



Unit 7: CTE Alignment Matrix

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Executive Summary

Sponsored by Genentech, Futurelab+ brought together a coalition of partners to develop an innovative, modular, 2-year biotechnology curriculum, along with instructional materials, to expose students and educators to the breadth of education and career pathways across biotechnology. To increase adoption and access to such curricula in California and beyond, the modular curriculum was designed to align with the [California Career Technical Education \(CTE\) Model Curriculum Standards for Biotechnology](#), meet at least 1 year of the [University of California science \(D\) subject requirement](#), and incorporate some of the three-dimensional learning innovations of the [Next Generation Science Standards](#). The 2-year biotechnology curriculum has four core units per year; each core unit has nine lessons and a lab that each take approximately 1 week to complete (9–10 weeks for the full unit). In total, the biotechnology curriculum has 72 lessons and eight labs that span 2 full instructional years. Because the Futurelab+ biotechnology curriculum is modular, teachers can select specific units and materials to design biotechnology courses that are relevant and appropriate for their students and teaching environments.

The purpose of this report is to provide teachers an independent review of which California CTE biotechnology standards are addressed within the curriculum and where they are addressed. The matrices that follow indicate the assignments and/or activities in which students demonstrate their understanding of a particular standard.

This review was completed on materials received May 3, 2022, and has not been updated to reflect any revisions made to materials since then. Only the standards met within Unit 7 are included in the matrices.

Anchor Standards

Standard	Description	Assessed (all student sections)
<p>2.0 Communications: <i>Acquire and accurately use Health Science and Medical Technology sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats. (Direct alignment with LS 9–10, 11–12.6)</i></p>		
2.5	Communicate information and ideas effectively to multiple audiences using a variety of media and formats.	<p>Lesson 4, Day 5 <i>Medicinal Community Garden Design</i>—capture sheet <i>Student Guide</i>, question 4</p> <p>Lesson 9, Day 2 <i>Biotech Unit Challenge</i>—rubric</p>
<p>5.0 Problem Solving and Critical Thinking: <i>Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques. (Direct alignment with WS 11-12.7)</i></p>		
5.3	Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.	<p>Lesson 1, Day 1 <i>What Does Biodiversity Mean for Human Health?</i>—capture sheet <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 1, Day 2 <i>Time Lapse Observation and Inference</i>, questions 3–5—capture sheet <i>Case Study</i>—capture sheet</p> <p>Lesson 1, Day 3 <i>Student Hotspot</i>—capture sheet <i>Student Guide</i>, questions 2 and 3—assessment at teacher discretion</p> <p>Lesson 1, Day 3 (optional activity) <i>Extension</i>—capture sheet</p> <p>Lesson 1, Day 4 <i>Google My Maps Presentation</i>—capture sheet</p> <p>Lesson 1, Day 5 <i>Biodiversity Stakeholders Map</i>—rubric</p> <p>Lesson 7, Day 1 (Molecular Modeling Team) <i>Find a Protein and Medicine Model Using Molview</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Communications Strategy Team) <i>Identify Your Team’s Patient Population</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p>

Standard	Description	Assessed (all student sections)
		<p>Lesson 7, Day 1 (Financial Analysis Scaling Team) <i>Values Discussion and Draft Benefit Sharing Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team) <i>Use a Model to Communicate</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Communications Strategy Team) <i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team) <i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Communications Strategy Team) <i>Outline Communication Strategy</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Financial Analysis Scaling Team) <i>Financial Analysis Introduction</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Communications Strategy Team) <i>Create a Draft of the Communications Product</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Financial Analysis Scaling Team) <i>Complete Draft Quantitative Analysis</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Molecular Modeling Team) <i>Create a Science Guide</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Communications Strategy Team) <i>Create a Draft of the Communications Product</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p>

Standard	Description	Assessed (all student sections)
		<p>Lesson 7, Day 5 (Financial Analysis Team) <i>Check In and Seek Feedback</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p>
5.4	Interpret information and draw conclusions, based on the best analysis, to make informed decisions.	<p>Lesson 1, Day 1 <i>What Does Biodiversity Mean for Human Health?</i>—capture sheet <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 1, Day 2 <i>Time Lapse Observation and Inference</i>, questions 4 and 5—capture sheet <i>Case Study</i>—capture sheet</p> <p>Lesson 1, Day 3 <i>Student Hotspot</i>—capture sheet <i>Student Guide</i>, questions 2 and 3—assessment at teacher discretion</p> <p>Lesson 1, Day 3 (optional activity) <i>Extension</i>—capture sheet</p> <p>Lesson 1, Day 4 <i>Google My Maps Presentation</i>—capture sheet</p> <p>Lesson 1, Day 5 <i>Biodiversity Stakeholders Map</i>—rubric</p> <p>Lesson 3, Day 1 <i>Collecting and Preserving Plant Specimens</i>, step I—capture sheet <i>Student Guide</i>, question 1</p> <p>Lesson 3, Day 2 <i>Collecting and Preserving Plant Specimens</i>, steps II–III—capture sheet <i>Student Guide</i>, question 2</p> <p>Lesson 3, Day 3 <i>Create a Plant Profile</i>—capture sheet</p> <p>Lesson 3, Day 4 <i>Small Group: Evolutionary relationships discussion</i>—assessment at teacher discretion <i>Student Guide</i>, question 3</p> <p>Lesson 7, Day 1 (Molecular Modeling Team) <i>Find a Protein and Medicine Model Using Molview</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Communications Strategy Team) <i>Identify Your Team’s Patient Population</i>—capture sheet</p>

