANDARD: 2. The student understands the process and importance of genetic diversity.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
References to intended outcome, strand, standard.	31-32, 46-50 (I) 51-52(M) 77, 86-87, 107, 134, 157, 181, 202, 219, 246- 248, 270, 290, 312, 336, 355, 364, Ch. 18 (370- 383) (I) 386 (M) Ch. 19 (390-400) (I) 401(M)	<u>ESP</u> <u>Reproduction</u> <u>ANIMATIONS</u> Biological molecules, reproduction – <u>Animation</u> <u>POWERWEB</u>	<u>ESP</u> <u>Reproduction – Quiz</u> <u>ANIMATIONS</u> Biological molecules, reproduction – <u>Quiz</u> <u>POWERWEB</u>	<u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5 <u>Unit 5</u> —Articles 40, 43, 45, 46 <u>Unit 6</u> —Articles 47, 49, 51, 52, 53, 54, 55	<u>ESP</u> <u>Reproduction – Review</u> <u>Topic</u> <u>Lab exercises</u> — meiosis, genetic mapping, heredity, gene segregation, DNA fingerprinting, reading DNA, gene regulation,

		<u>Unit 1</u> – Articles 1-5 <u>Unit 5</u> —Articles 40, 43, 45, 46 <u>Unit 6</u> —Articles 47, 49, 51, 52, 53, 54, 55	<u>Unit 1</u> – Articles 1-5 - <u>Quiz</u> <u>Unit 5</u> —Articles 40, 43, 45, 46 - <u>Quiz</u> <u>Unit 6</u> —Articles 47, 49, 51, 52, 53, 54, 55 - <u>Quiz</u>		restriction map <u>OLC</u> Chapter 19—flashcards
SC.F.2.4.2 know that every cell contains a “blueprint” coded in DNA molecules that specify how proteins are assembled to regulate cells.	31-32, 46-50 (I) 51-52(M) 374, 386, Ch. 19 (390-400) (I) 401(M)	<u>ESP</u> <u>Level of organization--</u> cell functions; cell division <u>Reproduction</u> <u>ANIMATIONS</u> Biological molecules, cells, reproduction— <u>Animation</u> <u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5 <u>Unit 5</u> —Articles 40, 43, 45, 46 <u>Unit 6</u> —Articles 47, 49, 51, 52, 53, 54, 55	<u>ESP</u> <u>Level of organization--</u> cell functions; cell division - <u>Quiz</u> <u>Reproduction - Quiz</u> <u>ANIMATIONS</u> Biological molecules, cells, reproduction – <u>Quiz</u> <u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5 - <u>Quiz</u> <u>Unit 5</u> —Articles 40, 43, 45, 46 - <u>Quiz</u> <u>Unit 6</u> —Articles 47, 49, 51, 52, 53, 54, 55 - <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5 <u>Unit 5</u> —Articles 40, 43, 45, 46 <u>Unit 6</u> —Articles 47, 49, 51, 52, 53, 54, 55	<u>ESP</u> <u>Level of organization--</u> cell functions; cell division – <u>Topic Review</u> <u>Reproduction – Topic Review</u> <u>Lab exercises—</u> meiosis, genetic mapping, heredity, gene segregation, DNA fingerprinting, reading DNA, gene regulation, restriction map <u>OLC</u> Chapter 19--flashcards

*In depth/Mentioned



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PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 7. Demonstrate understanding of the composition, active chemical compounds, structure, function, and dysfunction of the human body.

STRAND: F. Processes of Life

STANDARD: 1. The student describes patterns of structure and function in living things.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
References to intended outcome, strand, standard.	12-13, 18-33; Entire text from Chs. 4 through 19 (I)	<u>ESP</u> <u>Levels of organization</u> <u>Support & movement</u> <u>Integration & coordination</u> <u>Transport</u> <u>Absorption & excretion</u>	<u>ESP</u> <u>Levels of organization</u> <u>Support & movement – Quiz</u> <u>Integration & coordination – Quiz</u> <u>Transport – Quiz</u> <u>Absorption &</u>	<u>POWERWEB</u> <u>Units 1-6 – All Articles</u>	<u>ESP</u> <u>Levels of organization</u> <u>Support & movement – Topic Review</u> <u>Integration & coordination – Topic Review</u> <u>Transport – Topic Review</u>

