

Unit 03: Lab Experience

Content Area: **Template**
Course(s):
Time Period: **Full Year**
Length: **FY**
Status: **Published**

Standards Alignment

New Jersey Student Learning Standards

LA.K-12.NJSLSA.R3	Analyze how and why individuals, events, and ideas develop and interact over the course of a text. Craft and Structure
LA.K-12.NJSLSA.R4	Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
LA.K-12.NJSLSA.R10	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
LA.RST.6-8	Reading Science and Technical Subjects
LA.K-12.NJSLSA.W	Writing
LA.RST.6-8.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
LA.RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
LA.K-12.NJSLSA.W2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
LA.RST.6-8.10	By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.
LA.K-12.NJSLSA.W9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
LA.WHST.6-8.2.D	Use precise language and domain-specific vocabulary to inform about or explain the topic.
LA.WHST.6-8.9	Draw evidence from informational texts to support analysis, reflection, and research.
PFL.9.1.8.A	Income and Careers
PFL.9.1.8.A.3	Differentiate among ways that workers can improve earning power through the acquisition of new knowledge and skills.
PFL.9.1.8.A.4	Relate earning power to quality of life across cultures.
PFL.9.1.8.A.5	Relate how the demand for certain skills determines an individual's earning power.
PFL.9.1.8.A.6	Explain how income affects spending decisions.
PFL.9.1.8.B	Money Management
PFL.9.1.8.B.5	Explain the effect of the economy on personal income, individual and family security, and

	consumer decisions.
PFL.9.1.8.B.6	Evaluate the relationship of cultural traditions and historical influences on financial practice.
PFL.9.1.8.E.3	Compare and contrast product facts versus advertising claims.
AAAA.K-12.1	Inquire, think critically, and gain knowledge.
AAAA.K-12.1.1	Skills
AAAA.K-12.1.1.1	Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.
AAAA.K-12.1.1.5	Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.
AAAA.K-12.1.1.6	Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.
AAAA.K-12.1.2	Dispositions in Action
AAAA.K-12.1.2.2	Demonstrate confidence and self- direction by making independent choices in the selection of resources and information.
AAAA.K-12.1.2.3	Demonstrate creativity by using multiple resources and formats.
AAAA.K-12.1.2.4	Maintain a critical stance by questioning the validity and accuracy of all information.
AAAA.K-12.1.2.5	Demonstrate adaptability by changing the inquiry focus, questions, resources, or strategies when necessary to achieve success.
AAAA.K-12.1.2.6	Display emotional resilience by persisting in information searching despite challenges.
AAAA.K-12.1.2.7	Display persistence by continuing to pursue information to gain a broad perspective.
AAAA.K-12.1.3	Responsibilities
AAAA.K-12.1.3.1	Respect copyright/intellectual property rights of creators and producers.
AAAA.K-12.1.3.2	Seek divergent perspectives during information gathering and assessment.
AAAA.K-12.1.3.3	Follow ethical and legal guidelines in gathering and using information.
AAAA.K-12.1.3.4	Contribute to the exchange of ideas within the learning community.
AAAA.K-12.1.3.5	Use information technology responsibly.
AAAA.K-12.1.4	Self-Assessment Strategies
AAAA.K-12.1.4.1	Monitor own information-seeking processes for effectiveness and progress, and adapt as necessary.
AAAA.K-12.1.4.2	Use interaction with and feedback from teachers and peers to guide own inquiry process.
AAAA.K-12.1.4.3	Monitor gathered information, and assess for gaps or weaknesses.
AAAA.K-12.1.4.4	Seek appropriate help when it is needed.
AAAA.K-12.2	Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.
AAAA.K-12.2.1	Skills
AAAA.K-12.2.1.1	Continue an inquiry- based research process by applying critical- thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.
AAAA.K-12.2.1.2	Organize knowledge so that it is useful.
AAAA.K-12.2.1.3	Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.
AAAA.K-12.2.1.5	Collaborate with others to exchange ideas, develop new understandings, make decisions,