Standard	Description	Assessed (all student sections)
		<p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Financial Analysis Scaling Team)</p> <p><i>Values Discussion and Draft Benefit Sharing Plan</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team)</p> <p><i>Use a Model to Communicate</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Communications Strategy Team)</p> <p><i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team)</p> <p><i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team)</p> <p><i>Build Time</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Communications Strategy Team)</p> <p><i>Outline Communication Strategy</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Financial Analysis Scaling Team)</p> <p><i>Financial Analysis Introduction</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team)</p> <p><i>Build Time</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Communications Strategy Team)</p> <p><i>Create a Draft of the Communications Product</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Financial Analysis Scaling Team)</p> <p><i>Complete Draft Quantitative Analysis</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Molecular Modeling Team)</p> <p><i>Create a Science Guide</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Communications Strategy Team)</p> <p><i>Create a Draft of the Communications Product</i>—capture sheet</p>

Standard	Description	Assessed (all student sections)
		<p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Financial Analysis Scaling Team)</p> <p><i>Check In and Seek Feedback</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p>
5.6	Read, interpret, and extract information from documents.	<p>Lesson 7, Day 1 (Molecular Modeling Team)</p> <p><i>Find a Protein and Medicine Model Using Molview</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Communications Strategy Team)</p> <p><i>Identify Your Team’s Patient Population</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Financial Analysis Scaling Team)</p> <p><i>Values Discussion and Draft Benefit Sharing Plan</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team)</p> <p><i>Use a Model to Communicate</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Communications Strategy Team)</p> <p><i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team)</p> <p><i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team)</p> <p><i>Build Time</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Communications Strategy Team)</p> <p><i>Outline Communication Strategy</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Financial Analysis Scaling Team)</p> <p><i>Financial Analysis Introduction</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team)</p> <p><i>Build Time</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Communications Strategy Team)</p> <p><i>Create a Draft of the Communications Product</i>—capture sheet</p>

Standard	Description	Assessed (all student sections)
		<p><i>Student Guide, Project Team Process Journal</i>—capture sheet Lesson 7, Day 4 (Financial Analysis Scaling Team) <i>Complete Draft Quantitative Analysis</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet Lesson 7, Day 5 (Molecular Modeling Team) <i>Create a Science Guide</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet Lesson 7, Day 5 (Communications Strategy Team) <i>Create a Draft of the Communications Product</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet Lesson 7, Day 5 (Financial Analysis Scaling Team) <i>Check In and Seek Feedback</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p>
<p>7.0 Responsibility and Flexibility: <i>Initiate and participate in a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Health Science and Medical Technology sector workplace environment and community settings. (Direct alignment with SLS 9–10, 11–12.1)</i></p>		
7.3	Understand the need to adapt to changing and varied roles and responsibilities.	<p>Lesson 8, Day 1 <i>Peer Feedback</i>—capture sheet <i>Project Team Progress Check, day 1</i>—capture sheet Lesson 8, Day 2 <i>Project Team Progress Check, day 2</i>—capture sheet Lesson 8, Day 3 <i>Peer Feedback</i>—capture sheet</p>
7.4	Practice time management and efficiency to fulfill responsibilities.	<p>Lesson 8, Day 1 <i>Peer Feedback</i>—capture sheet <i>Project Team Progress Check, day 1</i>—capture sheet Lesson 8, Day 2 <i>Project Team Progress Check, day 2</i>—capture sheet Lesson 8, Day 3 <i>Peer Feedback</i>—capture sheet</p>
7.5	Apply high-quality techniques to product or presentation design and development.	<p>Lesson 8, Day 1 <i>Project Team Progress Check, day 1</i>—capture sheet Lesson 8, Day 2 <i>Project Team Progress Check, day 2</i>—capture sheet</p>