		<u>Reproduction</u> <u>ANIMATIONS</u> Chemistry, biological molecules, cells, human systems, anatomy, circulatory system, lymphatic system, digestive system, respiratory system, olfaction, taste, ear function, vision, nervous system, brain function, endocrine system, renal system, reproduction system= <u>Animations</u> <u>POWERWEB</u> Units 1-6 – All articles	<u>excretion – Quiz</u> <u>Reproduction – Quiz</u> <u>ANIMATIONS</u> Chemistry, biological molecules, cells, human systems, anatomy, circulatory system, lymphatic system, digestive system, respiratory system, olfaction, taste, ear function, vision, nervous system, brain function, endocrine system, renal system, reproduction system= <u>Quiz</u> <u>POWERWEB</u> Units 1-6 – All articles – Quiz		<u>Absorption & excretion – Topic Review</u> <u>Reproduction – Topic Review</u> <u>Lab exercises</u> —all <u>OLC</u> Chapters—all— flashcards & labeling
SC.F.1.4.2 know that body structures are uniquely designed and adapted for their function.	8-9, 12-13, Entire text from Chs. 4 (55-68) through 19 (I) LM 63-368 (lab exercises 8-49) (I)	<u>ESP</u> <u>Levels of organization</u> <u>Support & movement</u> <u>Integration &</u>	<u>ESP</u> <u>Levels of organization – Quiz</u> <u>Support & movement – Quiz</u>	<u>POWERWEB</u> Units 1-6 – All articles	<u>ESP</u> <u>Levels of organization – Topic Review</u> <u>Support & movement – Topic Review</u>

		<u>coordination</u> <u>Transport</u> <u>Absorption & excretion</u> <u>Reproduction</u> <u>ANIMATIONS</u> Chemistry, biological molecules, cells, human systems, anatomy, circulatory system, lymphatic system, digestive system, respiratory system, olfaction, taste, ear function, vision, nervous system, brain function, endocrine system, renal system, reproduction system= <u>Animation</u> <u>POWERWEB</u> <u>Units 1-6 – All Articles</u>	<u>Integration & coordination – Quiz</u> <u>Transport – Quiz</u> <u>Absorption & excretion – Quiz</u> <u>Reproduction – Quiz</u> <u>ANIMATIONS</u> Chemistry, biological molecules, cells, human systems, anatomy, circulatory system, lymphatic system, digestive system, respiratory system, olfaction, taste, ear function, vision, nervous system, brain function, endocrine system, renal system, reproduction system= <u>Quiz</u> <u>POWERWEB</u> <u>Units 1- 6 – All articles</u> <u>Quiz</u>		<u>Integration & coordination – Topic Review</u> <u>Transport – Topic Review</u> <u>Absorption & excretion – Topic Review</u> <u>Reproduction – Topic Review</u> <u>Lab exercises—all</u> <u>OLC</u> Chapters all—flashcards & labeling
SC.F.1.4.6 know that separate parts of the body	79, 108-109, Ch. 8 (141-161) Ch. 9 (164-	<u>ESP</u> <u>Integration &</u>	<u>ESP</u> <u>Integration &</u>	<u>POWERWEB</u> <u>Unit 1—Article 2</u>	<u>ESP</u> <u>Integration &</u>

