Unit 4 Principles of baking

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Belleville Public Schools

Curriculum Guide

Food & Nutrition GRADE 10th- 12th

Unit 4 Principles of baking

Belleville Board of Education

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Unit Overview

Unit 4 Principles of baking students will learn how to read a recipe gather ingredients needed to bake quick breads,yeast breads , 6 types of cookies ,desserts&cookies and how it fits into a healthy eating plan. This is a hands-on section where students will participate in the food labs preparing recipes after being engaged in the lessons about food.

Students will know:

- The basic ingredients for baking.
- The function of ingredients for baking.
- Quick breads vs yeast bread.
- 6 types of cookies
- Healthy baked goods
- Standard ways to measure ingredients.
- Proper storage for baked goods.
- Recipe terms and techniques for baking preparation.
- The function and care of kitchen tools, equipment and appliances.
- The proper and safe use of baking tools, equipment and appliances.

- A baked goods recipe is a chemical formula, allowing for little to no modification.

Enduring Understanding

Students will understand the following:

- Content Vocabulary terms and baking techniques.
- Skills for successful baking
- Identify the function of different ingredients in baking.
- Identify different measuring methods
- Identify the food science of leavening agents.
- Evaluate & compare different methods for making quick breads and yeast breads
- Develop skills for successful baking.
- Ingredients can be modified for special diets.
- Math skills are needed in reading, modifying and preparing recipes.
- Proper ways to store bread and baking ingredients for freshness.
- Recipes require kitchen tools, equipment and appliances to aid in food preparation.

Essential Questions

- Does the student have skills to prepare baked goods?
- Can The student identify the function of ingredients used in baked goods?
- Can the student identify basic ingredients used in baking?
- Can the student read and demonstrate the different methods used for baked goods?
- Can the student list the guidelines that contribute to successful baking?
- Does the student understand how to properly store baked goods?
- Is the student able to read a recipe, follow step-by-step directions, and properly identify culinary terms with different kitchen tools?
- Is the student able to modify a recipe to alternate the yield and/or substitute the ingredients?
- Is the student able to understand and apply basic properties involving the concepts of science& math?
- Is the student able to select and demonstrate proper use of appropriate tools, equipment and appliances based on function needed to perform recipe tasks?
- Does the student select appropriate solutions to decision-making situations?

Exit Skills

- Identify the function of ingredients in baking
- Identify measuring methods and techniques
- Identify baking skill level
- Prepare *mise en place*
- Identify 6 different types of cookies
- Prepare and compare examples of 6 different types of cookies
- Identify different types of quick breads
- Prepare an examples of quick breads using proper and safe baking techniques
- Prepare an example of yeast breads using proper and safe baking techniques
- Content Vocabulary terms and baking techniques.
- Baking is a science.
- Identify the function of ingredients.
- Ingredients can be modified for special diets.
- Math skills are needed in reading, modifying and preparing recipes.
- Methods of quick breads & yeast breads

- Methods of cookies, cake, pie
- Proper storage for baked goods.
- Recipes require kitchen tools, equipment and appliances to aid in food preparation.

New Jersey Student Learning Standards (NJSLS-S)

9.3.12.ED.1	Apply communication skills with students, parents and other groups to enhance learning and a commitment to learning.
9.3.12.ED.2	Demonstrate effective oral, written and multimedia communication in multiple formats and contexts.
9.3.HT.2	Evaluate the nature and scope of the Hospitality & Tourism Career Cluster and the role of hospitality and tourism in society and the economy.
9.3.12.ED.3	Use critical thinking to process educational communications, perspectives, policies and/or procedures.
9.3.HT.4	Describe employee rights and responsibilities and employers' obligations concerning occupational health and safety in the hospitality and tourism workplace.
9.3.12.ED.4	Evaluate and manage risks to safety, health and the environment in education and training settings.
9.3.12.ED.5	Demonstrate group collaboration skills to enhance professional education and training practice.
9.3.12.ED.9	Describe state-specific professional development requirements to maintain employment and to advance in an education and training career.
9.3.12.ED.10	Apply organizational skills and logic to enhance professional education and training practice.
9.3.12.ED.11	Demonstrate group management skills that enhance professional education and training practice.
9.3.12.ED-ADM.1	Use research-based practices to develop, communicate and enlist support for a vision of