	and solve problems.
AAAA.K-12.2.2	Dispositions in Action
AAAA.K-12.2.2.4	Demonstrate personal productivity by completing products to express learning.
AAAA.K-12.2.3	Responsibilities
AAAA.K-12.2.3.1	Connect understanding to the real world.
AAAA.K-12.2.3.2	Consider diverse and global perspectives in drawing conclusions.
AAAA.K-12.2.4	Self-Assessment Strategies
AAAA.K-12.2.4.1	Determine how to act on information (accept, reject, modify).
AAAA.K-12.2.4.3	Recognize new knowledge and understanding.
AAAA.K-12.3	Share knowledge and participate ethically and productively as members of our democratic society.
AAAA.K-12.3.1	Skills
AAAA.K-12.3.1.1	Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.
AAAA.K-12.3.1.3	Use writing and speaking skills to communicate new understandings effectively.
AAAA.K-12.3.1.4	Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.
AAAA.K-12.3.1.5	Connect learning to community issues.
AAAA.K-12.3.1.6	Use information and technology ethically and responsibly.
AAAA.K-12.3.2	Dispositions in Action
AAAA.K-12.3.2.1	Demonstrate leadership and confidence by presenting ideas to others in both formal and informal situations.
AAAA.K-12.3.2.2	Show social responsibility by participating actively with others in learning situations and by contributing questions and ideas during group discussions.
AAAA.K-12.3.2.3	Demonstrate teamwork by working productively with others.
AAAA.K-12.3.3	Responsibilities
AAAA.K-12.3.3.1	Solicit and respect diverse perspectives while searching for information, collaborating with others, and participating as a member of the community.
AAAA.K-12.3.3.2	Respect the differing interests and experiences of others, and seek a variety of viewpoints.
AAAA.K-12.3.3.3	Use knowledge and information skills and dispositions to engage in public conversation and debate around issues of common concern.
AAAA.K-12.3.3.4	Create products that apply to authentic, real-world contexts.
AAAA.K-12.3.3.7	Respect the principles of intellectual freedom.
AAAA.K-12.3.4	Self-Assessment Strategies
AAAA.K-12.3.4.1	Assess the processes by which learning was achieved in order to revise strategies and learn more effectively in the future.
AAAA.K-12.3.4.3	Assess own ability to work with others in a group setting by evaluating varied roles, leadership, and demonstrations of respect for other viewpoints.
AAAA.K-12.4	Pursue personal and aesthetic growth.
AAAA.K-12.4.1	Skills
AAAA.K-12.4.1.1	Read, view, and listen for pleasure and personal growth.
AAAA.K-12.4.1.5	Connect ideas to own interests and previous knowledge and experience.

AAAA.K-12.4.1.8	Use creative and artistic formats to express personal learning.
AAAA.K-12.4.2	Dispositions in Action
AAAA.K-12.4.2.1	Display curiosity by pursuing interests through multiple resources.
AAAA.K-12.4.2.3	Maintain openness to new ideas by considering divergent opinions, changing opinions or conclusions when evidence supports the change, and seeking information about new ideas encountered through academic or personal experiences.
AAAA.K-12.4.3	Responsibilities
AAAA.K-12.4.3.1	Participate in the social exchange of ideas, both electronically and in person.
AAAA.K-12.4.3.2	Recognize that resources are created for a variety of purposes.
AAAA.K-12.4.3.4	Practice safe and ethical behaviors in personal electronic communication and interaction.
AAAA.K-12.4.4	Self-Assessment Strategies
AAAA.K-12.4.4.1	Identify own areas of interest.
AAAA.K-12.4.4.2	Recognize the limits of own personal knowledge.
AAAA.K-12.4.4.3	Recognize how to focus efforts in personal learning.
AAAA.K-12.4.4.5	Develop personal criteria for gauging how effectively own ideas are expressed.
CAEP.9.2.8.B	Career Exploration
CAEP.9.2.8.B.3	Evaluate communication, collaboration, and leadership skills that can be developed through school, home, work, and extracurricular activities for use in a career.

Integration of Career Readiness, Life Literacies and Key Skills

CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP3	Attend to personal health and financial well-being.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP5	Consider the environmental, social and economic impacts of decisions.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP9	Model integrity, ethical leadership and effective management.
CRP.K-12.CRP10	Plan education and career paths aligned to personal goals.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.

Technology / Integration of Computer Science and Design Thinking

TECH.8.1.8	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.8.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.

TECH.8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
TECH.8.1.8.A.2	Create a document (e.g., newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability.
TECH.8.1.8.D	Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
TECH.8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
TECH.8.2.8	Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.
TECH.8.2.8.E	Computational Thinking: Programming: Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.
TECH.8.2.8.E.1	Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used.

Interdisciplinary Connections: NJSL for ELA, Social Studies, Science and/or Math Section

Integration of Diversity, Equity and Inclusion; Climate Change; Informational and Media Literacy New Section

see Crosswalks

21st Century Life and Careers

Stage I: Desired Results

Transfer/Overview/Rationale

Transfer / Overview / Rationale

Unit Rationale

The purpose of this unit...