<p>communicate with each other using electrical and/or chemical signals.</p>	<p>184), Ch. 10 (186-205), 230-231, 233, 238 (I) 272-273 (M) 283, 290-291 (I) 293(M) 304, 306-307, 325 (I) 339(M) 348, 354-356 (I) 367(M) 384-385 (I)</p>	<p><u>coordination</u></p> <p><u>Absorption & excretion</u></p> <p><u>ANIMATIONS</u> Biological molecules, cells, nervous & endocrine system – Animation</p> <p><u>POWERWEB</u> Unit 1—Article 2</p> <p><u>Unit 3</u> – Articles 10-20</p> <p><u>Unit 4</u>—Articles 22, 30, 33, 34, 35</p> <p><u>Unit 5</u>—Article 43</p>	<p><u>coordination – Quiz</u></p> <p><u>Absorption & excretion – Quiz</u></p> <p><u>ANIMATIONS</u> Biological molecules, cells, nervous & endocrine system – Quiz</p> <p><u>POWERWEB</u> Unit 1—Article 2 – Quiz</p> <p><u>Unit 3</u> – Articles 10-20 – Quiz</p> <p><u>Unit 4</u>—Articles 22, 30, 33, 34, 35 – Quiz</p> <p><u>Unit 5</u>—Article 43 – Quiz</p>	<p><u>Unit 3</u> – Articles 10-20</p> <p><u>Unit 4</u>—Articles 22, 30, 33, 34, 35</p> <p><u>Unit 5</u>—Article 43</p>	<p><u>coordination – Topic Review</u></p> <p><u>Absorption & excretion – Topic Review</u></p> <p><u>Lab exercises</u> —active transport, cell-cell interaction, enzymes/kinetics, thermodynamics</p> <p><u>OLC</u> Chapters 8—13—flashcards & labeling</p>
<p>SC.F.1.4.7 know that organisms respond to internal and external stimuli.</p>	<p>12 (I) 71, 87 (M), 118, 122-123, 135, Ch. 8 (141-161), Ch. 9 (164-184), Ch. 10 (186-205), 215, 233, 238, 248-249 (I) 251(M), 258-263, 269-270, 283 (I)</p>	<p><u>ESP</u> <u>Integration & coordination</u></p> <p><u>Absorption & excretion</u></p> <p><u>ANIMATIONS</u> Olfaction, taste, ear</p>	<p><u>ESP</u> <u>Integration & coordination – Quiz</u></p> <p><u>Absorption & excretion – Quiz</u></p> <p><u>ANIMATIONS</u> Olfaction, taste, ear</p>	<p><u>POWERWEB</u> Unit 1—Article 5</p> <p><u>Unit 3</u> – Articles 10-20</p> <p><u>Unit 4</u>— Articles 22, 30, 33, 34, 35</p> <p><u>Unit 5</u>—Article 43</p>	<p><u>ESP</u> <u>Integration & coordination – Topic Review</u></p> <p><u>Absorption & excretion – Topic Review</u></p>

	<p>293(M) 304, 325, 336-337, 348, 354-356 (I) 367(M) 370, 384-385 (I)</p> <p>LM 173-238 (lab exercises 24-32) (I)</p>	<p>functions, vision, Nervous system, endocrine system_– <u>Animation</u></p> <p><u>POWERWEB</u> <u>Unit 1</u>—Article 5</p> <p><u>Unit 3</u> – Articles 10-20</p> <p><u>Unit 4</u>— Articles 22, 30, 33, 34, 35</p> <p><u>Unit 5</u>—Article 43</p>	<p>functions, vision, Nervous system, endocrine system – <u>Quiz</u></p> <p><u>POWERWEB</u> <u>Unit 1</u>—Article 5 – <u>Quiz</u></p> <p><u>Unit 3</u> – Articles 10-20 – <u>Quiz</u></p> <p><u>Unit 4</u>— Articles 22, 30, 33, 34, 35 – <u>Quiz</u></p> <p><u>Unit 5</u>—Article 43 – <u>Quiz</u></p>		<p><u>Lab exercises</u> —active transport, cell- cell interaction, enzymes/kinetics, thermodynamics</p> <p><u>OLC</u> Chapters 7, 8, 9, 10, 13—flashcards & labeling</p>
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**CORRELATION
SUNSHINE STATE STANDARDS
& GRADE LEVEL EXPECTATIONS**

SUBJECT/COURSE: Anatomy and Physiology

COURSE CODE NUMBER: 2000350

SUBMISSION TITLE: Understanding Human Anatomy and Physiology, 5th Edition by Mader © 2005

PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 8. Demonstrate understanding of conditions that cause change in normal body functions (e.g., injury, infection, mutation, metabolic disorder) and the response of the body to those conditions (e.g., inflammatory response, clotting, immune response).