Standard	Description	Assessed (all student sections)
<p>9.0 Leadership and Teamwork: <i>Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution as practiced in the Cal-HOSA career technical student organization. (Direct alignment with SLS 11-12.1b).</i></p>		
<p>9.2</p>	<p>Identify the characteristics of successful teams, including leadership, cooperation, collaboration, and effective decision-making skills as applied in groups, teams, and career technical student organization activities.</p>	<p>Lesson 7, Day 1 <i>Student Guide, Project Team Process Journal—capture sheet</i> <i>Project Team Progress Check, day 1—capture sheet</i> Lesson 7, Day 1 (Communications Strategy Team) <i>Identify Your Team’s Patient Population—capture sheet</i> Lesson 7, Day 2 <i>Student Guide, Project Team Process Journal—capture sheet</i> <i>Project Team Progress Check, day 2—capture sheet</i> Lesson 7, Day 2 (Communications Strategy Team) <i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan—capture sheet</i> Lesson 7, Day 3 <i>Student Guide, Project Team Process Journal—capture sheet</i> <i>Project Team Progress Check, day 3—capture sheet</i> Lesson 7, Day 3 (Communications Strategy Team) <i>Outline Communication Strategy—capture sheet</i> <i>Student Guide, Project Team Process Journal—capture sheet</i> Lesson 7, Day 4 <i>Student Guide, Project Team Process Journal—capture sheet</i> <i>Project Team Progress Check, day 4—capture sheet</i> Lesson 7, Day 4 (Communications Strategy Team) <i>Create a Draft of the Communications Product—capture sheet</i> Lesson 7, Day 5 <i>Student Guide, Project Team Process Journal—capture sheet</i> Lesson 7, Day 5 (Communications Strategy Team) <i>Create a Draft of the Communications Product—capture sheet</i> <i>Student Guide, Project Team Process Journal—capture sheet</i> Lesson 8, Day 1 <i>Peer Feedback—capture sheet</i> <i>Project Team Progress Check, day 1—capture sheet</i> Lesson 8, Day 2 <i>Project Team Progress Check, day 2—capture sheet</i> Lesson 8, Day 3 <i>Peer Feedback—capture sheet</i></p>

Standard	Description	Assessed (all student sections)
9.5	Understand that the modern world is an international community and requires an expanded global view.	<p>Lesson 2, Day 1 <i>History of Aspirin</i>—capture sheet <i>History of Salicylic Acid to Aspirin Timeline Key Events</i>—class discussion, assessment at teacher discretion</p> <p>Lesson 2, Day 2 <i>Who Owns That?</i>, questions 2 and 3—capture sheet</p> <p>Lesson 2, Day 3 <i>Think-Pair-Share</i>—strategy, assessment at teacher discretion <i>Case Study</i>—capture sheet</p> <p>Lesson 2, Day 4 <i>Stakeholder Case Study Jigsaw Information</i>—capture sheet <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 2, Day 5 <i>Philosophical Chairs</i>—strategy, capture sheet</p> <p>Lesson 2, Day 6 <i>Nagoya Protocol Gallery Walk</i>—strategy, assessment at teacher discretion <i>Nagoya Protocol Summary Poster</i>—strategy, assessment at teacher discretion <i>Best Practices for Ethical Collaboration</i>—capture sheet <i>Stakeholder Perspectives</i>—rubric <i>Student Guide</i>, question 2—assessment at teacher discretion</p> <p>Lesson 9, Day 2 <i>Biotech Unit Challenge</i>—rubric</p>
<p>11.0 Demonstration and Application: <i>Demonstrate and apply the knowledge and skills contained in the Health Science and Medical Technology anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings and through the Cal-HOSA career technical student organization.</i></p>		
11.4	Employ entrepreneurial practices and behaviors appropriate to Health Science and Medical Technology sector opportunities.	<p>Lesson 9, Day 2 <i>Biotech Unit Challenge</i>—rubric</p>

Pathway Standards

Standard	Description	Assessed
A1.0: Define and assess biotechnology and recognize the diverse applications and impact on society.		
A1.5	Evaluate the impact of biotechnological applications on both developing and industrial societies, including legal and judicial practices.	<p>Lesson 2, Day 1 <i>History of Aspirin</i>—capture sheet <i>History of Salicylic Acid to Aspirin Timeline Key Events</i>—class discussion, assessment at teacher discretion</p> <p>Lesson 2, Day 2 <i>Who Owns That?</i>—capture sheet</p> <p>Lesson 2, Day 3 <i>Think-Pair-Share</i>—strategy, assessment at teacher discretion <i>Case Study</i>—capture sheet</p> <p>Lesson 2, Day 4 <i>Stakeholder Case Study Jigsaw Information</i>—capture sheet <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 2, Day 5 <i>Philosophical Chairs</i>—strategy, capture sheet</p> <p>Lesson 2, Day 6 <i>Nagoya Protocol Gallery Walk</i>—strategy, assessment at teacher discretion <i>Nagoya Protocol Summary Poster</i>—strategy, assessment at teacher discretion <i>Best Practices for Ethical Collaboration</i>—capture sheet <i>Stakeholder Perspectives</i>—rubric <i>Student Guide</i>, question 2—assessment at teacher discretion</p>
A2.0: Understand the ethical, moral, legal, and cultural issues related to the use of biotechnology research and product development.		
A2.3	Understand the necessity for accurate documentation and record keeping.	<p>Lesson 3, Day 1 <i>Who are Museum Scientists?</i>—capture sheet <i>Collecting and Preserving Plant Specimens</i>, step I—capture sheet <i>Student Guide</i>, question 1</p> <p>Lesson 3, Day 2 <i>Collecting and Preserving Plant Specimens</i>, steps II–III—capture sheet <i>Student Guide</i>, question 2</p> <p>Lesson 3, Day 3 <i>Create a Plant Profile</i>—capture sheet</p>

