












Unit 1: Project 1:
Security Awareness
8th Grade
Google Docs

<p>Notes & Preparation</p> 	<ul style="list-style-type: none"> ● Project length - 1 class ● Instructor note - Use this lesson as a first day introduction and as an introduction/review to technology and presentation design. The presentation file will be used on the teacher’s computer to project to the class OR can be used as an assessment. ● <input type="checkbox"/> 1.1a 8th PC-Chromebook Introduction or <input type="checkbox"/> 1.1a 8th Mac-Book Introduction ● Teacher Kahoot By: BTE
<p>Content Standards</p> 	<p><u>CA CS Standards:</u> 6-8.CS.1, 6-8.CS.2, 6-8.NI.4, 6-8.NI.5, 6-8.DA.6, 6-8.IC.21</p> <p><u>ISTE Standards:</u> #3 #5</p> <p><u>NETS Standards:</u> #1 #5</p>
<p>Engage</p> 	<p>Opening Welcome the students to technology class. Introduce yourself to the students. Introduce all class policies and procedures. If the school has yet to issue an Internet Policies and Procedures form, pass one out. Tell them to take it home and have their parent/guardian sign it and bring it back to class. It is advised that students submit an agreement signed by a parent/guardian before using the school’s computers and networks.</p> <p>Character Development <i>Awareness Vigilance:</i> Students will understand and be mindful of potential risks and threats that exist in the digital world. It involves knowing how to protect oneself and others from these risks by adopting responsible behaviors and following best practices when using technology and interacting online.</p> <p>Computer Introduction Let students know today they will be getting familiar with the technology. Ask students to share if they use a computer or device at home and how they use it. Let them know they will be going over computer basics, mouse practice, and</p>



	<p>keyboarding introduction. This may be a review for some and helpful to others. Introduce the term 'peripherals' and discuss the common peripherals used with the computer. Explain 'types of network protocols and computer security threats.'</p> <p>Project Description</p> <p>In this project, students will learn about computers and how to use them. They will be introduced to the following concepts. Introduce each section accordingly.</p> <ul style="list-style-type: none"> ● Boolean Operators ● Computer hardware and its functions ● Computer data storage ● Basic troubleshooting ● Mouse practice (only if needed) ● Keyboarding introduction (only if needed) ● Command or CTRL Keys Introduction ● Google Suite (Docs) ● Google Docs Introduction ● Types of Network Protocols ● External Data Storage ● PC Upgrade ● Understanding Computer Security Threats
<p>Web Resources for more Exploration</p> 	<ul style="list-style-type: none"> ● https://edu.gcfglobal.org/en/computerbasics/what-is-a-computer/1/ By: GCF Global ● https://www.youtube.com/watch?v=eEo_aacpwCw By: Geek's Lesson ● What is Computer Science? By: Undefined Behavior ● What Is Computer Security? (And Why It's Important) Berkeley Boot Camps By: Berkeley Extension ● National Cybersecurity Alliance By: Stay Safe Online ● NIST Computer Security Resource Center By: CRSC
<p>Additional Emphasis</p> 	<ul style="list-style-type: none"> ● Additional Emphasis: ● Discuss the evolution of technology over the years. The beginning with the abacus and other beginnings of technology.



