Unit 2: Adobe Photoshop Copied from: Intro to Computer Graphics/Digital Phot, Copied on: 02/21/22

Content Area: **Art**
Course(s): **Intro to Computer Graphics/Digital Photography**
Time Period: **NovDec**
Length: **35 days**
Status: **Published**

Title Section

Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

Computer Graphics & Digital Photography, Grades 10-12

Unit 2: Adobe Photoshop

Belleville Board of Education

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Board Approved: September 23, 2019

Unit Overview

In this unit, students will be introduced to the Adobe Creative Suite through the use of Photoshop.

- Students will learn computer graphics concepts and terminology, the Photoshop desktop, and how to use Photoshop tools, layers and palettes.
- Photoshop will be used both to alter, enhance, and improve digital photographs and to create original artwork.
- Students will explore how the development of technology has impacted the making of and the definition of visual art.
- Students will become active participants in the global art world, engaging with its forms and its content as they resesarch, discuss, inerpret and create art.
- Students will understand the safe, responsible and legal use of the internet and of copyrighted material.
- Students will use the internet to access information and tutorials to expand their knowledge of Photoshop.

Enduring Understanding

- Photoshop is a digital image editing program. The Photoshop workspace consists of toolbars, palettes, and menus.
- Photoshop can be used to edit and improve photographs as well as to create original artwork.

- Photoshop is primarily raster-based, which means that images created in Photoshop are made of pixels.
- The resolution of an image is a function of the number of pixels per inch. Resolution affects the clarity of images at different sizes.
- Photoshop tools include selection tools, navigation tools, drawing and painting tools, type tools, and many other types of tools.
- Layers are an important feature of Photoshop. Layers can have transparency, and can interact with each other.
- Using layers and the History Panel allow you to make changes and selectively undo them.
- Copyright laws dictate whether you can use an image that you did not create. You must pay royalties to use a copyrighted image.
- Fair Use laws specify conditions under which images found on the internet can be used legally.

Essential Questions

- What can you do in Photoshop that you can't do with a pencil or paintbrush?
- How do photographers use Photoshop?
- Is "photoshopping" an image inherently good or bad?
- What is a royalty-free image? Why is it important to know about copyright laws?
- What is resolution? What are the advantages and disadvantages of higher and lower resolutions?
- What are the selection tools and why are they necessary?
- What are the navigation tools?
- What is the advantage of using layers when working with or creating images in Photoshop?
- How does one preserve the original when making changes to an image?
- How and where can you save digital files?
- What are file extensions? How does a file extension affect a document?
- What does "healing" and "cloning" have to do with Photoshop?

Exit Skills

By the end of the Photoshop unit, students will be able to:

- Identify the menus, palettes, tools, and options in the Photoshop workspace.
- Choose the file format, resolution, and color mode appropriate to a given project.
- Use a wide variety of Photoshop tools and techniques to adjust, combine, correct and transform digital artwork and photographs.
- Use various drawing and painting tools in Photoshop to compose images.
- Create original artwork utilizing Photoshop's layers, transparency, and blending modes.
- Apply the Principles of Design, including balance, emphasis, pattern, contrast, movement, and unity to the creation of digital artwork.
- Analyze and evaluate raster-based artwork by examining an artist's use of the Elements of Art and Principles of Design.

New Jersey Student Learning Standards (NJSLS-S)

VPA.1.1.12	All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.
VPA.1.1.12.D.1	Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.
VPA.1.1.12.D.CS2	Stimuli for the creation of artworks can come from many places, including other arts disciplines.
VPA.1.2.12	All students will understand the role, development, and influence of the arts throughout history and across cultures.
VPA.1.2.12.A.2	Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.
VPA.1.2.12.A.CS1	Cultural and historical events impact art-making as well as how audiences respond to works of art.
VPA.1.2.12.A.CS2	Access to the arts has a positive influence on the quality of an individual’s lifelong learning, personal expression, and contributions to community and global citizenship.

