



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Curriculum Documents

School: Township of Ocean Intermediate School

Course: Computer Applications – Grade 6

Department: Technology

Supervisor: Patrick O’Neill

Board Approval	Supervisor	Notes
July 2015	James Maliff	Update Standards
December 2017	Patrick O’Neill	Update Standards

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#spartanlegacy



Week	Marking Period 1 / 3
1	Introduction to Class / District AUP / Google Classroom
2	Google Drive / Google Calendar / Google Keep
3	Internet Safety <ul style="list-style-type: none"> ● Scope & Sequence: Common Sense 6-8 Digital Citizenship Curriculum ● Website Evaluation
4	
5	
6	Email Etiquette and Gmail
7	Google Slides <ul style="list-style-type: none"> ● Stop-motion animation ● Research project
8	
9	
10	Google Sheets <ul style="list-style-type: none"> ● Making Games ● Pixel art
Week	Marking Period 2 / 4
11	Google Sheets <ul style="list-style-type: none"> ● Making Games ● Pixel art
12	Virtual Reality <ul style="list-style-type: none"> ● Google Cardboard ● Google Expeditions
13	
14	Podcasting & Blogging <ul style="list-style-type: none"> ● TED Talks ● Blogger ● Tutorials with Screencastify
15	
16	Introduction to Coding <ul style="list-style-type: none"> ● Scratch ● Coding with Chrome
17	
18	
19	Google Sites
20	

Time Frame	1 Week - September / February				
Topic					
Unit 1 - Introduction to Class / District AUP / Google Classroom (Demonstrated throughout the semester)					
Essential Questions					
<ul style="list-style-type: none"> • What are the benefits of a learning community? • What are the responsibilities for using technology? • What are the consequences for unethical, unsafe behavior when using the computer? • How can misuse be prevented? • How will misuse affect not only me, but others? 					
Enduring Understanding					
<ul style="list-style-type: none"> • Technology can have positive or negative impact on both users and those affected by their use. • Understand that there are consequences for unethical and unsafe computer use. 					
Alignment to NJSLs					
<ul style="list-style-type: none"> • 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. • 8.1.8.D.1 - Understand and model appropriate online behaviors related to cyber safety, cyberbullying, cyber security, and cyber ethics, including appropriate use of social media. • 8.1.8.D.3 - Demonstrate an understanding of fair use and Creative Commons intellectual property. • 8.1.8.D.5 - Understand appropriate uses for social media and the negative consequences of misuse. 					
Key Concepts & Skills					
<ul style="list-style-type: none"> • Discuss the purpose of an Acceptable Use Policy and the consequences of inappropriate use of technology. • Brainstorming and discussion of ideas based upon knowledge of the proper use of the computer/network while in school. 					
Learning Activities					
<ul style="list-style-type: none"> • Identify need for Acceptable Use Policy • Discussion on the school’s Acceptable Use Policy • Describe consequences for misusing school computers/networks 					
Assessments					
<ul style="list-style-type: none"> • Quiz on Google Forms • Ongoing daily assessments 					
21st Century Skills					
Creativity	✓	Critical Thinking	✓	Communication	Collaboration

✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> English Language Arts 							
Technology Integration							
<ul style="list-style-type: none"> Google Forms Google Classroom 							