STRAND: F. Processes of Life

STANDARD: 1. The student describes patterns of structure and function in living things.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
References to intended outcome, strand, standard.	74-77, 80, 88, 136, 145, 147, 176-177, 182, 190-191, 195, 209, 215, 221, 229, 240-241, 256, 257, 258-263, 264-265, 266-267, 272-273, 284, 286-288, 289, 293, 306-307, 318-319, 334-336, 338, 352, 358-361, 363-364, 367, 382-383, 392-394,	<u>Transport</u> —lymphatic <u>Integration & coordination</u> —senses, endocrine system <u>Absorption & excretion</u> <u>Reproduction</u>	<u>Transport</u> —lymphatic - <u>Quiz</u> <u>Integration & coordination</u> —senses, endocrine system - <u>Quiz</u> <u>Absorption & excretion</u> - <u>Quiz</u>	<u>Unit 4</u> - Articles 21-37 <u>Unit 5</u> – Articles 38-46 <u>Unit 6</u> – Articles 47-58	<u>Transport</u> —lymphatic – <u>Topic Review</u> <u>Integration & coordination</u> —senses, endocrine system – <u>Topic Review</u> <u>Absorption & excretion</u> - <u>Topic</u>

	396-397 (I)	<p><u>ANIMATIONS</u> Lymphatic system, digestive system, endocrine system, reproduction - <u>Animation</u></p> <p><u>POWERWEB</u> <u>Unit 4</u> - Articles 21-37</p> <p><u>Unit 5</u> – Articles 38-46</p> <p><u>Unit 6</u> – Articles 47-58</p>	<p><u>Reproduction - Quiz</u></p> <p><u>ANIMATIONS</u> Lymphatic system, digestive system, endocrine system, reproduction - <u>Quiz</u></p> <p><u>POWERWEB</u> <u>Unit 4</u> - Articles 21-37 - <u>Quiz</u></p> <p><u>Unit 5</u> – Articles 38-46 - <u>Quiz</u></p> <p><u>Unit 6</u> – Articles 47-58 - <u>Quiz</u></p>	<p><u>Review</u></p> <p><u>Reproduction – Topic Review</u> <u>Lab exercises</u> —enzymes/kinetics, meiosis, cystic fibrosis, evolution of heart</p> <p><u>OLC</u> Chapters—4--19— flashcards & labeling</p>	
SC.F.1.4.8 know that cell behavior can be affected by molecules from other parts of the organism or even from other organisms.	79, 80, 215, 221, 229, 258-263, 264-256, 266-267, 268, 269, 272-273, 334-336, 348, 354-356, 363-364, 367 (I)	<p><u>ESP</u> <u>Level of organization</u>— molecules of life, membrane function, cell functions, cell division</p> <p><u>Integration & coordination</u>— endocrine system</p>	<p><u>ESP</u> <u>Level of organization</u>— molecules of life, membrane function, cell functions, cell division - <u>Quiz</u></p> <p><u>Integration & coordination</u>— endocrine system -</p>	<p><u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5</p> <p><u>Unit 4</u>—Articles 22, 24, 30, 31, 32, 33, 34, 35, 36</p> <p><u>Unit 5</u>—Article 41</p> <p><u>Unit 6</u> – Articles 47-58</p>	<p><u>ESP</u> <u>Level of organization</u>— molecules of life, membrane function, cell functions, cell division – <u>Topic Review</u></p> <p><u>Integration & coordination</u>—</p>