<p>Learning Outcomes</p> 	<p>Students will:</p> <ul style="list-style-type: none">● Describe basic computer hardware and know its functions.● Identify common operating system terminology.● Describe basic hardware and software problems and know how to troubleshoot.● awareness about the importance of computer security.
<p>Project Steps</p> 	<p>Have the student:</p> <ol style="list-style-type: none">1. Open the template named  1.1a 8th PC-Chromebook Introduction or  1.1a 8th Mac-Book Introduction Note: Students may also open the template and use it as an assessment of knowledge. Have students label each2. Have the student point to key features and name those features3. Discuss the function of each hardware4. Switch to a different slide and have a different student come up and discuss the images on the screen5. Describe how the computing devices (Types of Network Protocols) connect to form the computer system6. Discuss as a class and demonstrate Understanding Computer Security Threats7. Discuss the unique features of a laptop and a Chromebook (link) <p>Computer Data Storage</p> <ol style="list-style-type: none">1. Introduce the term computer data2. Discuss what computer data is and give examples3. Navigate to this link and use the resources provided4. Review the web page and discuss the ways data can be stored5. Navigate to this link6. Use the web page to explain that the amount of space required to store data depends on the type of data. Based on the given examples, create situations, and discuss which type of storage would be the best for that data capacity.<ol style="list-style-type: none">a. Introduce the following computer memory Discuss what they are and what they do:b. RAM (link to more info)c. ROM (link to more info) <p>Basic Troubleshooting</p> <ol style="list-style-type: none">1. Share the following scenarios and discuss possible solutions:<ol style="list-style-type: none">a. The power button will not start the computerb. Cannot hear the sound coming from speakers or headphones



- c. A connected mouse or keyboard does not work
 - d. The computer or an application is frozen
 - e. Launch an Internet browser
2. Navigate to this [link](#) for more insight on common troubleshooting strategies

Understanding Computer Security Threats

1. Malware:
2. Phishing:
3. Social Engineering:
4. Denial-of-Service (DoS) and Distributed Denial-of-Service (DDoS) Attacks:
5. Data Breaches:
6. Insider Threats:
7. Advanced Persistent Threats (APTs):
8. Physical Attacks:
9. IoT Vulnerabilities:

Keyboarding Introduction (Only if needed)

1. Discuss Home Row keys and show proper finger placement
2. Launch an Internet browser
3. Launch the typing program used in class. **Note: See recommendations if typing programs are**
4. Create a New User account if applicable
5. Go to the lesson area
6. Practice typing skills



Create a Table and outline using MLA Format or APA Format Style

1. Review the 'Understanding Computer Security Threats' information with students
2. Teachers and Students may use alternatives such as AI ChatGPT resources for further information
3. Open a Blank Google Document
4. Navigate the internet for further information
5. Bookmark the resource
6. Title the Document '1.1 8th Understanding Computer Security Threats' (Last Name)
7. Format the Document following MLA or APA guidelines
 - a. Include the Header with Page Number
 - b. Include Heading with
 - i. Student First and Last Name



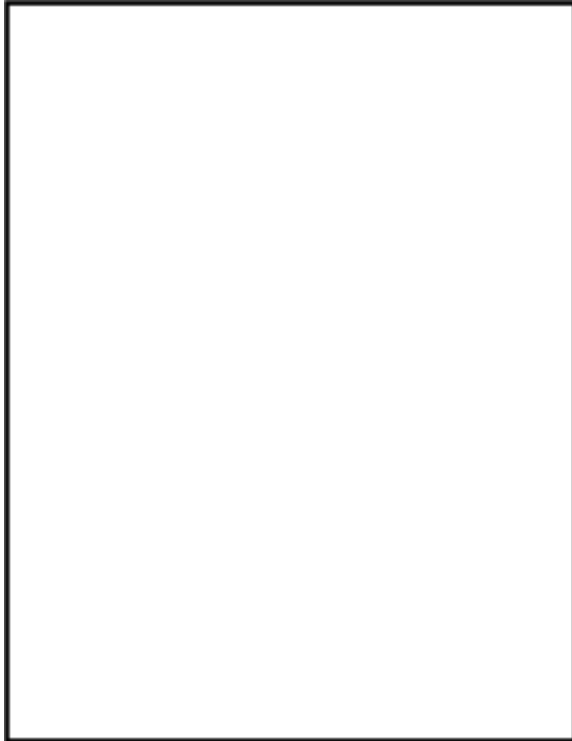
	<ul style="list-style-type: none">ii. Teacher's Nameiii. Subjectiv. Due Datev. Titlec. Double Spaced. Marginse. Font and size8. Include the following topics:<ul style="list-style-type: none">a. Insert numbered list menub. Include:<ul style="list-style-type: none">i. Malware:<ul style="list-style-type: none">1. Definition:2. Summary3. Preventionii. Phishing:<ul style="list-style-type: none">1. Definition:2. Summary3. Preventioniii. Social Engineering:<ul style="list-style-type: none">1. Definition:2. Summary3. Preventioniv. Denial-of-Service (DoS) and Distributed Denial-of-Service (DDoS) Attacks:<ul style="list-style-type: none">1. Definition:2. Summary3. Preventionv. Data Breaches:<ul style="list-style-type: none">1. Definition:2. Summary3. Preventionvi. Insider Threats:<ul style="list-style-type: none">1. Definition:2. Summary3. Preventionvii. Advanced Persistent Threats (APTs):<ul style="list-style-type: none">1. Definition:2. Summary3. Preventionviii. Physical Attacks:<ul style="list-style-type: none">1. Definition:
--	---