Standard	Description	Assessed
		<p>Lesson 3, Day 4 <i>Small Group: Evolutionary relationships discussion</i>—assessment at teacher discretion <i>Student Guide</i>, question 3</p>
A2.4	Understand the critical need for ethical policies and procedures for institutions engaged in biotechnology research and product development.	<p>Lesson 1, Day 1 <i>What Does Biodiversity Mean for Human Health?</i>—capture sheet <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 1, Day 2 <i>Case Study</i>, questions 2, 5, and 6—capture sheet</p> <p>Lesson 1, Day 3 <i>Student Hotspot</i>—capture sheet <i>Student Guide</i>, questions 2 and 3—assessment at teacher discretion</p> <p>Lesson 1, Day 3 (optional activity) <i>Extension</i>—capture sheet</p> <p>Lesson 1, Day 4 <i>Google My Maps Presentation</i>—capture sheet</p> <p>Lesson 1, Day 5 <i>Biodiversity Stakeholders Map</i>—rubric</p> <p>Lesson 2, Day 1 <i>History of Aspirin</i>—capture sheet <i>History of Salicylic Acid to Aspirin Timeline Key Events</i>—class discussion, assessment at teacher discretion</p> <p>Lesson 2, Day 2 <i>Who Owns That?</i>—capture sheet</p> <p>Lesson 2, Day 3 <i>Think-Pair-Share</i>—strategy, assessment at teacher discretion <i>Case Study</i>—capture sheet</p> <p>Lesson 2, Day 4 <i>Stakeholder Case Study Jigsaw Information</i>—capture sheet <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 2, Day 5 <i>Philosophical Chairs</i>—strategy, capture sheet</p> <p>Lesson 2, Day 6 <i>Nagoya Protocol Gallery Walk</i>—strategy, assessment at teacher discretion <i>Nagoya Protocol Gallery Summary Poster</i>—strategy, assessment at teacher discretion</p>

Standard	Description	Assessed
		<i>Best Practices for Ethical Collaboration</i> —capture sheet <i>Rubric for Stakeholder Perspectives</i> <i>Student Guide</i> , question 2—assessment at teacher discretion
A2.6	Prepare a presentation comparing the benefits and harm that can be the result of biotechnology innovations in both the research and application phases and which course of action will result in the best outcomes.	<p>Lesson 6, Day 2 <i>Drug Development Application</i>—capture sheet <i>Student Strengths and Areas of Growth Reflection</i>—capture sheet</p> <p>Lesson 6, Day 3 <i>Project Team Collaboration Agreement</i>—capture sheet</p> <p>Lesson 6, Day 4 <i>Preliminary Background Research</i>—capture sheet</p> <p>Lesson 6, Day 5 <i>Gallery Walk</i>—strategy, capture sheet</p> <p>Lesson 7, Day 1 (Molecular Modeling Team) <i>Find a Protein and Medicine Model Using Molview</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Communications Strategy Team) <i>Identify Your Team’s Patient Population</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Financial Analysis Scaling Team) <i>Values Discussion and Draft Benefit Sharing Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team) <i>Use a Model to Communicate</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Communications Strategy Team) <i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team) <i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p>

Standard	Description	Assessed
		<p>Lesson 7, Day 3 (Communications Strategy Team) <i>Outline Communication Strategy</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Financial Analysis Scaling Team) <i>Financial Analysis Introduction</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Communications Strategy Team) <i>Create a Draft of the Communications Product</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Financial Analysis Scaling Team) <i>Complete Draft Quantitative Analysis</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 <i>Molecular Modeling Team Day 3 and 4: Build Time</i>—capture sheet <i>Communications Strategy Team Day 4 and 5: Create a Draft of the Communications Product</i>—capture sheet <i>Financial Analysis Scaling Team Day 4: Complete Draft Quantitative Analysis</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet <i>Project Team Progress Check, day 4</i>—capture sheet</p> <p>Lesson 7, Day 5 (Molecular Modeling Team) <i>Create a Science Guide</i>—capture sheet <i>Communications Strategy Team Day 4 and 5: Create a Draft of the Communications Product</i>—capture sheet <i>Financial Analysis Scaling Team Day 5: Check In and Seek Feedback</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 8, Day 1 <i>Peer Feedback</i>—capture sheet <i>Project Team Progress Check, day 1</i>—capture sheet</p> <p>Lesson 8, Day 2 <i>Project Team Progress Check, day 2</i>—capture sheet</p> <p>Lesson 8, Day 3 <i>Peer Feedback</i>—capture sheet</p> <p>Lesson 9, Day 2 <i>Biotech Unit Challenge</i>—rubric</p>

