Unit 1 Computer Skills and Tools

Content Area: **Technology**
Course(s): **Computer Applications 2 Gr. 8**
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Title Section

Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

Computer Applications 2, Grade 8

Computer Skills and Tools

Belleville Board of Education

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Unit Overview

Unit 1, Computer Skills and Tools, 30 sessions, will introduce the students and/or review with the students the basics of the Google Suite. From this unit students should expect to learn how to properly use Google classroom, docs, sheets, slides, g-mail, drive, and sites. Students should also expect to increase their typing speed and accuracy.

Enduring Understanding

Enduring understandings:

Students will be able to use their learning to be a part of and communicate with the world through understanding how to:

- Log into applications with a strong password
- Communicate through email.
- Use a platform to find and complete assignments and real world problems.
- Find or search for files and folders.
- Multitask by opening and using two applications at once.
- Create and use a structure of files and folders.
- Create, name and save files.
- Create and delete folders.
- Produce multimedia presentations.

Essential Questions

Essential Questions:

- Why is it important to create strong passwords and not share them?
- What is the proper way to digitally communicate?
- Where do I start my lessons?
- How do I find my files in the cloud?
- Why is it important to name files?
- How do I get my message across?

Essential Question: How is computer literacy a process for success in school and in the world we live in?

Exit Skills

By the end of Grade 8 Computer Applications Unit 1, the student should be able to:

- Create and keep safe a strong password.
- Communicate effectively communicate through email.
- Find, complete and turn in assignments using a digital platform.
- Name, save, locate, edit files.
- Prepare a basic multimedia presentation.
- Open and use two applications at once.
- Create and delete folders.
- Organize their drive.

New Jersey Student Learning Standards (NJSLS-S)

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.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.A.CS1	Understand and use technology systems.
TECH.8.1.8.A.CS2	Select and use applications effectively and productively.
TECH.8.1.8.D.CS2	Demonstrate personal responsibility for lifelong learning.
TECH.8.2.8.A	The Nature of Technology: Creativity and Innovation: Technology systems impact every aspect of the world in which we live.
TECH.8.2.8.A.CS1	The characteristics and scope of technology.
TECH.8.2.8.A.CS2	The core concepts of technology.
TECH.8.2.8.B.CS1	The cultural, social, economic and political effects of technology.
TECH.8.2.8.B.CS2	The effects of technology on the environment.
TECH.8.2.8.B.CS4	The influence of technology on history.
TECH.8.2.8.D.CS2	Use and maintain technological products and systems.
TECH.8.2.8.E.4	Use appropriate terms in conversation (e.g., programming, language, data, RAM, ROM, Boolean logic terms).