	<ul style="list-style-type: none">2. Summary3. Preventionix. IoT Vulnerabilities:<ul style="list-style-type: none">1. Definition:2. Summary3. Prevention9. Add Sources following the MLA or APA style guidelines10. Works Cited<ul style="list-style-type: none">a. Click on Toolsb. Select Citationsc. Add Citations Sourced. or Use Easybib.com
<p>Reflection</p> 	<p>Lesson recap, what I learned, and what I am excited about next week.</p> <p>Review the class policies with the students by asking them if they can name some of them. Review the sections that were covered each day. Ask the students if they are excited to be creating projects in the computer lab.</p>
<p>Extend</p> 	<p>Students may use any of the web resources in the lesson to continue learning.</p>



No Template



Sample

Castle 1

Student Castle:
Ms. Castle
Technology
62803

Understanding Computer Security Threats

- 1. Malware:**
 - a. **Definition:** Malicious software designed to harm or exploit computers, networks, and data.
 - b. **Summary:** Malware can include viruses, worms, ransomware, and more.
 - c. **Prevention:** Install reputable antivirus software, keep systems updated, avoid downloading from untrusted sources.
- 2. Phishing:**
 - a. **Definition:** Deceptive attempts to trick individuals into revealing sensitive information, such as passwords or credit card details.
 - b. **Summary:** Phishing often involves emails or fake websites that mimic trusted sources.
 - c. **Prevention:** Be cautious of suspicious email links, verify sources, and never share personal information via unsecured channels.
- 3. Social Engineering:**
 - a. **Definition:** Manipulating individuals to disclose confidential information or perform actions that compromise security.
 - b. **Summary:** Social engineering can involve impersonation or psychological manipulation.
 - c. **Prevention:** Be skeptical of unsolicited requests, verify identities, and maintain privacy settings on social media.
- 4. Denial-of-Service (DoS) and Distributed Denial-of-Service (DDoS) Attacks:**
 - a. **Definition:** Denial-of-Service (DoS) attacks aim to disrupt or disable computer systems, while DDoS attacks overwhelm networks with excessive traffic.
 - b. **Summary:** These attacks can cause service interruptions and impact availability.
 - c. **Prevention:** Employ firewalls, intrusion detection systems, and limit exposure to the public internet.
- 5. Data Breaches**
 - a. **Definition:** Unauthorized access to sensitive or confidential data stored by organizations or individuals.
 - b. **Summary:** Data breaches can result in the theft or exposure of private information.
 - c. **Prevention:** Implement strong access controls, encrypt data, and regularly monitor systems for unusual activity.
- 6. Insider Threats**
 - a. **Definition:** Security risks arising from individuals within an organization who intentionally or unintentionally cause harm.

Castle 1

Works Cited




NIST Computer Security Resource Center | CSRC, <https://www.nist.gov/>. Accessed 23 June 2023.

National Cybersecurity Alliance Home, <https://nscyberalliance.org/>. Accessed 23 June 2023.