	success for all learners.
9.3.12.ED-ADM.2	Identify behaviors necessary for developing and sustaining a positive learning culture.
9.3.12.ED-ADM.4	Identify instructional practices that meet the learning organization's objectives.
9.3.12.ED-TT.3	Use content knowledge and skills of instruction to develop standards-based goals and assessments.
9.3.HT-RFB.4	Demonstrate leadership qualities and collaboration with others.

Interdisciplinary Connections

LA.RL.9-10	Reading Literature
LA.RI.9-10	Reading Informational Text
LA.RI.9-10.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
	Integration of Knowledge and Ideas
LA.W.9-10	Writing

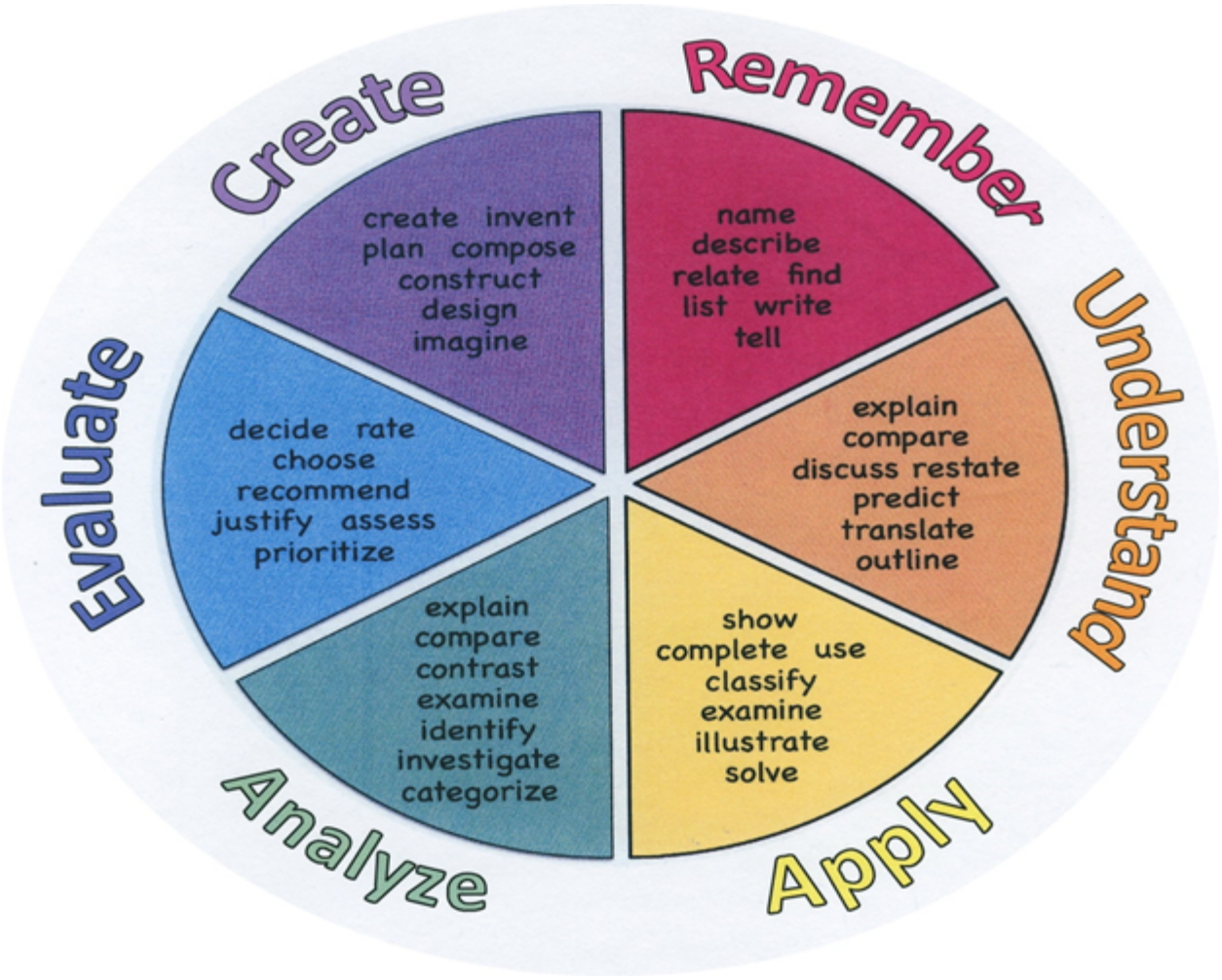
Learning Objectives

After completing the principles of baking unit, students will be able to Identify:

The basic ingredients for baking.
The function of ingredients for baking.
Standard ways to measure ingredients.
Proper storage for baked goods.
Recipe terms and techniques for baking preparation.
The function and care of kitchen tools, equipment and appliances.
The proper and safe use of baking tools, equipment and appliances.
A baked goods recipe is a chemical formula, allowing for little to no modification.
Correctly read and measure baking ingredients.
Correctly follow and perform recipe direction steps, culinary terms and techniques.
Correctly applied proper measuring techniques.
Correctly applied math skills when utilizing recipes.
Select the appropriate tool, equipment and/or appliance to perform baking function or task.

Demonstrate safe and correct use of tools, equipment and/or appliance to perform baking function or task.
Properly and accurately measure recipe ingredients.
Correctly applied skills for successful baking.

Remember	Understand	Apply	Analyze	Evaluate	Create
Choose	Classify	Choose	Categorize	Appraise	Combine
Describe	Defend	Dramatize	Classify	Judge	Compose
Define	Demonstrate	Explain	Compare	Criticize	Construct
Label	Distinguish	Generalize	Differentiate	Defend	Design