VPA.1.3.12	All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.
VPA.1.3.12.D.1	Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
VPA.1.3.12.D.2	Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
VPA.1.3.12.D.4	Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.
VPA.1.3.12.D.5	Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.
VPA.1.3.12.D.CS1	How individuals manipulate the elements of art and principles of design results in original portfolios that reflect choice and personal stylistic nuance.
VPA.1.3.12.D.CS2	Culturally and historically diverse art media, art mediums, techniques, and styles impact originality and interpretation of the artistic statement.
VPA.1.3.12.D.CS3	The artist's understanding of the relationships among art media, methodology, and visual statement allows the artist to use expressionism, abstractionism (nonobjective art), realism/naturalism, impressionism, and other genre styles to convey ideas to an audience.
VPA.1.3.12.D.CS4	Artists interpret/render themes using traditional art media and methodologies as well as new art media and methodologies.
VPA.1.4.12.A.1	Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.
VPA.1.4.12.A.2	Speculate on the artist's intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.
VPA.1.4.12.A.3	Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.
VPA.1.4.12.A.CS2	Contextual clues within artworks often reveal artistic intent, enabling the viewer to hypothesize the artist's concept.
VPA.1.4.12.A.CS3	Artistic styles, trends, movements, and historical responses to various genres of art evolve over time.
VPA.1.4.12.B.1	Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.
VPA.1.4.12.B.2	Evaluate how an artist's technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.
VPA.1.4.12.B.3	Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.
VPA.1.4.12.B.CS2	The cohesiveness of a work of art and its ability to communicate a theme or narrative can be directly affected by the artist's technical proficiency as well as by the manner and physical context in which it is performed or shown.
VPA.1.4.12.B.CS3	Art and art-making reflect and affect the role of technology in a global society.

Interdisciplinary Connections

Mathematics

- Rule of Thirds
- Crop ratios
- Image resolution (pixels per inch)

Language Arts

- Reading technical subjects

MA.N-Q	Quantities
MA.N-Q.A	Reason quantitatively and use units to solve problems.
LA.RST.9-10.2	Determine the central ideas, themes, or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.
LA.RST.9-10.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.
LA.RST.9-10.4	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 9-10 texts and topics.