Standard	Description	Assessed
<p>A3.0: Demonstrate competencies in the fundamentals of molecular cell biology, including deoxyribonucleic acid (DNA) and proteins and standard techniques for their purification and manipulation.</p>		
<p>A3.3</p>	<p>Employ standard techniques of DNA extraction, purification, restriction digests, bacterial cell culture, and agarose gel electrophoresis and document and evaluate results.</p>	<p>Lesson 5, Day 1 <i>Student Guide, Part 1: Pre-Lab</i>—capture sheet <i>Bioactive Compounds from Plants Questions</i>—capture sheet <i>Vocabulary Tool</i> <i>Exit Ticket</i>—assessment at teacher discretion</p> <p>Lesson 5, Day 1 (optional activity) <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 5, Day 2 <i>Kirby-Bauer Assay Questions</i>—capture sheet</p> <p>Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet <i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 3 <i>Student Protocol, Part 2: Kirby-Bauer Assay</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 4 <i>Student Guide, Part 2: Lab</i>, questions 2 and 3—capture sheet <i>Student Guide, Part 3: Data Analysis</i>, questions 2 and 3—capture sheet</p> <p>Lesson 5, Day 5 <i>Student Guide, Part 4: Obtaining Information</i>—capture sheet <i>Obtaining and Communicating Information</i>—rubric</p>
<p>A4.0: Recognize basic concepts in cell biology and become familiar with the laboratory tools used for their analysis.</p>		
<p>A4.2</p>	<p>Describe conditions that promote cell growth under aseptic conditions in the laboratory and workplace.</p>	<p>Lesson 5, Day 1 <i>Student Guide, Part 1: Pre-Lab</i>—capture sheet <i>Bioactive Compounds from Plants Questions</i>—capture sheet <i>Vocabulary Tool</i> <i>Exit Ticket</i>—assessment at teacher discretion</p> <p>Lesson 5, Day 1 (optional activity) <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 5, Day 2 <i>Kirby-Bauer Assay Questions</i>—capture sheet</p> <p>Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet</p>

Standard	Description	Assessed
		<p><i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion Lesson 5, Day 3</p> <p><i>Student Protocol, Part 2: Kirby-Bauer Assay</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion Lesson 5, Day 4</p> <p><i>Student Guide, Part 2: Lab</i>, questions 2 and 3—capture sheet Lesson 5, Day 5</p> <p><i>Student Guide, Part 4: Obtaining Information</i>—capture sheet <i>Obtaining and Communicating Information</i>—rubric</p>
A4.3	Use various methods to monitor the growth of cell cultures.	<p>Lesson 5, Day 1 (optional activity) <i>Student Guide</i>, question 1—assessment at teacher discretion Lesson 5, Day 2 <i>Kirby-Bauer Assay Questions</i>—capture sheet Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet <i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion Lesson 5, Day 3 <i>Student Protocol, Part 2: Kirby-Bauer Assay</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion Lesson 5, Day 4 <i>Student Guide, Part 3: Data Analysis</i>, questions 2 and 3—capture sheet Lesson 5, Day 5 <i>Student Guide, Part 4: Obtaining Information</i>—capture sheet <i>Obtaining and Communicating Information</i>—rubric</p>
A4.5	Discuss the structure and function of the macromolecules that compose cells, including carbohydrates, lipids, DNA, RNA, and protein molecules	<p>Lesson 6, Day 1 <i>Career Exploration</i>—capture sheet Lesson 6, Day 4 <i>Preliminary Background Research</i>—capture sheet Lesson 6, Day 5 <i>Gallery Walk</i>—strategy, capture sheet Lesson 7, Day 1 <i>Student Guide, Project Team Process Journal</i>—capture sheet Lesson 7, Day 1 (Molecular Modeling Team) <i>Find a Protein and Medicine Model Using Molview</i>—capture sheet</p>

Standard	Description	Assessed
		<p>Lesson 7, Day 1 (Communications Strategy Team) <i>Identify Your Team’s Patient Population</i>—capture sheet</p> <p>Lesson 7, Day 2 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team) <i>Use a Model to Communicate</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Communications Strategy Team) <i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Communications Strategy Team) <i>Outline Communication Strategy</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Communications Strategy Team) <i>Create a Draft of the Communications Product</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Molecular Modeling Team) <i>Create a Science Guide</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Communications Strategy Team) <i>Create a Draft of the Communications Product</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 9, Day 2 <i>Biotech Unit Challenge</i>—rubric</p>