Interdisciplinary Connections

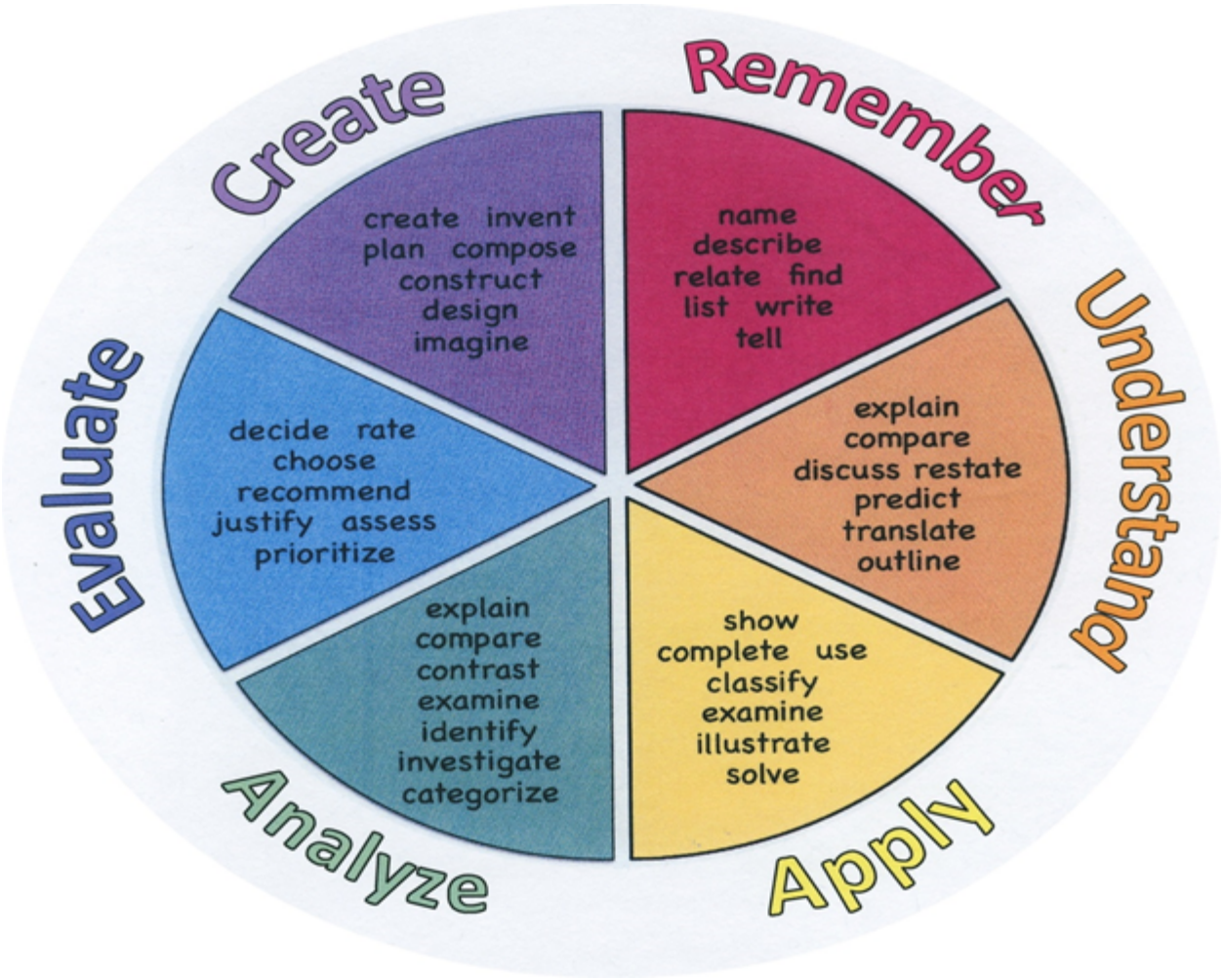
6-8.MS-ETS1-4.ETS1.B.2	Models of all kinds are important for testing solutions.

Learning Objectives

Students will be able to:

- Construct a strong password to use for computer and applications log in.
- Choose email as an effective communication method.
- Develop skills in the use of a digital platform to find and complete assignments and real world problems.
- Create, organize and use a structure of files and folders to allow ease of finding files.
- Multitask by opening and using two applications at once.
- Produce Multimedia presentations.

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

Typing course and supplemetal typing skills:
Students will work on typing speed and keyboard memorization.

www.typing.com

https://www.flippity.net/TypingTest.asp

Google for Email, classroom, docs, slides, sheets, drive and sites:
Students will learn the basics of Google areas through the use of the below platforms.

www.applieddigitalskills

Creating a responsible blog

Organize Files in a drive

www.youtube.com

The Basics of Google Sheets for Students and Teachers

Assessment Evidence - Checking for Understanding (CFU)

Quiz-Students will duplicate the Chromebook Keyboard at the end of the 30 sessions. (summative assessment)

Create a responsible blog. (summative assessment)

Explain the functions of Gmail and additional applications. (formative assessment)

Create a Power Point presentation on the school-related topic of one's choosing. (summative assessment)

Write about the uses of GMail and other Google application in school and at work. (alternative assessment)