List	Explain	Judge	Distinguish	Compare	Develop
Locate	Express	Organize	Identify	Assess	Formulate
Match	Extend	Paint	Infer	Conclude	Hypothesize
Memorize	Give Examples	Prepare	Point out	Contrast	Invent
Name	Illustrate	Produce	Select	Critique	Make
Omit	Indicate	Select	Subdivide	Determine	Originate
Recite	Interrelate	Show	Survey	Grade	Organize
Select	Interpret	Sketch	Arrange	Justify	Plan
State	Infer	Solve	Breakdown	Measure	Produce
Count	Match	Use	Combine	Rank	Role Play
Draw	Paraphrase	Add	Detect	Rate	Drive
Outline	Represent	Calculate	Diagram	Support	Devise
Point	Restate	Change	Discriminate	Test	Generate
Quote	Rewrite	Classify	Illustrate		Integrate
Recall	Select	Complete	Outline		Prescribe
Recognize	Show	Compute	Point out		Propose
Repeat	Summarize	Discover	Separate		Reconstruct
Reproduce	Tell	Divide			Revise
	Translate	Examine			Rewrite
	Associate	Graph			Transform
	Compute	Interpolate			
	Convert	Manipulate			
	Discuss	Modify			
	Estimate	Operate			
	Extrapolate	Subtract			
	Generalize				
	Predict				



Suggested Activities & Best Practices

- Describe how to incorporate healthy baked goods into your diet.
- list and identify the function of ingredients used in baked goods and describe their function.
- compare and contrast the gluten in different types of flour and their function in baked goods.
- explain the growth of yeast as a leavening agent.
- explain how to activate yeast.
- explain and demonstrate the kneading mixing method .
- prepare a quality yeast bread product following a multi-step recipe.
- compare and contrast the mixing methods used in quick breads: muffin mixing method and biscuit mixing method.
- identify and demonstrate preparation techniques for quick breads according to their types: batter, pour method , dough, drop method
- identify and explain the leavening agents used in quick breads: chemical types and natural.
- produce various quick breads formulated by following a multi-step recipe.