Time Frame	1 Week - September / February					
Topic						
<p align="center">Unit 2 - Google Drive / Google Calendar / Google Keep (Demonstrated throughout the semester)</p>						
Essential Questions						
<ul style="list-style-type: none"> • Why are applications that help organize life important? • How can using applications help organize life? 						
Enduring Understanding						
<ul style="list-style-type: none"> • Google Drive organizes documents and files to be accessed remotely. • Google Calendar helps organize and events and can notify one of appointments. • Google Keep creates notes and lists to help organize tasks. 						
Alignment to NJSLs						
<ul style="list-style-type: none"> • 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. • 8.2.8.E.1 - Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used. • 8.2.8.E.2 - Demonstrate an understanding of the relationship between hardware and software. 						
Key Concepts & Skills						
<ul style="list-style-type: none"> • Google Drive organizes documents and files to be accessed remotely. • Google Calendar helps organize and events and can notify one of appointments. • Google Keep creates notes and lists to help organize tasks. 						
Learning Activities						
<ul style="list-style-type: none"> • Create folders in Drive • Organize files • Create events in Calendar • Set up notifications • Create notes and an online assignment pad in Keep 						
Assessments						
<ul style="list-style-type: none"> • Screen checks • Homework created in Calendar • Notes created in Keep 						
21st Century Skills						
	Creativity	✓	Critical Thinking	✓	Communication	Collaboration

✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> ● English Language Arts 							
Technology Integration							
<ul style="list-style-type: none"> ● Google Drive ● Google Calendar ● Google Keep 							

Time Frame	3 Weeks - September / February
Topic	
Unit 3 - Internet Safety (Demonstrated throughout the semester)	
Essential Questions	
<ul style="list-style-type: none"> ● What are the consequences for unethical, unsafe behavior when using the computer? ● What are my responsibilities for using technology? ● How can misuse be prevented? ● How will misuse affect not only me, but others? 	
Enduring Understanding	
<ul style="list-style-type: none"> ● Technology can have positive or negative impact on both users and those affected by their use. ● The use of appropriate online behaviors related to cyber safety, cyberbullying, cyber security, and cyber ethics is beneficial for online and offline relationships. ● What one does online can affect one’s future and interpersonal relationships. 	
Alignment to NJSL	
<ul style="list-style-type: none"> ● 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. ● 8.1.8.D.1 - Understand and model appropriate online behaviors related to cyber safety, cyberbullying, cyber security, and cyber ethics, including appropriate use of social media. ● 8.1.8.D.5 - Understand appropriate uses for social media and the negative consequences of misuse. ● 8.2.8.E.1 - Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used. ● 8.2.8.E.4 - Use appropriate terms in conversation. 	
Key Concepts & Skills	
<ul style="list-style-type: none"> ● Understand the benefits and drawbacks of the Internet and social media. ● Understand what cyber ethics are. ● Recognize ways of avoiding cyberbullies. ● Discuss the different between facts, statistics, and opinion. 	
Learning Activities	
<ul style="list-style-type: none"> ● Responses to Internet safety scenarios ● Poster or Public Service Announcement activity ● Internet safety culminating project 	
Assessments	

- Quiz on [Google Forms](#)
- Culminating unit project on [PowToon](#) or [Prezi](#)
- Ongoing daily assessments using [FlipGrid](#)

21st Century Skills

✓	Creativity	✓	Critical Thinking	✓	Communication	✓	Collaboration
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		

Interdisciplinary Connections

- English Language Arts
- Mathematics
- Social Studies

Technology Integration

- [Google Forms](#)
- [PowToon](#)
- [Prezi](#)
- [FlipGrid](#)