<p>SC.F.1.4.8 know that cell behavior can be affected by molecules from other parts of the organism or even from other organisms.</p> <p>(cont.)</p>		<p><u>Transport</u>—lymphatic</p> <p><u>Absorption & excretion</u></p> <p><u>Reproduction</u></p> <p><u>ANIMATIONS</u> Lymphatic system, digestive system, endocrine system, reproduction – <u>Animation</u></p> <p><u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5</p> <p><u>Unit 4</u>—Articles 22, 24, 30, 31, 32, 33, 34, 35, 36</p> <p><u>Unit 5</u>—Article 41</p> <p><u>Unit 6</u> – Articles 47-58</p>	<p><u>Quiz</u></p> <p><u>Transport</u>—lymphatic - <u>Quiz</u></p> <p><u>Absorption & excretion</u> - <u>Quiz</u></p> <p><u>Reproduction</u> - <u>Quiz</u></p> <p><u>ANIMATIONS</u> Lymphatic system, digestive system, endocrine system, reproduction – <u>Quiz</u></p> <p><u>POWERWEB</u> <u>Unit 1</u> – Articles 1-5 - <u>Quiz</u></p> <p><u>Unit 4</u>—Articles 22, 24, 30, 31, 32, 33, 34, 35, 36 - <u>Quiz</u></p> <p><u>Unit 5</u>—Article 41 - <u>Quiz</u></p> <p><u>Unit 6</u> – Articles 47-58 - <u>Quiz</u></p>		<p>endocrine system – <u>Topic Review</u></p> <p><u>Transport</u>—lymphatic – <u>Topic Review</u></p> <p><u>Absorption & excretion</u> – <u>Topic Review</u></p> <p><u>Reproduction</u> – <u>Topic Review</u></p> <p><u>Lab exercises</u> —active transport, cell-cell interaction, enzymes, oxidative repair, meiosis, genetic map, heredity, gene segregation, DNA fingerprinting, reading DNA, gene regulation, restriction map</p> <p><u>OLC</u> Chapters 5, 10, 11, 13, 17—flashcards</p>
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**CORRELATION
SUNSHINE STATE STANDARDS
& GRADE LEVEL EXPECTATIONS**

SUBJECT/COURSE: Anatomy and Physiology

COURSE CODE NUMBER: 2000350

SUBMISSION TITLE: Understanding Human Anatomy and Physiology, 5th Edition by Mader © 2005

PUBLISHER: Glencoe/McGraw-Hill

GRADE: 9-12

INTENDED OUTCOME: 9. Demonstrate knowledge of the connections of anatomy, physiology, and medicine with technology, society, and the environment.

STRAND: H. The Nature of Science

STANDARD: 3. The student understands that science, technology, and society are interwoven and interdependent.

BENCHMARK	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT in Major Tool- I/M*	PAGES(S) OR LOCATIONS(S) FOR FOCUS LESSONS	Pages or Locations for ASSESSMENTS	Pages or Locations for ENRICHMENTS	Pages or Locations for TUTORIALS
References to intended outcome, strand, standard.	9, 14, 19, 74, 77, 88, 9, 77, 88, 107, 145, 148, 158, 176-177, 197, 212, 229, 231, 256, 265, 267, 280, 334-335, 338, 361, 398, 399 (I)	<u>POWERWEB</u> <u>Unit 4—Article 32</u>	<u>POWERWEB</u> <u>Unit 4—Article 32 - Quiz</u>		<u>Lab exercises—genetic mapping, DNA fingerprinting, meiosis</u> <u>OLC Chapter 18, 19—flashcard</u>
SC.H.3.4.1 know that performance testing is often conducted using small-scale	<i>145M</i> , 177, 212, 361, 398, 399 (I)	<u>POWERWEB</u> <u>Unit 4—Article 32</u>	<u>POWERWEB</u> <u>Unit 4—Article 32 - Quiz</u>		<u>Lab exercises—genetic mapping, DNA fingerprinting</u>