Assessment Evidence - Checking for Understanding (CFU)

- Chapter 32 Vocabulary Terms-benchmark assessment
- Chapter 32 Review key concepts-benchmark assessment
- Chapter 34 Vocabulary Terms-benchmark assessment
- Chapter 34 Review Key Concepts
- Google classroom
- Unit Review/Test prep
- Study guide
- Unit test-summative assessment
- Kitchen Logs
- Kitchen Labs
- Kitchen Appliances and tools
- Evaluation Rubrics
- Teacher Observation Checklist
- Self Assessment
- Teacher and student discussions-alternate assessment
- Think, pair, share-formative assessment

- Admit Tickets
- Anticipation Guide
- Common Benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- DBQ's
- Define
- Describe
- Evaluate
- Evaluation rubrics
- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration
- Journals
- KWL Chart
- Learning Center Activities
- Multimedia Reports
- Newspaper Headline
- Outline
- Question Stems
- Quickwrite
- Quizzes
- Red Light, Green Light
- Self- assessments
- Socratic Seminar
- Study Guide
- Surveys
- Teacher Observation Checklist
- Think, Pair, Share
- Think, Write, Pair, Share
- Top 10 List
- Unit review/Test prep
- Unit tests
- Web-Based Assessments
- Written Reports

Primary Resources & Materials

- Textbook: Food ,Nutrition & Wellness
- *Workbook: Food Nutrition & Wellness*
- *Group Discussions*
- *Group Projects*
- *Measuring worksheets*
- *Baking Bingo*
- You tube Clips on baking procedures
- Power Point Presentations

Ancillary Resources

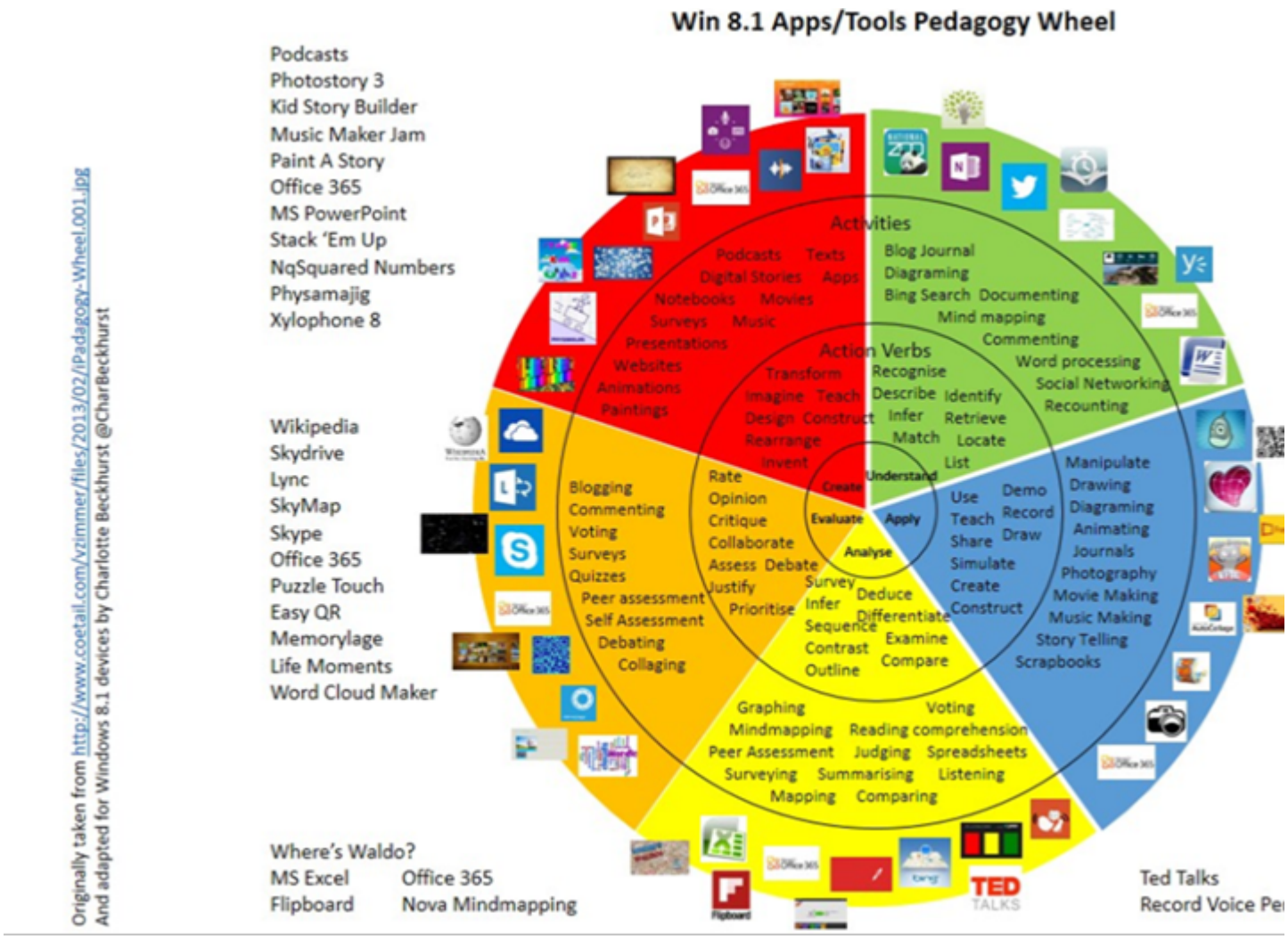
Upon completion of this section, please remove all remaining descriptions, notes, outlines, examples and/or illustrations that are not not needed or used.