Time Frame	1 Week - October / March
Topic	
Unit 4 - Performing Searches, Evaluating Websites, & Using Databases (Demonstrated throughout the semester)	
Essential Questions	
<ul style="list-style-type: none"> ● What are different types of searches you can perform? ● How do you know a website is reliable? ● What is a database, and how can you use it for research? 	
Enduring Understanding	
<ul style="list-style-type: none"> ● The Internet is a vast world of information that needs to be evaluated for reliable information. ● Searches allow you to find information online, and they can be used to narrow the type of information you wish to find. ● Databases are a more reliable source to find accurate information when researching a topic. 	
Alignment to NJSLs	
<ul style="list-style-type: none"> ● 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. ● 8.1.8.D.2 - Demonstrate the application of appropriate citation to digital content. ● 8.1.8.D.3 - Demonstrate an understanding of fair use and Creative Commons intellectual property. ● 8.1.8.D.4 - Assess the credibility and accuracy of digital content. ● 8.1.8.E.1 - Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem. ● 8.2.8.B.6 - Compare and contrast the different types of intellectual property including copyrights, patents and trademarks. 	
Key Concepts & Skills	
<ul style="list-style-type: none"> ● How to use different types of searches to compile information on a topic. ● Understand different types of searches can be used , but they might offer different results. ● Evaluate various websites to see whether the information provided is relevant and accurate. ● Understand the advantage of using a database when researching. 	
Learning Activities	
<ul style="list-style-type: none"> ● Discussion on the importance of giving credit where credit is due. ● Search for various websites to locate and evaluate information provided. ● Look up same information in different databases. 	
Assessments	
<ul style="list-style-type: none"> ● Search Engine and Website Evaluation Project ● Ongoing use throughout semester 	

21st Century Skills							
	Creativity	✓	Critical Thinking	✓	Communication		Collaboration
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> • English Language Arts • Social Studies 							
Technology Integration							
<ul style="list-style-type: none"> • Google Docs • School Databases 							

Time Frame	1 Week - October / March
Topic	
Unit 5 - Email Etiquette & Gmail (Demonstrated throughout the semester)	
Essential Questions	
<ul style="list-style-type: none"> ● What is etiquette and why is it important to communication? ● How can you send an email to a classmate or teacher? ● How do you add attachments to email? ● What is spam (also known as junk mail)? 	
Enduring Understanding	
<ul style="list-style-type: none"> ● Email is a more formal means of communication. Proper etiquette should be used when sending an email to a recipient. 	
Alignment to NJSLs	
<ul style="list-style-type: none"> ● 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. ● 8.2.8.A.1 - Research a product that was designed for a specific demand and identify how the product has changed to meet new demands (i.e. telephone for communication - smart phone for mobility needs). ● 8.2.8.E.1 - Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used. ● 8.2.8.E.4 - Use appropriate terms in conversation. 	
Key Concepts & Skills	
<ul style="list-style-type: none"> ● Know how to log into school email. ● Compose and send an email to a classmate and/or teacher. ● Compose and send an email with an attachment. ● Recognize spam and how to prevent it. 	
Learning Activities	
<ul style="list-style-type: none"> ● Discussion of different areas of email. ● Discussion with examples of email etiquette. ● Send an email to classmate or teacher. 	
Assessments	
<ul style="list-style-type: none"> ● Vocabulary terms assessed through Google Forms ● Email sent to classmate using school email ● Email sent to teacher using school email ● Ongoing use of email throughout semester 	

21st Century Skills							
✓	Creativity	✓	Critical Thinking	✓	Communication		Collaboration
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> • English Language Arts • Social Studies 							
Technology Integration							
<ul style="list-style-type: none"> • Gmail • Google Forms 							

Time Frame	3 Weeks - October-November / March-April
Topic	
Unit 6 - Google Slides	
Essential Questions	
<ul style="list-style-type: none"> ● How can I use Google Slides? ● How can I collaborate remotely to complete work? ● What can I do to become a better public speaker? 	
Enduring Understanding	
<ul style="list-style-type: none"> ● Web-based applications, such as Google Slides, can be used to create and collaborate on presentations. 	
Alignment to NJSLs	
<ul style="list-style-type: none"> ● 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. ● 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. ● 8.1.8.A.3 - Use and/or develop a simulation that provides an environment to solve real world problem or theory. ● 8.1.8.B.1 - Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web). ● 8.1.8.C.1 - Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries. ● 8.1.8.D.2 - Demonstrate the application of appropriate citation to digital content. ● 8.1.8.D.3 - Demonstrate an understanding of fair use and Creative Commons to intellectual property. ● 8.1.8.D.4 - Assess the credibility and accuracy of digital content. ● 8.1.8.F.1 - Explore a local issue, by using digital tools to collect and analyze data to identify a solution and make an informed decision. 	
Key Concepts & Skills	
<ul style="list-style-type: none"> ● Presentation created in Google Slides ● Sharing a presentation ● Apply themes ● Creating your own theme ● Collaborating effectively on a presentation ● Inserting elements ● Formatting ● Arranging elements ● Hyperlinking ● Creating a works cited page 	