Standard	Description	Assessed
A5.0: Integrate computer skills into program components.		
A5.1	Use the Internet and World Wide Web to collect and share scientific information.	<p>Lesson 1, Day 1 <i>What Does Biodiversity Mean for Human Health?</i>—capture sheet <i>Student Guide</i>, question 1—assessment at teacher discretion</p> <p>Lesson 1, Day 2 <i>Time Lapse Observation and Inference</i>—capture sheet <i>Case Study</i>—capture sheet</p> <p>Lesson 1, Day 3 <i>Student Hotspot</i>—capture sheet <i>Student Guide</i>, questions 2 and 3—assessment at teacher discretion</p> <p>Lesson 1, Day 3 (optional activity) <i>Extension</i>—capture sheet</p> <p>Lesson 1, Day 4 <i>Google My Maps Presentation</i>—capture sheet</p> <p>Lesson 1, Day 5 <i>Biodiversity Stakeholders Map</i>—rubric</p> <p>Lesson 4, Day 2 <i>TEK Jigsaw</i>—capture sheet <i>Student Guide</i>, questions 2 and 3</p> <p>Lesson 4, Day 3 <i>Medicinal Plant Profile</i>—capture sheet</p> <p>Lesson 4, Day 5 <i>Medicinal Community Garden Design</i>—capture sheet <i>Student Guide</i>, question 4</p>
A5.3	Compile labs (results, tables, graphs) in a legal, scientific notebook and/or an Internet site or Web page.	<p>Lesson 1, Day 2 <i>Time Lapse Observation and Inference</i>, question 2—capture sheet <i>Case Study</i>, question 3—capture sheet</p> <p>Lesson 1, Day 4 <i>Google My Maps Presentation</i>—capture sheet</p> <p>Lesson 1, Day 5 <i>Biodiversity Stakeholders Map</i>—rubric</p>

Standard	Description	Assessed
A7.0: Understand the function of regulatory agencies for the biotechnology industry and the lasting impact of routine laboratory and communication practices on product development and manufacturing.		
A7.1	Identify agencies at the local, state, and federal levels.	<p>Lesson 1, Day 2 Case Study—capture sheet</p> <p>Lesson 1, Day 4 Google My Maps Presentation—capture sheet</p> <p>Lesson 1, Day 5 Biodiversity Stakeholders Map—rubric</p>
A7.3	Describe intellectual property.	<p>Lesson 2, Day 2 Who Owns That?—capture sheet</p> <p>Lesson 2, Day 3 Think-Pair-Share—strategy, assessment at teacher discretion Case Study—capture sheet</p> <p>Lesson 2, Day 4 Stakeholder Case Study Jigsaw Information—capture sheet Student Guide, question 1—assessment at teacher discretion</p> <p>Lesson 2, Day 5 Philosophical Chairs—strategy, capture sheet</p> <p>Lesson 2, Day 6 Nagoya Protocol Gallery Walk—strategy, assessment at teacher discretion Nagoya Protocol Summary Poster—strategy, assessment at teacher discretion Best Practices for Ethical Collaboration—capture sheet Stakeholder Perspectives—rubric Student Guide, question 2—assessment at teacher discretion</p> <p>Lesson 6, Day 1 Career Exploration—capture sheet</p> <p>Lesson 6, Day 4 Preliminary Background Research—capture sheet</p> <p>Lesson 6, Day 5 Gallery Walk—strategy, capture sheet</p> <p>Lesson 7, Day 1 Student Guide, Project Team Process Journal—capture sheet</p> <p>Lesson 7, Day 1 (Financial Analysis Scaling Team) Values Discussion and Draft Benefit Sharing Plan—capture sheet</p>

Standard	Description	Assessed
		<p>Lesson 7, Day 2 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team) <i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Financial Analysis Scaling Team) <i>Financial Analysis Introduction</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Financial Analysis Scaling Team) <i>Complete Draft Quantitative Analysis</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 9, Day 2 <i>Biotech Unit Challenge</i>—rubric</p>
A7.6	<p>Articulate issues of ethical concern, including plagiarism, copyrights, trademarks, and patents and use online data resources and searchable databases to investigate a copyright, trademark, or patent.</p>	<p>Lesson 6, Day 1 <i>Career Exploration</i>—capture sheet</p> <p>Lesson 6, Day 4 <i>Preliminary Background Research</i>—capture sheet</p> <p>Lesson 6, Day 5 <i>Gallery Walk</i>—strategy, capture sheet</p> <p>Lesson 7, Day 1 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Financial Analysis Scaling Team) <i>Values Discussion and Draft Benefit Sharing Plan</i>—capture sheet</p> <p>Lesson 7, Day 2 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team) <i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p>

Standard	Description	Assessed
		<p>Lesson 7, Day 3 (Financial Analysis Scaling Team) <i>Financial Analysis Introduction</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Financial Analysis Scaling Team) <i>Complete Draft Quantitative Analysis</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 9, Day 2 <i>Biotech Unit Challenge</i>—rubric</p>
A8.0: Follow sustainable and safe practices with high regard for quality control.		
A8.1	Follow written protocols and oral directions to perform a variety of laboratory and technical tasks.	<p>Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet <i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 3 <i>Student Protocol, Part 2: Kirby-Bauer Assay</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 4 <i>Student Guide, Part 2: Lab</i>, questions 2 and 3—capture sheet <i>Student Guide, Part 3: Data Analysis</i>, question 2—capture sheet</p>
A8.6	Properly and safely use and monitor a variety of scientific equipment, including pH meters, microscopes, spectrophotometers, pipettes, micropipettes, and balances.	<p>Lesson 5, Day 1 <i>Vocabulary Tool</i> <i>Exit Ticket</i>—assessment at teacher discretion</p> <p>Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet <i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 3 <i>Student Protocol, Part 2: Kirby-Bauer Assay</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 4 <i>Student Guide, Part 3: Data Analysis</i>, question 2—capture sheet</p>