- Group Discussions
- Group Projects
- Lab Plans
- Unit Recipes
- Chapter worksheets
- Chapter review
- Chapter test
- Exit Tickets

Technology Infusion

- **Please reference video links and websites listed under Primary Resources & Materials**
- Google Classroom
- Interactive Smart TV Technology
- Technology Internet Research and Word Processing

- Video Demonstration
- Calculations
- Online Applications
- Power Point



Alignment to 21st Century Skills & Technology

- English Language Arts; Reading writing communication
- Mathematics
- Economics
- Interpersnal skills Communication
- Technology

CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP11	Use technology to enhance productivity.
CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CAEP.9.2.12.C.2	Modify Personalized Student Learning Plans to support declared career goals.
TECH.8.1.12	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.8.1.12.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.12.C.CS4	Contribute to project teams to produce original works or solve problems.

21st Century Skills/Interdisciplinary Themes

- Communication and Collaboration
- Creativity and Innovation
- Critical thinking and Problem Solving
- ICT (Information, Communications and Technology) Literacy
- Information Literacy
- Life and Career Skills
- Media Literacy

21st Century Skills

- Civic Literacy
- Environmental Literacy
- Financial, Economic, Business and Entrepreneurial Literacy
- Global Awareness
- Health Literacy

Differentiation

- Extra time to complete assignents
- Study Guides
- Small group instruction following whole group introduction of concepts
- Small groups setting

- Multi-sensory approaches
- Pairing Oral instruction w/visuals
- Group Assignments and Projects
- Probject based learning
- Leveled Rubrics
- Think-Pair Share (roundtable)

Differentiations:

- Small group instruction
- Small group assignments
- Extra time to complete assignments
- Pairing oral instruction with visuals
- Repeat directions
- Use manipulatives
- Center-based instruction
- Token economy
- Study guides
- Teacher reads assessments allowed
- Scheduled breaks
- Rephrase written directions
- Multisensory approaches
- Additional time
- Preview vocabulary
- Preview content & concepts
- Story guides
- Behavior management plan
- Highlight text
- Student(s) work with assigned partner
- Visual presentation
- Assistive technology
- Auditory presentations
- Large print edition
- Dictation to scribe
- Small group setting

Hi-Prep Differentiations:

- Alternative formative and summative assessments
- Choice boards
- Games and tournaments
- Group investigations
- Guided Reading
- Independent research and projects
- Interest groups
- Learning contracts