- Admit Tickets
- Anticipation Guide
- Common Benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- DBQ's
- Define
- Describe
- Evaluate
- Evaluation Rubric
- Exit Tickets
- Explaining
- Fist-to-Five or Thumb-Ometer
- Illustration

- Journals
- KWL Chart
- Learning Center Activities
- Multimedia Reports
- Newspaper Headlines
- 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

Google Classroom

https://classroom.google.com

Typing.com

https://www.typing.com/teacher/login

Cengage, South-Western Digitools, 2012

Applied Digital Skills

https://applieddigitalskills.withgoogle.com/s/en/home

Ancillary Resources

Federal Trade Commission:

https://www.ftc.gov/

- Internet Safety
- Living Life Online
- Net Cetera

Technology Infusion

Google Classroom

https://classroom.google.com

- G-Mail
- Google Docs, Sheets and Slides
- Google Drive
- Google Sites

Typing.com

https://www.typing.com/teacher/login

You Tube

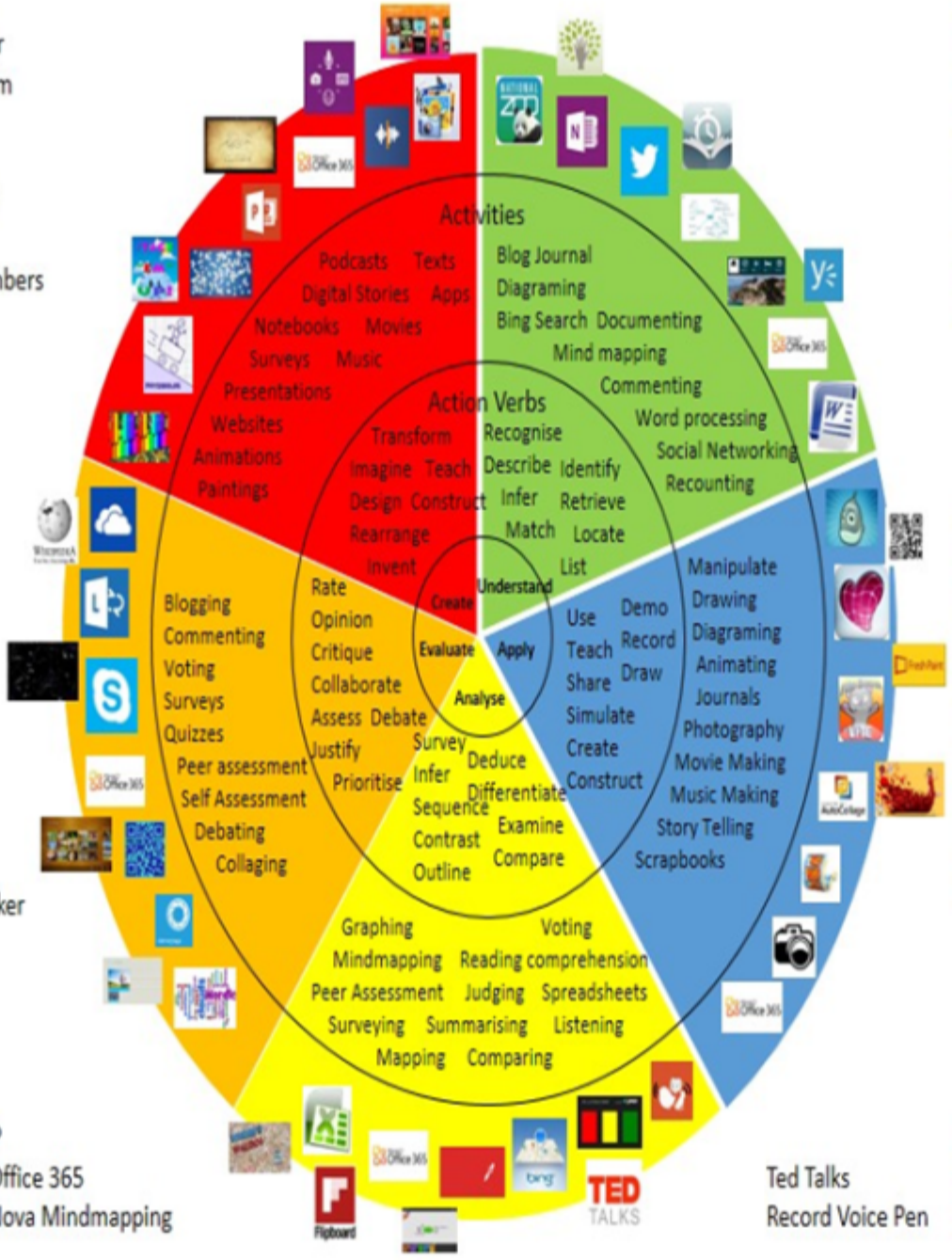
www.youtube.com

- Ted Talks

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

Mastery and infusion of **21st Century Skills & Technology** and their Alignment to the core content areas is essential to student learning. Key Subjects include:

- English, reading or language arts
- World Languages
- Arts
- Mathematics
- Economics
- Science
- Geography
- History
- Government and Civics

CRP.K-12.CRP11	Use technology to enhance productivity.
CAEP.9.2.8.B.2	Develop a Personalized Student Learning Plan with the assistance of an adult mentor that includes information about career areas of interest, goals and an educational plan.
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.
CAEP.9.2.8.B.4	Evaluate how traditional and nontraditional careers have evolved regionally, nationally, and globally.
CAEP.9.2.8.B.7	Evaluate the impact of online activities and social media on employer decisions.
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.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.
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TECH.8.2.8.B.CS4	The influence of technology on history.

TECH.8.2.8.E.4	Use appropriate terms in conversation (e.g., programming, language, data, RAM, ROM, Boolean logic terms).

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

Differentiation

Differentiations:

Exemplar:

- **Extra time to complete assignments: Students will be allowed to turn in work up to 6 days after the due date.**
    - Small group instruction
    - Small group assignments