Standard	Description	Assessed
A8.7	Determine which equipment is appropriate to use for a given task and the units of measurement used.	<p>Lesson 5, Day 1 <i>Vocabulary Tool</i> <i>Exit Ticket</i>—assessment at teacher discretion</p> <p>Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet <i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 3 <i>Student Protocol, Part 2: Kirby-Bauer Assay</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 4 <i>Student Guide, Part 2: Lab</i>, questions 2 and 3—capture sheet</p> <p>Lesson 5, Day 4 <i>Student Guide, Part 3: Data Analysis</i>, question 2—capture sheet</p>
A8.8	Perform specimen collection, label samples, and prepare samples for testing.	<p>Lesson 3, Day 1 <i>Who are Museum Scientists?</i>, questions 3–9—capture sheet <i>Collecting and Preserving Plant Specimens</i>, step I—capture sheet <i>Student Guide</i>, question 1</p> <p>Lesson 3, Day 2 <i>Collecting and Preserving Plant Specimens</i>, steps II–III—capture sheet <i>Student Guide</i>, question 2</p> <p>Lesson 3, Day 3 <i>Create a Plant Profile</i>—capture sheet</p> <p>Lesson 5, Day 1 <i>Student Guide, Part 1: Pre-Lab</i>—capture sheet <i>Bioactive Compounds from Plants Questions</i>—capture sheet</p> <p>Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet <i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 2 <i>Student Guide, Part 2: Lab</i>, question 1—capture sheet <i>Student Protocol, Part 1: Extract Bioactive Compounds</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p> <p>Lesson 5, Day 3 <i>Student Protocol, Part 2: Kirby-Bauer Assay</i> <i>Exit Ticket</i>—strategy, assessment at teacher discretion</p>

Standard	Description	Assessed
		<p>Lesson 5, Day 4 <i>Student Guide, Part 3: Data Analysis</i>, question 2—capture sheet</p> <p>Lesson 5, Day 1 (optional activity) <i>Student Guide</i>, question 4—assessment at teacher discretion</p>
A8.9	Handle, transport, and store samples safely.	<p>Lesson 3, Day 1 <i>Collecting and Preserving Plant Specimens</i>, step I—capture sheet <i>Student Guide</i>, question 1</p> <p>Lesson 3, Day 2 <i>Collecting and Preserving Plant Specimens</i>, step II–III—capture sheet <i>Student Guide</i>, question 2</p> <p>Lesson 3, Day 3 <i>Create a Plant Profile</i>—capture sheet</p>
<p>A9.0: <i>Understand that manufacturing represents inter-connectedness between science and production.</i></p>		
A9.4	Cite examples of plant parts or extracts used as pharmaceuticals.	<p>Lesson 4, Day 3 <i>Medicinal Plant Profile</i>—capture sheet</p> <p>Lesson 4, Day 4 <i>Plant Profile Gallery Walk Student</i>—capture sheet</p> <p>Lesson 4, Day 5 <i>Medicinal Community Garden Design</i>—capture sheet <i>Student Guide</i>, question 4</p> <p>Lesson 5, Day 1 <i>Student Guide, Part 1: Pre-Lab</i>—capture sheet <i>Bioactive Compounds from Plants Questions</i>—capture sheet <i>Vocabulary Tool</i> <i>Exit Ticket</i>—assessment at teacher discretion</p> <p>Lesson 5, Day 2 (optional activity) <i>Student Guide</i>, question 2—assessment at teacher discretion</p> <p>Lesson 5, Day 3 (optional activity) <i>Student Guide</i>, question 3—assessment at teacher discretion</p> <p>Lesson 5, Day 5 <i>Student Guide, Part 4: Obtaining Information</i>—capture sheet <i>Obtaining and Communicating Information</i>—rubric</p> <p>Lesson 5, Day 1 (optional activity) <i>Student Guide</i>, question 1—assessment at teacher discretion</p>

Standard	Description	Assessed
		<p>Lesson 6, Day 1 <i>Medicinal Plant Profile</i>—capture sheet <i>Career Exploration</i>—capture sheet</p> <p>Lesson 6, Day 2 <i>Drug Development Application</i>—capture sheet <i>Plants and Human Health Pitch</i>—assessment at teacher discretion</p> <p>Lesson 6, Day 4 <i>Preliminary Background Research</i>—capture sheet</p> <p>Lesson 6, Day 5 <i>Gallery Walk</i>—strategy, capture sheet</p> <p>Lesson 7, Day 1 (Molecular Modeling Team) <i>Find a Protein and Medicine Model Using Molview</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Communications Strategy Team) <i>Identify Your Team’s Patient Population</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Financial Analysis Scaling Team) <i>Values Discussion and Draft Benefit Sharing Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team) <i>Use a Model to Communicate</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Communications Strategy Team) <i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team) <i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Communications Strategy Team) <i>Outline Communication Strategy</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Financial Analysis Scaling Team) <i>Financial Analysis Introduction</i>—capture sheet</p>