- Leveled rubrics
- Literature circles
- Multiple intelligence options
- Multiple texts
- Personal agendas
- Project-based learning
- Problem-based learning
- Stations/centers
- Think-Tac-Toes
- Tiered activities/assignments
- Tiered products
- Varying organizers for instructions

Lo-Prep Differentiations

- Choice of books or activities
- Cubing activities
- Exploration by interest
- Flexible grouping
- Goal setting with students
- Jigsaw
- Mini workshops to re-teach or extend skills
- Open-ended activities
- Think-Pair-Share
- Reading buddies
- Varied journal prompts
- Varied supplemental materials

Special Education Learning (IEP's & 504's)

Please identify the **Special Education Learning** adaptations that will be employed in the unit, using the ones identified below.

- Provide modifications as dictated in the student's IEP/504 plan
- Additional time on assignments/assessment
- Additional time for Skill Mastery

- Study Guides/Board Notes
- Notes/presentations on Google Classroom
- Highighted text visual presentation
- Modified assignments
- Shortened assignments
- Multi-sensor pesentation (presentations on SMART TV, on Google Classroom and paper copies for students as appropriate)
- Modifed test formats (written/verbal vs. Google form)
- Open book/Study Guides
- Preferential seating
- Peer mentoring

- printed copy of board work/notes provided
- additional time for skill mastery
- assistive technology
- behavior management plan
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- modified assignment format
- modified test content
- modified test format
- modified test length
- multi-sensory presentation
- multiple test sessions
- preferential seating
- preview of content, concepts, and vocabulary
- Provide modifications as dictated in the student's IEP/504 plan
- reduced/shortened reading assignments
- Reduced/shortened written assignments
- secure attention before giving instruction/directions
- shortened assignments
- student working with an assigned partner
- teacher initiated weekly assignment sheet
- Use open book, study guides, test prototypes

English Language Learning (ELL)

- Translation of content/activities (Port of Entry) supporting terms and definitions related to unit 4 principles of baking
- Assignments submitted in native language (Port of Entry)
- Modifying assignments
- Review assignment/project directions (model)
- Open book/notes options
- Tutoring by peers to reinforce concepts
- Modifying tests to reflect selected objectives

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarif
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning;
- allowing students to correct errors (looking for understanding)
- allowing the use of note cards or open-book during testing
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using computer word processing spell check and grammar check features
- using true/false, matching, or fill in the blank tests in lieu of essay tests

At Risk

- Peer tutoring on Unit 4 Principles of Baking
- Correction and resubmission of work related to Unit 4 Principles of Baking
- Model concepts of Careers in hospitality industry
- Model concepts of principles of baking
- Evaluating correct work; collaborating with student on incorrect work
- Additonal time to complete assignments

- allowing students to correct errors (looking for understanding)

- teaching key aspects of a topic. Eliminate nonessential information
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing
- collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test.
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using authentic assessments with real-life problem-solving
- using true/false, matching, or fill in the blank tests in lieu of essay tests
- using videos, illustrations, pictures, and drawings to explain or clarify

Talented and Gifted Learning (T&G)

- Complete activities above grade level
- Advanced problem-solving related to Unit 4 Principles of baking
- Teacher-selected instructional strategies (simulations) focused to provide challenge, engagement, and growth opportunities
- Simulated project modules utilizing technology at higher level to create diferent baked goods
- Higher order, critical and creative thinking skills, and discovery related to analysis of Unit 4 principles of baking

- Above grade level placement option for qualified students
- Advanced problem-solving
- Allow students to work at a faster pace
- Cluster grouping
- Complete activities aligned with above grade level text using Benchmark results
- Create a blog or social media page about their unit
- Create a plan to solve an issue presented in the class or in a text
- Debate issues with research to support arguments
- Flexible skill grouping within a class or across grade level for rigor

- Higher order, critical & creative thinking skills, and discovery
- Multi-disciplinary unit and/or project
- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize exploratory connections to higher-grade concepts
- Utilize project-based learning for greater depth of knowledge

Sample Lesson

Refer to Unit 1