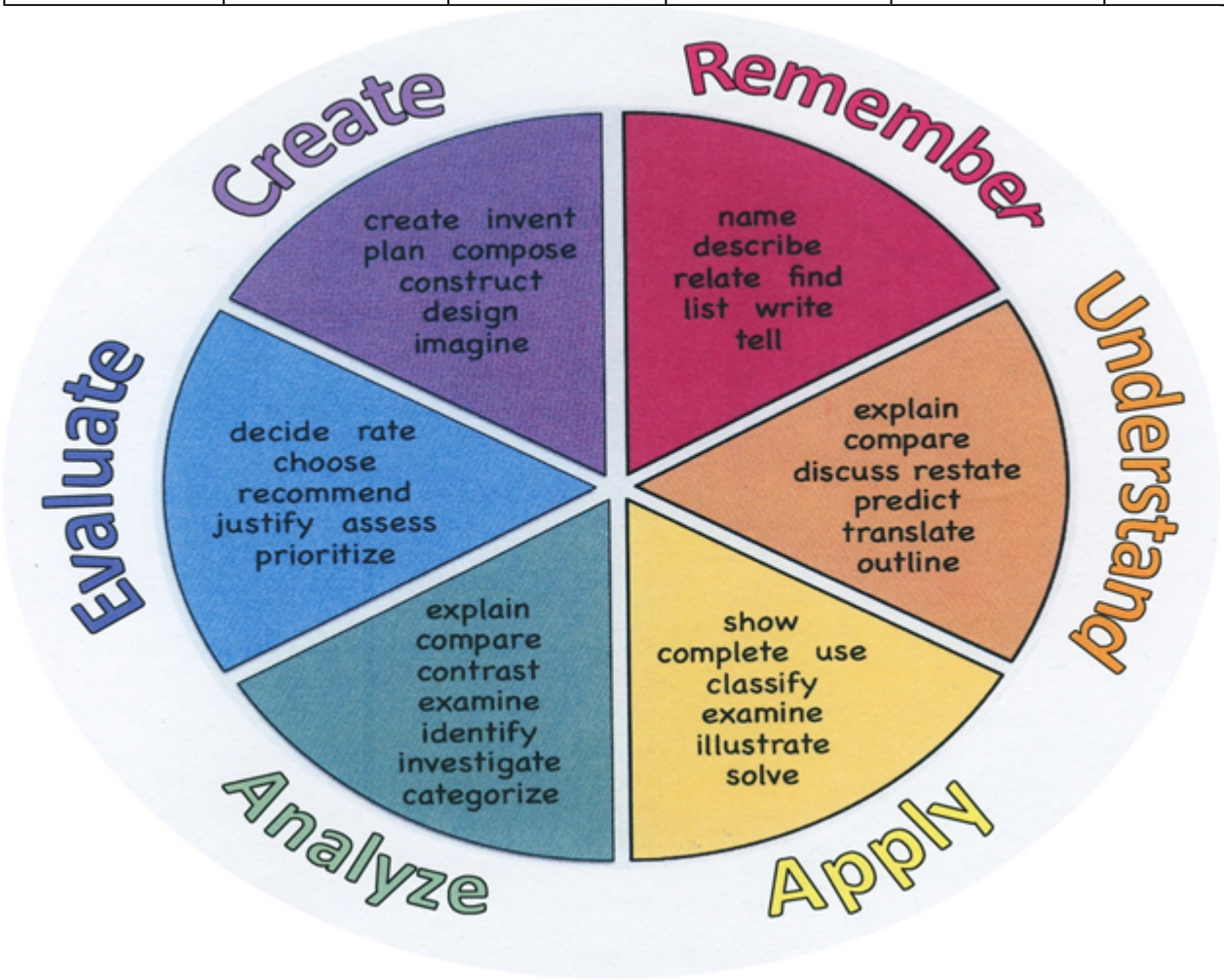
Learning Objectives

Students will demonstrate the ability to:

- Select the Color Mode, File Extenstion, and resolution that is appropriate for a given Photoshop Project.
- Determine which Photoshop tools and techniques are needed for specific tasks within Photoshop.
- Apply adjustment layers, filters and transformations to alter and improve photographs.
- Transform images using Photoshop image editing tools.
- Compose images with a focus on Elements of Art and Principles of Design.
- Create original multi-layered artwork in Photoshop.
- Evaluate digital images and assess an artist's use of the Principles of Design.

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

- Introduce students to the Photoshop desktop by demonstrating basic tools and letting students experiment.
- Select from Adobe HelpX video tutorials to introduce layers, selections and adjustments: Show video, then demonstrate each step as students complete the exercises.
- Provide step-by-step written instructions so students can work at their own pace.
- Provide links to additional tutorials for students who need reinforcement.

Suggested projects:

- Remove unwanted people or objects from a photo
- Change the setting of a photo
- "Andy Warhol" multiples
- Insert yourself into an image
- Composite self-portrait
- Surrealistic digital collage
- Create a chimera - combine parts of different animals seamlessly.
- Photoshop Eye Painting: use paint tools to create a detailed macro image beginning with a closeup greyscale photograph of one's eye as the bottom reference layer.

Assessment Evidence - Checking for Understanding (CFU)

- Exit tickets (Example: Name an advantage and a disadvantage of using an adjustment layer instead of adjusting the image itself?) - formative assessment
- Observations of student work in class - formative assessment
- Teacher-student conferences regarding work in progress - alternative assessment
- Quizzes on Photoshop tools and techniques - summative assessment
- Self-assesments - alternative assessment
- Evaluation rubrics - 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

- Apple computers
- Adobe Creative Cloud software
- Apple TV
- Internet connection

Ancillary Resources

- Adobe Video tutorials
- Other online tutorials
- Teacher-created handouts
- Related websites