Practical, hands-on experience is essential in reinforcing the processes being discussed in learning to read recipes,

learning about the safe use of kitchen tools, and practicing safe kitchen procedures. Cooking engages all the senses, provides fine and gross motor experiences, and helps develop muscle memory through practicing the techniques we've discussed in class. By participating in lab activities, students will begin to recognize similarities in techniques, in combinations of ingredients, in the mixing processes, and in the way ingredients are measured in different recipes.

Learning to work together as a team in the kitchen while following the directions in a recipe will teach students very important skills, such as team-building, compromise, leadership, following directions, the importance of following through with your job because others are depending on you, multi-tasking, focusing, cause and effect, accuracy, accountability, etc. Shared experiences foster a feeling of belonging and pull the class together as a unit.

Meaning

Essential Questions

Essential Questions

Why do we have to work together? We don't even know each other...

Why does it matter if I clean my dishes properly?

Do I really have to follow the recipe?

Why does it matter if I measure correctly or not?

What if I don't like this recipe?

Enduring Understanding/Indicators of Understanding

Enduring Understanding/Indicators of Understanding

Teamwork in the kitchen is imperative to achieving the desired results.

Following the recipe very important when you are learning to cook .

Thinking about what you are doing will produce better food more efficiently and safely, and doesn't take any more time than rushing through.

In order to keep a clean and safe working environment, you must follow all cleaning and storage procedures.

You must learn the rules before you can break the rules.

Acquisition (Student Learning Objectives)

Knowledge

Knowledge

Students will know...

-working as part of a team makes the work easier.

-that each team member is important and their effort effects the groups results.

-that a recipe is a guide to achieve a specific result.

-that using the proper tools, cleaning them correctly, and storing them in the correct place, will make the job proceed quickly and efficiently, keep the kitchen free of pests, and keep germs at bay.

-that it is important to keep the lab clean, and leave it in better shape than they found it.

-that planning their time correctly in the kitchen is extremely important in the outcome of the recipe and in being on time to their next class.

-all members of the group are responsible for the completeness of the lab, and the cleanliness of the kitchens.

-how to use the internet to search for and obtain complete and usable recipes.

-how to use a word processing, or presentation program to build and decorate a cookbook.

-how to copy and cite a recipe for inclusion in their cookbook while respecting the authors copyright, and avoiding plagiarism.

Skills

Skills

Student will be skilled at ...

-reading and interpreting a recipe.

-performing the scheduled job in the kitchens.

-determining the correct tools to use for the jobs specified in the recipe, and finding them in the kitchens.

-using kitchen tools safely and correctly.

-cleaning and storing equipment in the kitchens.

-storing and using food safely in the kitchen.

- achieving the desired result when following a recipe.
- trouble shooting problems in the kitchen, fixing mistakes rather than throwing away a mistake.
- working as a member of a group to achieve the desired result
- helping out their teammates when they need help with their assigned job.
- evaluating their lab results, determining areas that need improvement, and making those improvements in the next lab.
- using computers to research recipes on the internet.
- determining that a recipe is complete and useable.
- Finding recipes that reflect the cultures of their families and building a cookbook based on those cultures.
- choosing a recipe and following it at home to bring into class as a sample.
- Finding recipes that reflect their own personal taste and using them to build a cookbook.
- writing an introductory paragraph in their own style.
- Writing a short introduction to a country, it's culture, and its cuisine, and how that influence shows, or doesn't show, in their household.
- working within a deadline.

[End of Year cleaning and storage directions](#)

[Mid-year cleaning directions](#)

[Measuring practice sheet](#)

Stage 3: Learning Plan

Resource and Mentor Texts

Resources and Mentor Texts

Recipes

Cookbooks

Kitchen Labs

Kitchen Equipment

Groceries

Text "Today's Teen" Chapter 40 "Working in the Kitchen"

Formative Assessment Strategies

Formative Assessment Strategies

Participation

Self-evaluation of lab results

Teacher Observation

Lab results

Completed assignments

Learning Activities/Unit of Study

Learning Activities/Unit of Study

Recipe choices

Lab planning

Market orders

Cooking Labs

Laundry

Job assignments and rotation

Computer based recipe research, cookbook project, family history

Planning and building a cookbook.

Writing introductory paragraphs

Family history research

Cultural foods research.