    - Extra time to complete assignments
    - Pairing oral instruction with visuals
    - Repeat directions
    - Study guides

- Use Manipulatives
- Center-Based Instruction
- Token Economy
- Study Guides
- Teacher Reads Assessment Aloud
- 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:

Exemplar: Students will be given a choice of 3 activities, 2 teacher designed and 1 design your own.

- 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

Exemplar:

- **Mini workshops to re-teach or extend skills**

    - 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)

Exemplar:

Students work with an assigned partner.

Weekly Assignment Sheet in Google Classroom

- 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
- Printed Copy of Board Work/Notes Provided

- 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)

Exemplar:

Students are assigned a partner for tutoring and assistance in class

Students are given fewer choices on quizzes and tests.

- 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 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

Exemplar:

Students are allowed to correct errors on all assignments.

Reduce the number of answer choices on the multiple choice test.

- 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)

Exemplar:

Students will create a blog or social media page a topic of their choice within the unit

- 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 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

Unit Name: Computer Skills and Tools

NJSLS: CRP.K-12.CRP11 Use Technology to enhance Productivity; TECH.8.1.8.A Students demonstrate a sound understanding of technology concepts, systems and operations. 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.

Interdisciplinary Connection: With the 1:1 initiative in place, this unit will connect to all classes.

Statement of Objective: SWBAT

- Communicate and collaborate with classmates in order to solve a problem
- Iteratively improve a solution to a problem
- Identify different strategies used to solve a problem

Learning Activity: Applied Digital Skills-Creating a Responsible Blog. Brainstorm things you are passionate about, choose 1. Add a title to your blog, a picture that relates to the topic and and introductory paragraph to the blog.

21st Century Themes and Skills: Communication and Collaboration, Creativity and Innovation

Differentiation: Assist students as needed and peer assistance.

Integration of Technology: Use of computers in class.