"What is Computer Security? (and Why It's Important)." Berkeley Bear Camps, <https://bearcamp.berkeley.edu/blog/what-is-computer-security/>. Accessed 23 June 2023.






Unit 1: Project 2:
Setting Up Google Calendar
8th Grade
Google Calendar

<p>Notes & Preparation</p> 	<ul style="list-style-type: none"> ● Project length :1 class ● Instructor note - For the following project the students will need to have their school schedule readily available with this information: Class Period (if applicable) Class Name, Start Time, and End Time ● Files to Load: 8th Grade Creative Communications
<p>Content Standards</p> 	<p><u>CA CS Standards:</u> 6-8.CS.1, 6-8.CS.3, 6-8.DA.7, 6-8.DA.8, 6-8.IC.21</p> <p><u>ISTE Standards:</u> #2, #3, #4</p> <p><u>NETS Standards :</u> #1, #5, #6</p>
<p>Engage</p> 	<p>Opening Welcome students to technology class. Discuss with students technology and how it has changed over time. Discuss the term 'backchannel'. The 'backchannel' is classroom communication that isn't from the presenter. 'Backchannel devices' encourage students to share their thoughts and ideas, even questions, while a lesson is going on. Typically, the comments show up on the class screen, shared with all classmates, likely anonymously. Students read and respond. You use them to be informed when students get/don't get a topic she/he is covering. Ask students what 'backchannels' they have used and which ones their school uses.</p> <p>Vocabulary for Unit 1 – Quizlet.com</p> <ul style="list-style-type: none"> ● Digital device ● Browser ● Bookmark ● Annotation ● App ● Backchannel ● Benchmark ● Blog ● Cloud ● Digital portfolio ● Digital tools



	<ul style="list-style-type: none"> ● Hashtag ● Link back ● PDF ● Plagiarism ● Template ● Kilobyte ● Megabyte ● Gigabyte ● Social Networking ● URL ● ISP ● DNS ● Fiber Optic Cable ● IP Address ● Internet ● Packets ● Servers ● Wi-Fi ● JPG <p><u>Character Development</u> <i>Schedule Strategist:</i> Strategic skills is making careful plans and decisions to achieve specific goals. A strategist is known for their ability to analyze situations, devise effective strategies, and execute them skillfully. Strategist are able to manage resources, anticipating challenges, and adapt their plans as needed. Discuss the positives of using technology to stay connected with the world, family, and friends. Discuss the negatives without relying on technology organizing tools.</p> <p><u>Project Description</u> Students will set up a Google Calendar, scheduling their classes and activities. Discuss areas where a shared calendar can help with time management and keep everyone organized.</p>
<p>Web Resources for more Exploration</p> 	<ul style="list-style-type: none"> ● <u>Teen Voices: The Pressure to Stay Connected</u> By: Common Sense Education





<p>Additional Emphasis</p> 	<ul style="list-style-type: none">• Color coding events.• Repeat events.• Sharing calendars.• Adding locations of events.
<p>Learning Outcomes</p> 	<p>Students will:</p> <ul style="list-style-type: none">• Learn how to visualize their time with a virtual calendar• Set up a Google calendar• Schedule an event• Set up recurring events• Color code events• Share calendar
<p>Project Steps</p> 	<p>Have the student:</p> <ol style="list-style-type: none">1. Have the Students:2. Open a web browser3. Navigate to com4. Click on the app menu icon in the top right corner5. Click the Calendar Icon6. Click the Create button in the top left corner7. Click 'Event'8. Click where it says Add Title9. Type the Class Name10. Click the start time and set it to match the start of class on the student's schedule11. Click the end time and set it to match the end of class on the student's schedule12. Click 'Does Not Repeat'13. Click 'Custom'14. Set the event to repeat as often as the class period repeats:15. For example, if this class is on Monday/Wednesday/Friday, the settings would reflect: Repeat every 1 week, repeat on M, W, F, Ends on Last Date of Classes for the semester/trimester.16. Click Save17. Click 'Week' on the upper right side of the screen18. Click 'Day' to change the calendar view to only reflect 1 day of the week19. Click the start time of the next class period on the Day view of the calendar20. Click where it says Add Title