Finding countries from Family History research and plotting them on a world map

Modifications and/or Accommodations

Suggested Modifications (ELL, Sp. Ed, Gifted, At-risk of Failure)

English Language Learners

Native language support: The teacher provides auditory or written content to students in their native language.

Adjusted Speech: The teacher changes speech patterns to increase student comprehension. This could include facing the students, paraphrasing, clearly indicating the most important ideas, and speaking more slowly.

Visuals: The teacher uses graphics, pictures, visuals, and manipulatives. This helps ELL students better understand and comprehend the subjects at hand.

Front-Loading Vocabulary: The teacher front loads vocabulary. This means providing students with a list of important vocabulary words they will need to know for a book, lesson, etc. prior to the lesson being taught. Including pictures to go with the vocabulary words is also very beneficial for the students.

Special Education Students

Chunking: The teacher presents information in a way that makes it easy for students to understand and remember. Chunking is based on the presumption that our working memory is easily overloaded by excessive detail. The best way to deliver information is to organize it into meaningful units. Because students with special needs get overloaded easily, chunking is an effective strategy to use with them.

Checking for Understanding: It is important to constantly check for understanding, especially for students who have accommodations. Teachers want to make sure students understand the concepts being covered in a way that makes sense to them.

Extra time: The teacher provides students with special needs extra time to complete work or answer questions. It is important to give students enough time to process their thoughts.

Oral Reading: The teacher will read work orally to students. Class work such as tests and literature circles may need to be read aloud to the student.

Timers: The teacher will use timers as an instructional tool. The use of timers is beneficial for students who have trouble completing tasks. Timers can be helpful so the student is aware of how much time they have to complete an assignment.

Students with 504 Plans

Chunking: The teacher presents information in a way that makes it easy for students to understand and remember. Chunking is based on the presumption that our working memory is easily overloaded by excessive detail. The best way to deliver information is to organize it into meaningful units. Because students with special needs get overloaded easily, chunking is an effective strategy to use with them.

Checking for Understanding: It is important to constantly check for understanding, especially for students who have accommodations. Teachers want to make sure students understand the concepts being covered in a way that makes sense to them.

Extra time: The teacher provides students with special needs extra time to complete work or answer questions. It is important to give students enough time to process their thoughts.

Gifted & Talented Strategies

Extensions/Enrichments: Teachers will provide gifted and talented students with extension/enrichment projects. Students will be challenged to further their understanding, to apply acquired knowledge, and/or to produce something in reference to acquired knowledge.

Modify/Change Activities: Teachers will monitor and modify activities to accommodate those students who need to be challenged further. Additional reading, problem-solving, writing, or project work is necessary for those students who are ready to move on at a rate more accelerated than their peers. In this way, G & T students are provided the same opportunity for support as special needs students.

Students at Risk of School Failure

Directions or Instructions: Make sure directions and/or instructions are given in limited numbers. Give directions/instructions verbally and in simple written format. Ask students to repeat the instructions or directions to ensure understanding occurs. Check back with the student to ensure he/she hasn't forgotten.

Peer Support: Peers can help build confidence in other students by assisting in peer learning. Many teachers use the 'ask 3 before me' approach. This is fine, however, a student at risk may have to have a specific student or two to ask. Set this up for the student so he/she knows who to ask for clarification before going to you.

Alternate or Modified Assignments: Always ask yourself, "How can I modify this assignment to ensure the students at risk are able to complete it?" Sometimes you'll simplify the task, reduce the length of the assignment or allow for a different mode of delivery. For instance, many students may hand something in, the at-risk student may jot notes and give you the information verbally. Or, it just may be that you will need to assign an alternate assignment.

Increase One to One Time: When other students are working, always touch base with your students at risk and find out if they're on track or needing some additional support. A few minutes here and there will go a long way to intervene as the need presents itself.

Contracts: It helps to have a working contract between you and your students at risk. This helps prioritize the tasks that need to be done and ensure completion happens. Each day write down what needs to be completed, as the tasks are done, provide a checkmark or happy face. The goal of using contracts is to eventually have the student come to you for completion sign-offs.

Hands On: As much as possible, think in concrete terms and provide hands-on tasks. This means a child doing math may require a calculator or counters. The child may need to tape record comprehension activities instead of writing them. A child may have to listen to a story being read instead of reading it him/herself.

Tests/Assessments: Tests can be done orally if need be. Break tests down in smaller increments by having a portion of the test in the morning, another portion after lunch and the final part the next day.

Seating: Seat students near a helping peer or with quick access to the teacher. Those with hearing or sight issues need to be close to the instruction which often means near the front.