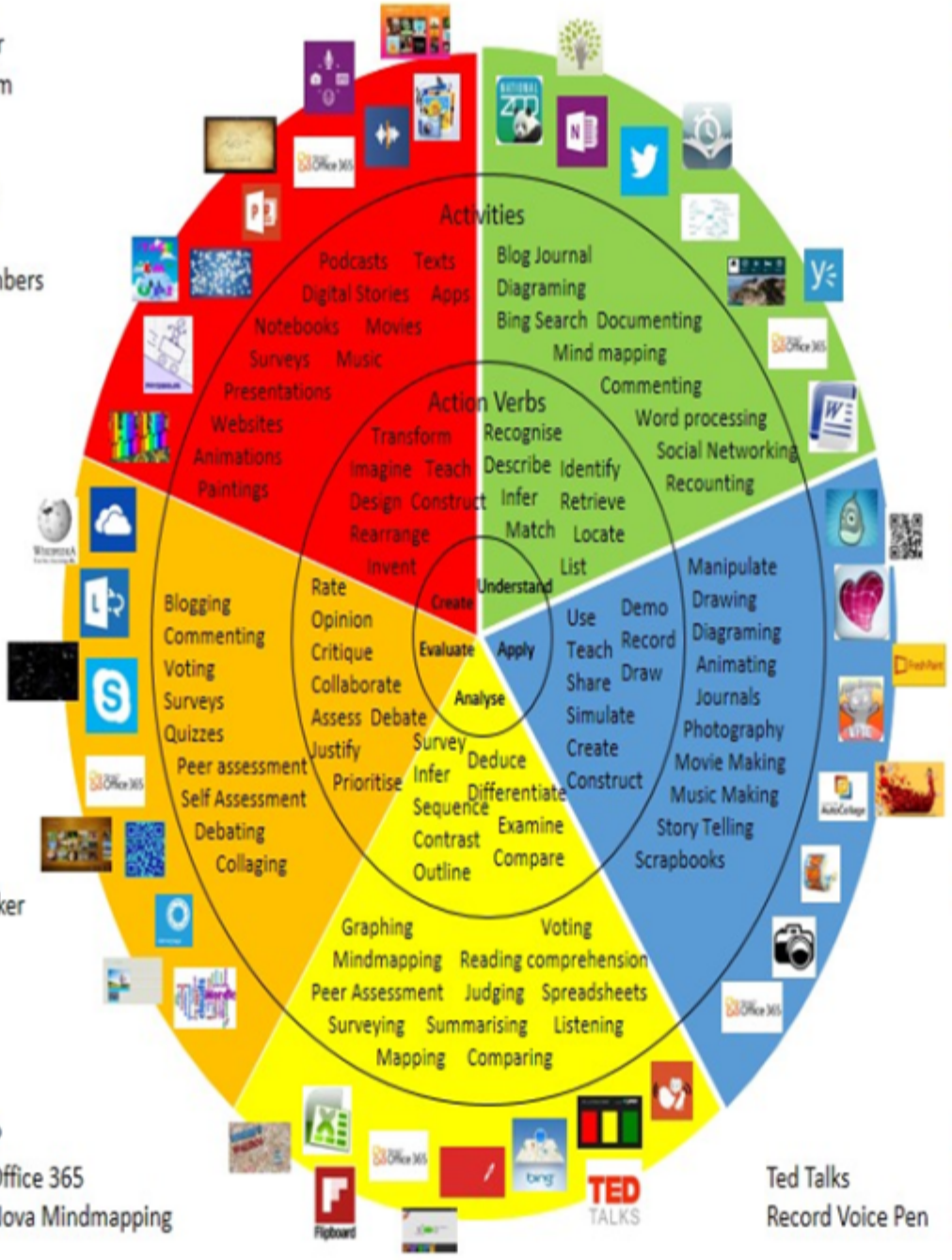
Technology Infusion

- Digital photography
- Adobe Photoshop software
- Apple computers
- Google Classroom
- Internet searches
- Web-based tutorials
- Youtube instructional videos
- Adobe video tutorials
- Apple TV for demonstrations

Win 8.1 Apps/Tools Pedagogy Wheel

Podcasts
Photostory 3
Kid Story Builder
Music Maker Jam
Paint A Story
Office 365
MS PowerPoint
Stack 'Em Up
NqSquared Numbers
Physamajig
Xylophone 8