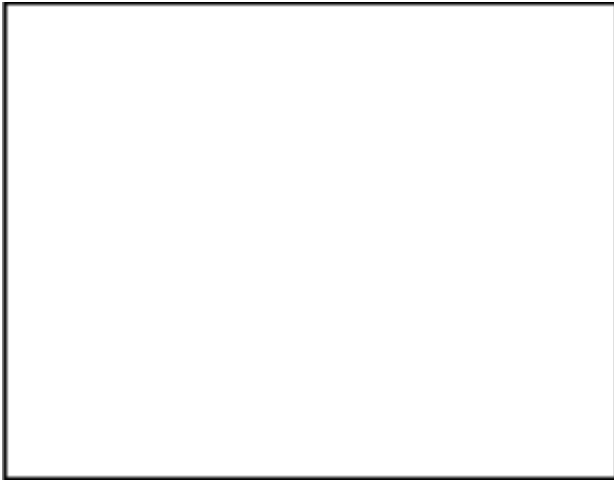


	<ol style="list-style-type: none">21. Type the Class Name22. Click the start time, and set it to match the start of class on the student's schedule23. Click the end time, and set it to match the end of class on the student's schedule24. Click 'Does Not Repeat'25. Click 'Custom'26. Set the event to repeat as often as the class period repeats.27. For example, if this class is on Monday/Wednesday/Friday, the settings would reflect: Repeat every 1 week, repeat on M, W, F, Ends on Last Date of Classes for the semester/trimester28. Click More Options29. Click the blue circle icon to change the color of the event30. Click Save31. Repeat the steps above to add as many class sessions as the student schedule has:32. For example: Add all 7 class periods to the calendar as repeating events33. Click Day in the top right corner34. Click Month35. Using the left and right arrows navigate to the student's birthday month36. Click on the date square for the appropriate day37. Type 'Student Name, Birthday'38. Click 'Does not Repeat'39. Click 'Does not Repeat'40. Click Annually on41. Click Add Guests42. Type the teacher's email address43. Click Save44. Click Month in the top right corner45. Click Week46. Click Create47. Click Focus Time48. Highlight the text 'Focus Time'49. Delete the text50. Add 'Homework Time'51. Click on the date and time settings below the event title52. Have the student choose which time of day they are most likely to set aside time for homework. For some students, this might be before For other students, this might be after sports and dinner.53. Click Does Not Repeat54. Choose Every Weekday
--	--

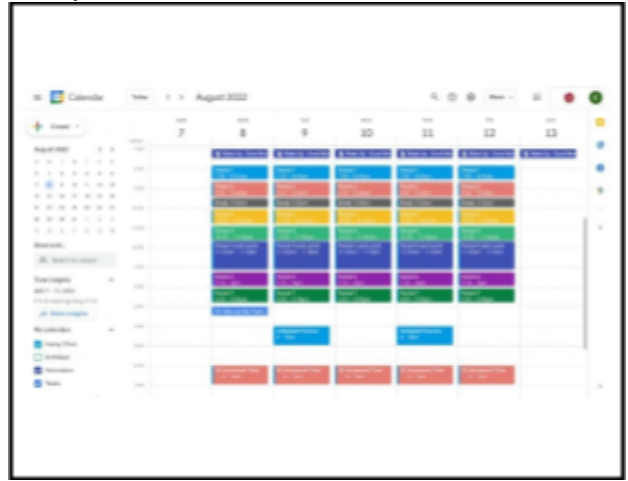


	<p>55. Click Save 56. Click Create 57. Click Task 58. Type the name of a weekly chore that the student must complete (Ex: Take out the Trash) 59. Choose the date and time when the task needs to be completed 60. Set the task to be a recurring weekly</p>
<p>Reflection</p> 	<p>Lesson recap, what I learned, and what I am excited about next week.</p> <p>Look at the calendar from a daily, weekly, and monthly view. Take note of the following: how full/not full a student's schedule might be when the best times to make additional plans are, the worst times to make plans.</p>
<p>Extend</p> 	<ol style="list-style-type: none">1. Add all extracurricular activities to the calendar2. Plan out study time, homework time, friend time, family time, or other key activities that they may do in their free time outside of school

No Template






Sample











Unit 1: Project 3:
Email Etiquette
8th Grade
Google Email

<p>Notes & Preparation</p> 	<ul style="list-style-type: none"> ● Project length - 1 class ● Instructor note - Most schools have outside blocks/security on emails. Students are only able to email instructors. Consider having students email you for the first email. Then they can send a professional thank you note to a principal or teacher. ● Files to load - None ● Web resources- Check all web resources used in the lesson ahead of time.
<p>Content Standards</p> 	<p><u>CA CS Standards:</u> 6-8.CS.1, 6-8.DA.7, 6-8.DA.8, 6-8.IC.21</p> <p><u>ISTE Standards:</u> #2, #3, #4</p> <p><u>NETS Standards :</u> #1, #5, #6</p>
<p>Engage</p> 	<p>Opening Welcome to the technology class. Review the last project. Review Vocabulary words for unit 1.</p> <p>Character Development <u>Netiquette Awareness:</u> Becoming a healthy digital citizen takes planning and instruction. Discuss with students the importance of learning proper digital etiquette or as some call netiquette. Discuss with students when students get an email, follow this checklist:</p> <ul style="list-style-type: none"> ● Do you know the sender? ● Is email legitimate? For example, does the 'voice' sound like the sender? ● Is the sender asking for personal information? Legitimate sources never do. ● Is there an attachment? If so, don't open it unless you are sure you know the sender. <p>Discuss privacy settings, email security with the school systems, and how to block spam or unsubscribe. Clarify terms like 'high priority, 'chain letters' and 'CC, BC'. Make 'Subject line' the topic of the email. Answer swiftly. Re-read before sending. Don't use all caps -THIS IS SHOUTING. Don't attach unnecessary files. Be careful</p>



	<p>of overusing high priority. Don't email confidential information. Don't email offensive remarks. Don't forward chain letters or spam. Remind students that if they ever have anyone asking them for money over an email, most likely it is a scam. Make sure they show an adult, Google the sender and verify the email.</p> <p><u>Project Description</u> In this project, we will have the goal to have proper email etiquette. Just like when writing a letter or sending a note to someone in the mail, writing an email has proper etiquette.</p> <p>Every email needs a proper address, subject line, opener, and signature closer. Discuss the different purposes of each and how to have proper etiquette with each section of an email.</p> <p>Discuss the definitions of 'CC' and 'BC'</p>
<p>Web Resources for more Exploration</p> 	<ul style="list-style-type: none"> • How to write a professional email for students by students By: <u>Centre for Teaching and Learning</u> • How to write an email By: <u>English Units</u> • Beware of what you share By: <u>Common Sense Education</u>
<p>Additional Emphasis</p> 	<ul style="list-style-type: none"> • Why 'subjects' are to be clear and concise • How to start an email • The use of all caps in an email (it means you are shouting) • How to set up a personal fun signature within the email software
<p>Learning Outcomes</p> 	<p>Students will:</p> <ul style="list-style-type: none"> • Type a greeting • Write an email • Write a departing salutation • Add a signature in settings • Understand Netiquette • Understand scams, chain letters, and know how to block or unsubscribe
<p>Project Steps</p>	<p>Have the student:</p> <ol style="list-style-type: none"> 1. Have the Students:



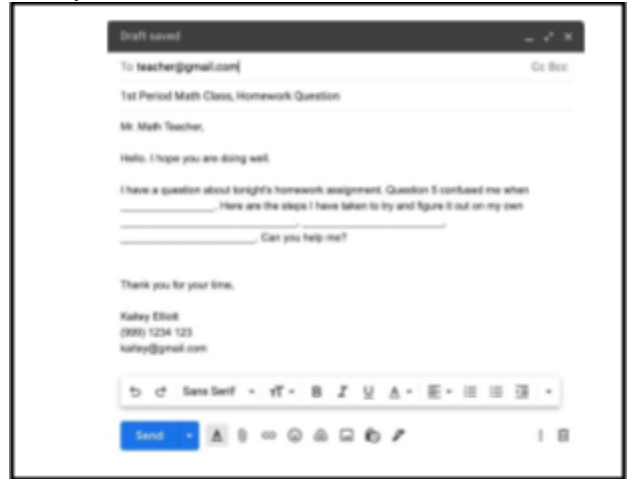
	<ol style="list-style-type: none">2. Open a web browser3. Navigate to the website google.com4. Click the Google App menu on the top right corner of the screen5. Click Gmail6. Click Compose7. Add an address. For this lesson add your teacher's email.8. Click the Subject Line9. Type a Subject Line that summarizes an email about homework (ex:'1st Period Math Class, Homework Question')10. Click the email body section11. Type your teacher's name12. Hit enter to add a new row of text13. Type a greeting.14. Hit enter to add a new row of text15. Type the question that you have for your teacher. Share the background of how you ended up at the question, and how you have already tried to answer it. Give examples16. Hit enter to add a new row of text17. Type a departing salutation18. Hit enter to add a new row of text19. Type a signature with your name, and contact information20. Click on the recipient's bar at the top of the email window21. Type your teacher's email address22. Read through the entire draft and check for typos and grammatical errors23. Click Send
<p>Reflection</p> 	<p>Lesson recap, what I learned, and what I am excited about next week.</p> <p>Reflect on the emails sent. Ask students why sending an email to an instructor or boss is different from sending one to a friend or family member.</p>
<p>Extend</p> 	<p>For differentiated learning or early finishers, students may complete the following optional steps:</p> <ol style="list-style-type: none">1. Compose a new email to send to your Principal2. Add your teacher's email as a 'CC'3. At the bottom left next to 'Send' click the down arrow4. Click 'schedule send'5. Select the time you would like the email sent



Template






Sample










Unit 1: Project 4:
Resume Final Challenge Assessment
Grade
Google Docs or Canva



<p>Notes & Preparation</p> 	<ul style="list-style-type: none"> ● Project length: 1 class ● Instructor Note - Have students select a template from Google Docs or create their own template. ● Files to Load: Check all web resources used in the lesson ahead of time.
<p>Content Standards</p> 	<p><u>CA CS Standards:</u> 6-8.CS.1, 6-8.DA.7, 6-8.DA.8, 6-8.IC.21</p> <p><u>ISTE Standards:</u> #2, #3, #4</p> <p><u>NETS Standards:</u> #1, #5, #6</p>
<p>Engage</p> 	<p><u>Opening</u> Welcome to the Technology class. Review the last project.</p> <p><u>Project Description</u> You will be creating a resume in a word processing program. You will be focusing on interests and involvement in school activities, academics, sports, volunteer experience, awards, etc. This is your chance to brag about yourself! Search the Internet for ideas and focus on the words writers use to describe themselves and their abilities. Begin statements with descriptive words like involved, active, committed, assisted, participated, developed, reviewed, etc. You will have the goal to create a resume for the future. A resume is a document that sums up a job seeker's qualifications for the jobs they're interested in. It is a marketing tool that job seekers use to communicate their value to employers. What kinds of information do you think would be necessary to include on a resume? Create a list as a class.</p>



<p>Web Resources for more Exploration</p> 	<ul style="list-style-type: none"> • <u>What is a Resume and Why is It Important?</u> • <u>What is a Resume</u>
<p>Additional Emphasis</p> 	<ul style="list-style-type: none"> • Has no grammatical or spelling errors • Remains a single page in length • Is eye-appealing with balanced margins and spacing • Contains only brief descriptive statement
<p>Learning Outcomes</p> 	<p>Students will:</p> <ul style="list-style-type: none"> • Know what a strong resume looks like. • Understand how resumes are used in career planning.
<p>Project Steps</p> 	<p>Have the student:</p> <ol style="list-style-type: none"> 1. Create a blank Google Docs Sheet or Lauch to <u>www.canva.com</u> 2. Follow the final challenge list of items to include and topics to address 3. Work independently to reinforce skills learned in this unit 4. Turn it into Learning Management System
<p>Reflection</p> 	<p>Lesson recap, what I learned, and what I am excited about next unit. Discuss what they have enjoyed most about this unit.</p>



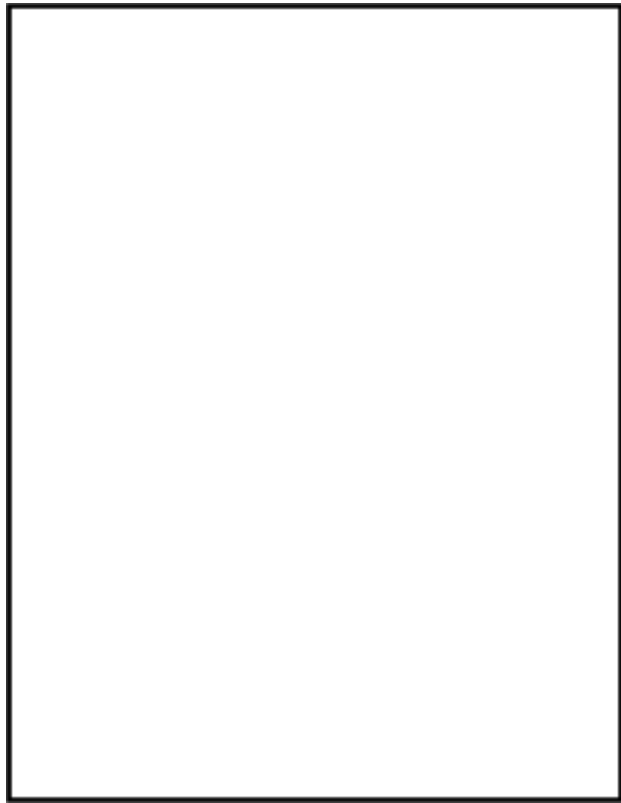
8TH GRADE FINAL CHALLENGE STUDENT HANDOUT

<p>Directions</p> 	<p>You will create a one-page poster reflecting on why it is important to think and imagine all the options to make better learning choices. This is a final challenge to showcase all the skills you have learned throughout this unit. This project will be turned in before the end of the class today. Finish as much as you can.</p>
	<ol style="list-style-type: none">1. Use advanced search techniques to look up the following information:2. Resume tips3. Current resume examples4. Online resume formats5. The information included in each section6. Launch a Word Processing, Desktop Publishing, Design Editing Program, or Resume Creator application7. Search through the resume templates8. Choose a template that best fits your personal style9. Save the file as Resume Final Challenge (Last Name)10. Format page/canvas size to 8½ x 11 if needed11. Switch back to resume12. Modify the template to include the following sections:<ol style="list-style-type: none">a. Objectiveb. Educationc. Key Skillsd. Experience (Work or Volunteer)e. Interests and Activitiesf. Achievementsg. Languagesh. References13. Complete the resume with your information14. Use tools such as Spelling and Grammar Check, Thesaurus, and Dictionary to revise your resume15. Identify collaboration tools and use at least one tool to help review resume with a peer16. Format font17. Save file

**This project will be turned in before the end of the class today.
Finish as much as you can.**



Template



Sample

