Unit 4: Kitchen Tools and Equipment

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Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

Introduction to Culinary Arts

Grades 11-12

Kitchen Tools and Equipment

Belleville Board of Education

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Unit Overview

Food preparation equipment is equipment used to process or prepare food. Food preparation equipment may be used in cooking or as part of cleanup. Appliances and kitchen tools make food preparation and cleanup easier. Kitchen equipment can do much to save time and increase efficiency. Kitchen equipment is a financial investment and many points must be considered when purchasing these items. Smallwares include hand tools, cookware, and measuring tools. Proper selection, use and care of kitchen tools and equipment are basic skills needed in food preparation. Safe use and proper clean-up procedures are essential when working in the kitchen to prevent accidents.

Enduring Understanding

- Kitchen tools and appliances aid in food preparation.
- Kitchen tools have a specific use and function in food preparation.
- Safe knife handling and proper use is essential in food preparation.
- Cutting boards are color coded for specific uses to avoid cross contamination.
- Appliances are classified as large/major or small/minor.
- A stove contains three heating elements to cook food.
- Commercial kitchen has specific food industry equipment and appliances.
- Commercial kitchen equipment is used for large quantity food production.
- Safe appliance care and operation is essential in food preparation.
- A safe working environment is essential in food preparation.

Essential Questions

- Is the student able to explain and exhibit proper classroom procedures that contribute positively to the learning environment?
- Does the student exhibit competence in speaking, listening, and the writing process as skills and tools for learning?
- Is the student able to select and apply appropriate solutions to solve and prevent dangerous situations and accidents in the kitchen?
- Can the student identify, select, and properly use common kitchen utensils based on function for specific tasks?
- Is the student able to select the appropriate knife for a specific job and explain safe use and proper care when cutting foods?
- Is the student able to demonstrate safe use and proper care when cutting foods?
- Can the student identify and explain the safe operation and care of major and small appliances used in food preparation?
- Can the student identify commercial kitchens/food industry's tools, equipment and appliances for food production?
- Can the student compare and contrast the differences between commercial kitchens/food industry and home kitchen's tools, equipment and appliances to prepare food?
- Is the student able to safely operate major and small appliances used in food preparation?

Exit Skills

Student will be able to:

- identify and explain the function of tools and equipment used in food production.
- select the appropriate tools and equipment based on their function in food production.
- demonstrate the correct and safe use of tools and equipment in food production.
- safely carry a knife.
- safely pass a knife to a fellow cook.
- safely clean and store a knife.
- safely hone a knife to maintain a straight edge.
- safely select the correct colored cutting board to avoid cross contamination.
- safely operate all 3 cooking elements of the stove.
- safely operate a washer and dryer to clean fabrics.
- safely operate small appliances.
- safely operate a micro-wave oven.

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.

9.3.12.ED.3	Use critical thinking to process educational communications, perspectives, policies and/or procedures.
9.3.12.ED.4	Evaluate and manage risks to safety, health and the environment in education and training settings.
9.3.HT.5	Identify potential, real and perceived hazards and emergency situations and determine the appropriate safety and security measures in the hospitality and tourism workplace.
9.3.12.ED.5	Demonstrate group collaboration skills to enhance professional education and training practice.
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.HT-RFB.2	Demonstrate safety and sanitation procedures in food and beverage service facilities.
9.3.HT-RFB.4	Demonstrate leadership qualities and collaboration with others.

Interdisciplinary Connections

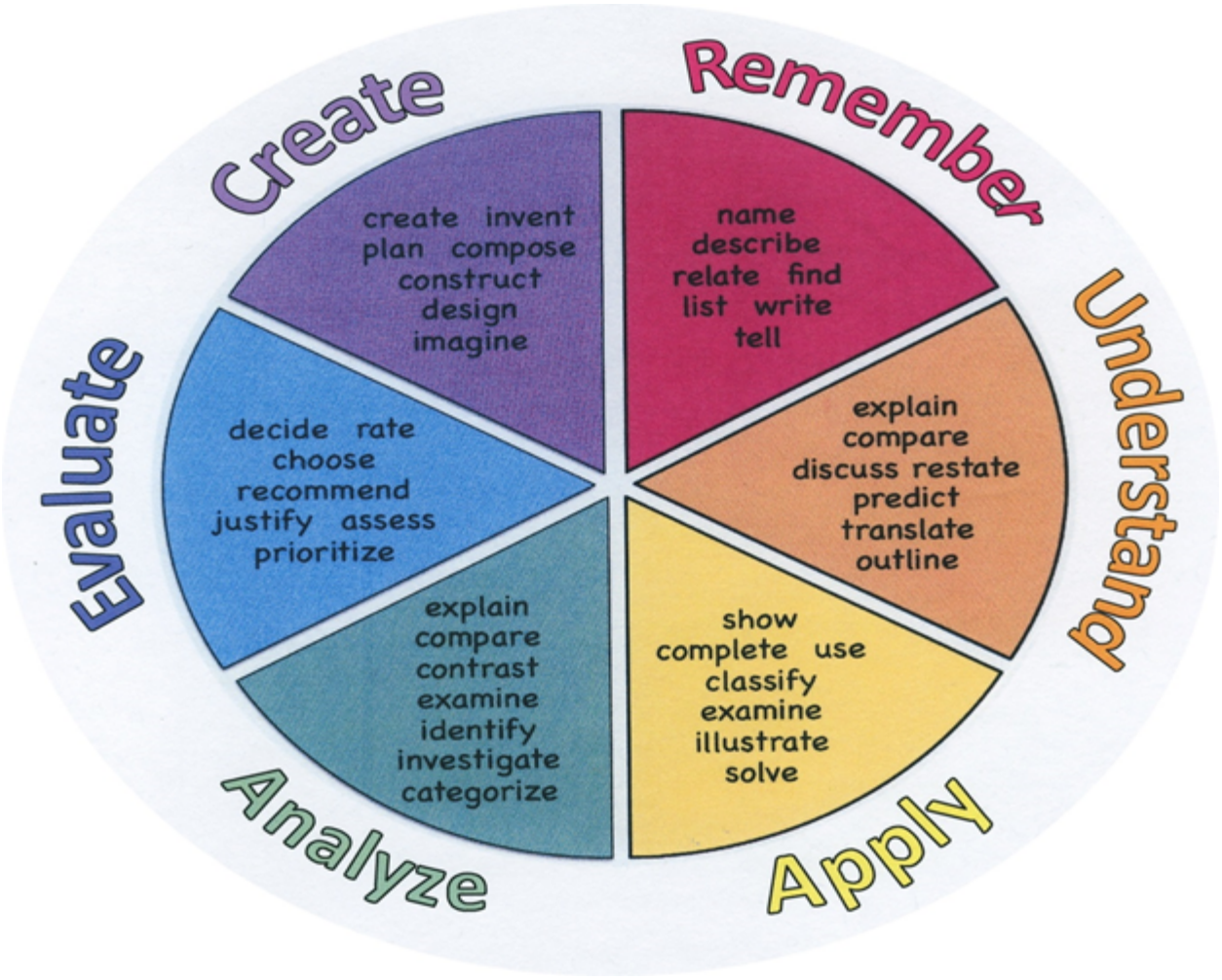
LA.RST.11-12.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
LA.RST.11-12.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
LA.RST.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
LA.RST.11-12.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Learning Objectives

Student will demonstrate the ability to:

- read and demonstrate the correct knowledge of recipe abbreviations.
- utilize the correct measuring tool and technique to measure recipe ingredients.
- research and select appropriate recipes based on a set of criteria factors.
- read a recipe, follow step-by-step directions, and properly perform recipe culinary terms.
- modify a recipe to alter the yield and/or substitute the ingredients.
- understand, apply and calculate basic properties involving the concepts of math.
- select and demonstrate proper use of appropriate tools, equipment and appliances based on function needed to perform recipe tasks.
- select appropriate solutions to decision-making situations.
- work as a team to accomplish assigned tasks within a limited time frame.
- produce a successful food product formulated by following a set plan.