Wikipedia
Skydrive
Lync
SkyMap
Skype
Office 365
Puzzle Touch
Easy QR
Memorylage
Life Moments
Word Cloud Maker



Where's Waldo?
MS Excel Office 365
Flipboard Nova Mindmapping

Ted Talks
Record Voice Pen

Originally taken from http://www.coetail.com/vzimmer/files/2013/02/iPadagogy-Wheel.001.jpg
And adapted for Windows 8.1 devices by Charlotte Beckhurst @CharBeckhurst

Alignment to 21st Century Skills & Technology

- **Creativity and Invention** is at the heart of any artistic endeavor.
- **Critical Thinking and Problem Solving** is necessary in order to achieve a well-composed image that achieves a visual goal.
- **Media Literacy** is enhanced when students analyze how a photograph can be manipulated through lighting, focus, composition and other attributes.
- Photography is an avenue to multiple **21st century careers.**
- Manipulated images are central to 21st century visual **communication.**
- Students exercise **Information Literacy** when they identify a skill or technique they wish to use and search for information that helps them acquire the knowledge they need.

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.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.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.
CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
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.A.1	Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
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.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.12.B.CS2	Create original works as a means of personal or group expression.
TECH.8.1.12.D.1	Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.
TECH.8.1.12.D.2	Evaluate consequences of unauthorized electronic access (e.g., hacking) and disclosure, and on dissemination of personal information.
TECH.8.1.12.D.4	Research and understand the positive and negative impact of one's digital footprint.
TECH.8.1.12.D.CS1	Advocate and practice safe, legal, and responsible use of information and technology.
TECH.8.1.12.D.CS2	Demonstrate personal responsibility for lifelong learning.

TECH.8.1.12.E.CS2	Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

21st Century Skills/Interdisciplinary Themes

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

Please list only the **21st Century/Interdisciplinary Themes** that will be incorporated into this unit.

- 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

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

Please list only the **21st Century Skills** that will be incorporated into this unit.

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

Differentiation

- Small group instruction
- Small group assignments
- Extra time to complete assignments
- Pairing oral instruction with visuals
- Repeat directions

- Study guides
- Rephrase written directions
- Additional time
- Student(s) work with assigned partner
- Visual presentation
- Alternative formative and summative assessments
- Independent research and projects
- Leveled rubrics
- Project-based learning
- Tiered activities/assignments
- Exploration by interest
- Goal setting with students
- Mini workshops to re-teach or extend skills
- Varied supplemental materials

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

- Provide modifications as dictated in the student's IEP/504 plan
- Preferential seating
- Additional time for skill mastery
- Have student repeat directions to check for understanding
- Check work frequently for understanding
- Secure attention before giving instruction/directions
- Shortened assignments
- Extended time on tests/quizzes
- Use open book, study guides, test prototypes

- 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)

- Decreasing the amount of workpresented or required
- Using videos, illustrations, pictures, and drawings to explain or clarify
- Teaching key aspects of a topic. Eliminate nonessential information
- Tutoring by peers
- Providing a copy of the teacher’s notes with use of online translator
- Providing study guides

- 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

- Decreasing the amount of workpresented or required
- Using videos, illustrations, pictures, and drawings to explain or clarify
- Teaching key aspects of a topic. Eliminate nonessential information
- Tutoring by peers
- Providing a copy of the teacher's notes
- Providing study guides
- allowing students to correct errors (looking for understanding)
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing

- 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)

- Advanced problem-solving
- Higher order, critical & creative thinking skills, and discovery

- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunitie
- Multi-disciplinary unit and/or project
- Allow students to work at a faster pace
- Utilize project-based learning for greater depth of knowledge
- Utilize exploratory connections to higher-grade concepts

- 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

Using the template below, please develop a **Sample Lesson** for the first unit only.

Unit Name:

NJSLS:

Interdisciplinary Connection:

Statement of Objective:

Anticipatory Set/Do Now:

Learning Activity:

Student Assessment/CFU's:

Materials:

21st Century Themes and Skills:

Differentiation/Modifications:

Integration of Technology: