

Next Generation Science Standards:
Life Science Performance Expectations
CORRELATION GUIDE
for Hole's Human Anatomy & Physiology



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Next Generation Science Standards Life Science Performance Expectations	Hole's Human Anatomy & Physiology High School Edition, ©2021
<p>HS-LS16. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.</p> <p>HS-LS17. Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen</p>	<p>73-79, 126-127, 136-137, 142-148 Assess: Chapter Assessments 82 (#32, #35, #41), 10 (#2, #3), 150 #38 Practice 128 (#2)</p>

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HS-ETS11 Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.	Can be addressed in the following: Clinical Connections 388, 390, 658, 904 From Science to Technology 64, 894, 897
HS-ETS12 Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.	NA
HS-ETS13. Evaluate a solution to a complex real world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.	Can be addressed in the following: Clinical Connections 388, 390, 658, 904 From Science to Technology 64, 894, 897
HS-ETS14 Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.	NA

Next Generation Science Standards Science and Engineering Practices	Hole's Human Anatomy & Physiology High School Edition, ©2021
1. Asking questions (for science) and defining problems (for engineering)	Scientific method: 11, 97 Engineering can be incorporated into the following: Assess: Integrative Assessments/Critical Thinking 80 (#1) 295 (#3), 925 (#6) Clinical Application 294, 470 From Science to Technology 81, 156, 178, 583, 894
2. Developing and using models	NA Could be incorporated into discussions of diffusion, mitosis, DNA, circulatory system, etc. but models are not specifically noted in any of the activities.
3. Planning and carrying out investigations	Coverage is steps of scientific method: 11, 97
4. Analyzing and interpreting data	Poor coverage: Assess: Integrative Assessments/Critical Thinking 256 (#6), 534 (#1), 566 (#8), 745 (#1, #6)
5. Using mathematics and computational thinking	Text is very light on asking students due to computations. Following involve mathematical concepts that could be expanded upon: 62, 69-71, 931-