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

- read and demonstrate the correct knowledge of recipe abbreviations.
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- research and select appropriate recipes based on a set of criteria factors.
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Assessment Evidence - Checking for Understanding (CFU)

- Common Benchmarks
- Unit 4 Test-summative assessment
- Unit Review/Test prep
- Study Guides
- Tool/Function
- Evaluation Rubrics
- Teacher Observation Checklist
- Self Assessment
- Explaining-formative assessment
- Teacher Student Conference-alternate assessment
- benchmark assessments (see below)
-
    - read and demonstrate the correct knowledge of recipe abbreviations.
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    - research and select appropriate recipes based on a set of criteria factors.
    - read a recipe, follow step-by-step directions, and properly perform recipe culinary terms.
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    - work as a team to accomplish assigned tasks within a limited time frame.
    - produce a successful food product formulated by following a set plan.

- 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

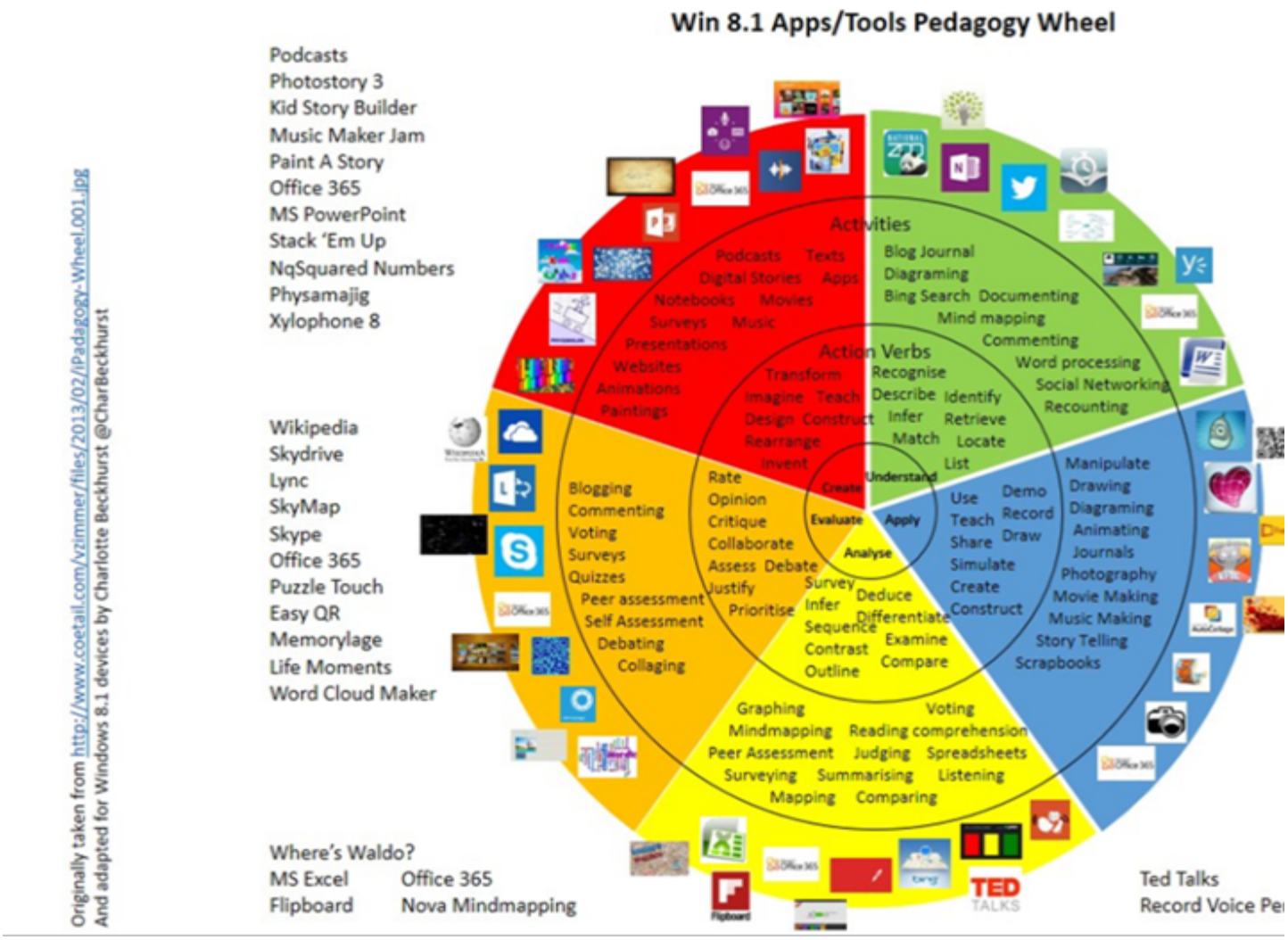
- Textbook: *Guide to Good Food*
- Textbook: *Culinary Essentials*
- Textbook – *Foundation of Restaurant Management*
- *Tool Bingo*
- Video Clip: Kitchen Tools
- Power Point Presentations
- Internet: Kitchen Tool Functions

Ancillary Resources

- Demonstrations
- exit questions
- lab plans
- unit recipes
- Chapter worksheets/questions
- Filling out culinary learning log

Technology Infusion

- 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

- Communication Skills – English, Reading, Writing
- Mathematics
- Economics
- Science
- Social Skills/Interpersonal Skills

CRP.K-12.CRP1.1	Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP9.1	Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' action, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture.
CAEP.9.2.12.C.2	Modify Personalized Student Learning Plans to support declared career goals.
TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.12.F	Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

21st Century Skills/Interdisciplinary Themes

- Communication and Collaboration
- ICT (Information, Communications and Technology) Literacy
- Interpersonal Communication
- Critical Thinking and Problem-Solving
- Financial, Economic, Business and Entrepreneurial Literacy
- Life and Career Skills

- 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

Students will be able to use their learning to …

- Use effective oral and written communication strategies for creating, expressing, and interpreting information and ideas.
- Use critical and creative thinking strategies to facilitate innovation and problem-solving both independently and in teams.
- Use technology is used to access, manage, integrate, and disseminate information.
- Use effective leadership and teamwork strategies to foster collaboration and cooperation to accomplish goals.
- Develop life skills in order to achieve continuing success in various life roles related to continuing education, career development, and personal growth.

- Develop employable skills to build the capacity for successful careers.

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

Differentiation

Differentiations:

- Small group assignments

- Added time to complete assignments
- Pairing oral instructions with visuals
- Repeat directions as needed
- Reinforcing on-task behaviors and skill acquisition
- Reduce amount of assignments that are due
- Rephrase written directions
- Study guides provided
- Additional time for skill mastery
- Test read to student
- Visual presentation
- Small Group Instruction
- Additional Time

Hi-Prep Differentiations:

- Project-based Learning
- Problem-based Learning

Lo-Prep Differentiations

- Goal Setting with Students
- Mini Workshops to re-teach or extend skills

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

- Study Guides/Board Notes
- Additional Time for Skill Mastery
- Assistive Technology
- Computer or Electronic Device Utilizes
- Multi-sensory Instruction
- Preferential Seating
- Student Working with an Assigned Partner
- Small Group Instruction
- Check Work Frequently for Understanding
- Extended Time on Tests/Quizzes

- 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)

- Teach Key Concepts
- Visual Teaching Aids: Videos, Illustrations, Pictures and Drawings
- Use of note cards, study guides and open book during testing
- Small Group Instruction
- Student Working with an Assigned Partner
- Preview of Content, Concepts, and Vocabulary
- Check Work Frequently for Understanding
- Peer Tutoring

- 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

- using videos, illustrations, pictures, and drawings to explain or clarify
- teaching key aspects of a topic. eliminate nonessential information
- tutoring by peers
- providing study guides
- allowing students to correct errors (looking for understanding)
- allowing products to demonstrate student's learning
- using authentic assessments with real-life problem-solving

Ref's Description

- 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)

- Create a plan to solve an issue presented in the class or in a text
- Advanced problem-solving
- Higher order, critical and creative thinking skills, and discovery
- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize project-based learning for greater depth of knowledge

- 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

See first unit: Employability and Career Development for an example.