models, computer simulations, or analogous systems to reduce the chance of system failure.	LM 249-256 (I)				<u>OLC</u> Chapter 18, 19—flashcard
SC.H.3.4.2 know that technological problems often create a demand for new scientific knowledge and that new technologies make it possible for scientists to extend their research in a way that advances science.	9, 14, 19 (I)	<u>POWERWEB</u> <u>Unit 4</u> —Article 32	<u>POWERWEB</u> <u>Unit 4</u> —Article 32 - <u>Quiz</u>		<u>Lab exercises</u> —genetic mapping, DNA fingerprinting, meiosis <u>OLC</u> Chapter 18, 19—flashcard
SC.H.3.4.3 know that scientists can bring information, insights, and analytical skills to matters of public concern and help people understand the possible causes and effects of events.	74, 77, 107, 145, 361 (I)	<u>POWERWEB</u> <u>Unit 2</u> – Article 9 <u>Unit 3</u> —Articles 14, 16, 18, 19 <u>Unit 4</u> —Articles 25, 26, 30, 32, 36 <u>Unit 5</u> —Article 41 <u>Unit 6</u> —Articles 50, 54	<u>POWERWEB</u> <u>Unit 2</u> – Article 9 - <u>Quiz</u> <u>Unit 3</u> —Articles 14, 16, 18, 19 - <u>Quiz</u> <u>Unit 4</u> —Articles 25, 26, 30, 32, 36 - <u>Quiz</u> <u>Unit 5</u> —Article 41 - <u>Quiz</u> <u>Unit 6</u> —Articles 50, 54 - <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 2</u> – Article 9 <u>Unit 3</u> —Articles 14, 16, 18, 19 <u>Unit 4</u> —Articles 25, 26, 30, 32, 36 <u>Unit 5</u> —Article 41 <u>Unit 6</u> —Articles 50, 54	<u>Lab exercises</u> —genetic mapping, DNA fingerprinting, meiosis <u>OLC</u> Chapter 18, 19—flashcard
SC.H.3.4.4 know that funds for science research come from federal government agencies, industry, and private	361(M)				

foundations and that this funding often influences the areas of discovery.					
SC.H.3.4.5 know that the value of a technology may differ for different people and at different times.	9, 212 (I)	<u>ESP</u> <u>Reproduction</u> <u>POWERWEB</u> <u>Unit 3</u> —Articles 12, 18, 19 <u>Unit 4</u> — Articles 30, 32, 33, 34, 35 <u>Unit 5</u> —Article 41 <u>Unit 6</u> —Articles 50, 54	<u>ESP</u> <u>Reproduction - Quiz</u> <u>POWERWEB</u> <u>Unit 3</u> —Articles 12, 18, 19 - <u>Quiz</u> <u>Unit 4</u> — Articles 30, 32, 33, 34, 35 - <u>Quiz</u> <u>Unit 5</u> —Article 41 - <u>Quiz</u> <u>Unit 6</u> —Articles 50, 54 - <u>Quiz</u>	<u>POWERWEB</u> <u>Unit 3</u> —Articles 12, 18, 19 <u>Unit 4</u> — Articles 30, 32, 33, 34, 35 <u>Unit 5</u> —Article 41 <u>Unit 6</u> —Articles 50, 54	<u>ESP</u> <u>Reproduction – Animation – Topic Review</u> <u>Lab exercises</u> —genetic mapping, DNA fingerprinting, meiosis <u>OLC</u> Chapter 18, 19—flashcard
SC.H.3.4.6 know that scientific knowledge is used by those who engage in design and technology to solve practical problems, taking human values and limitations into account.	9, 77, 88, 107, 145, 148, 158, 176-177, 197, 212, 229, 231, 256, 265, 267, 280, 334-335, 338, 398, 399 (I)	<u>ANIMATION</u> <u>Reproduction - Animation</u> <u>POWERWEB</u> <u>Unit 3</u> —Articles 12, 18, 19 <u>Unit 4</u> — Articles 30, 32, 33, 34, 35	<u>ANIMATION</u> <u>Reproduction – Quiz</u> <u>POWERWEB</u> <u>Unit 3</u> —Articles 12, 18, 19 - <u>Quiz</u> <u>Unit 4</u> — Articles 30, 32, 33, 34, 35 - <u>Quiz</u> <u>Unit 5</u> —Article 41 -	<u>POWERWEB</u> <u>Unit 3</u> —Articles 12, 18, 19 <u>Unit 4</u> — Articles 30, 32, 33, 34, 35 <u>Unit 5</u> —Article 41 <u>Unit 6</u> —Articles 50, 54	<u>Lab exercises</u> —genetic mapping, DNA fingerprinting, meiosis <u>OLC</u> Chapter 18, 19—flashcard

		<u>Unit 5</u> —Article 41	<u>Quiz</u>		
		<u>Unit 6</u> —Articles 50, 54	<u>Unit 6</u> —Articles 50, 54 - <u>Quiz</u>		