Standard	Description	Assessed
		<p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team)</p> <p><i>Build Time</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Communications Strategy Team)</p> <p><i>Create a Draft of the Communications Product</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Financial Analysis Scaling Team)</p> <p><i>Complete Draft Quantitative Analysis</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Molecular Modeling Team)</p> <p><i>Create a Science Guide</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Communications Strategy Team)</p> <p><i>Create a Draft of the Communications Product</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Financial Analysis Scaling Team)</p> <p><i>Check In and Seek Feedback</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 9, Day 2</p> <p><i>Biotech Unit Challenge</i>—rubric</p>
A9.5	Use the Internet to find information about traditional pharmaceuticals, herbal remedies, and recombinant pharmaceuticals.	<p>Lesson 4, Day 1</p> <p><i>Tending Nature</i>—capture sheet</p> <p><i>Student Guide</i>, question 1</p> <p>Lesson 4, Day 2</p> <p><i>TEK Jigsaw</i>—capture sheet</p> <p><i>Student Guide</i>, questions 2 and 3</p> <p>Lesson 4, Day 3</p> <p><i>Medicinal Plant Profile</i>—capture sheet</p> <p>Lesson 4, Day 5</p> <p><i>Medicinal Community Garden Design</i>—capture sheet</p> <p><i>Student Guide</i>, question 4</p> <p>Lesson 5, Day 1</p> <p><i>Student Guide, Part 1: Pre-Lab</i>—capture sheet</p> <p><i>Bioactive Compounds from Plants Questions</i>—capture sheet</p> <p><i>Vocabulary Tool</i></p> <p><i>Exit Ticket</i>—assessment at teacher discretion</p>

Standard	Description	Assessed
		<p>Lesson 5, Day 2 (optional activity) <i>Student Guide</i>, question 2—assessment at teacher discretion</p> <p>Lesson 5, Day 3 (optional activity) <i>Student Guide</i>, question 3—assessment at teacher discretion</p> <p>Lesson 5, Day 5 <i>Student Guide, Part 4: Obtaining Information</i>—capture sheet <i>Obtaining and Communicating Information</i>—rubric</p> <p>Lesson 6, Day 1 <i>Medicinal Plant Profile</i>—capture sheet</p> <p>Lesson 6, Day 4 <i>Preliminary Background Research</i>—capture sheet</p> <p>Lesson 6, Day 5 <i>Gallery Walk</i>—strategy, capture sheet</p> <p>Lesson 7, Day 1 (Molecular Modeling Team) <i>Find a Protein and Medicine Model Using Molview</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Communications Strategy Team) <i>Identify Your Team’s Patient Population</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Financial Analysis Scaling Team) <i>Values Discussion and Draft Benefit Sharing Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team) <i>Use a Model to Communicate</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Communications Strategy Team) <i>Communications Strategy Team Day 2: Identify the Audience for Your Communications Plan</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Financial Analysis Scaling Team) <i>Financial Analysis Scaling Team Day 2: Question Selection and Research</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Communications Strategy Team) <i>Outline Communication Strategy</i>—capture sheet</p>

Standard	Description	Assessed
		<p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Financial Analysis Scaling Team)</p> <p><i>Financial Analysis Introduction</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team)</p> <p><i>Build Time</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Communications Strategy Team)</p> <p><i>Create a Draft of the Communications Product</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Financial Analysis Scaling Team)</p> <p><i>Complete Draft Quantitative Analysis</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Molecular Modeling Team)</p> <p><i>Create a Science Guide</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Communications Strategy Team)</p> <p><i>Create a Draft of the Communications Product</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Financial Analysis Scaling Team)</p> <p><i>Check In and Seek Feedback</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p>
A9.7	Design a flowchart describing the steps for creating a new drug from hypothesis to distribution.	<p>Lesson 7, Day 1</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 1 (Molecular Modeling Team)</p> <p><i>Find a Protein and Medicine Model Using Molview</i>—capture sheet</p> <p>Lesson 7, Day 2</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 2 (Molecular Modeling Team)</p> <p><i>Use a Model to Communicate</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 3 (Molecular Modeling Team)</p> <p><i>Build Time</i>—capture sheet</p> <p><i>Student Guide, Project Team Process Journal</i>—capture sheet</p>

Standard	Description	Assessed
		<p>Lesson 7, Day 4 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 4 (Molecular Modeling Team) <i>Build Time</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 <i>Student Guide, Project Team Process Journal</i>—capture sheet</p> <p>Lesson 7, Day 5 (Molecular Modeling Team) <i>Create a Science Guide</i>—capture sheet <i>Student Guide, Project Team Process Journal</i>—capture sheet</p>



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