Learning Activities

- Create a stop-motion animation cartoon in [Google Slides](#)
- Researching a topic
- Creating a presentation for topic in [Google Slides](#)
- Discussion on the importance of giving credit where credit is due
- Creating a works cited page in [Google Docs](#) and hyperlinking to it
- Working with partners remotely for research and creation of presentation

Assessments

- Stop-motion animation cartoon
- Research project and presentation with a works cited page

21st Century Skills

✓	Creativity	✓	Critical Thinking	✓	Communication	✓	Collaboration
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		

Interdisciplinary Connections

- English Language Arts
- Science
- Social Studies

Technology Integration

- [Google Slides](#)
- [Google Docs](#)
- [School Databases](#)

Time Frame	2 Weeks - November / April						
Topic							
Unit 7 - Google Sheets							
Essential Questions							
<ul style="list-style-type: none"> • How can I use Google Sheets? • How do I create graphs and charts to display my data? 							
Enduring Understanding							
<ul style="list-style-type: none"> • Web-based applications, such as Google Sheets, can be used to organize and display data. 							
Alignment to NJSLs							
<ul style="list-style-type: none"> • 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. • 8.1.8.A.3 - Graph and calculate data within a spreadsheet and present a summary of results. • 8.1.8.A.5 - Create a database query, sort and create a report and describe the process, and explain the report results. • 8.1.8.B.1 - Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web). • 8.1.8.B.1 - Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web). 							
Key Concepts & Skills							
<ul style="list-style-type: none"> • Spreadsheet creation • Review sharing • Inserting charts and graphs • Formatting • Hyperlinking 							
Learning Activities							
<ul style="list-style-type: none"> • Discussion on the how data can be displayed effectively. • Creation of a spreadsheet using Google Sheets. • Demonstration on how formatting spreadsheets affects how data is displayed. • Displaying of data through the use of charts and graphs. 							
Assessments							
<ul style="list-style-type: none"> • Spreadsheet with chart or graph • Vocabulary assessed with Google Forms 							
21st Century Skills							
	Creativity	✓	Critical	✓	Communication	✓	Collaboration

			Thinking				
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> ● English Language Arts ● Mathematics ● Science 							
Technology Integration							
<ul style="list-style-type: none"> ● Google Sheets ● Google Forms 							

Time Frame		1 Week - December / May					
Topic							
Unit 8 - Virtual Reality							
Essential Questions							
<ul style="list-style-type: none"> • What is virtual reality? • How can virtual reality be used to enhance learning? 							
Enduring Understanding							
<ul style="list-style-type: none"> • Virtual reality applications will present students with learning adventures. 							
Alignment to NJSLs							
<ul style="list-style-type: none"> • 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. • 8.2.8.E.1 - Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used. • 8.2.8.E.2 - Demonstrate an understanding of the relationship between hardware and software. • 8.2.8.E.4 - Use appropriate terms in conversation (e.g., programming, language, data, RAM, ROM, Boolean logic terms). 							
Key Concepts & Skills							
<ul style="list-style-type: none"> • Define virtual reality • Make virtual reality goggles. • Use applications to experience virtual reality • Evaluate virtual reality applications 							
Learning Activities							
<ul style="list-style-type: none"> • Make Google Cardboard goggles. • Use virtual reality applications to experience virtual reality. • Evaluate virtual reality applications. 							
Assessments							
<ul style="list-style-type: none"> • Google Cardboard goggles will be made. • Evaluation handout of virtual reality applications. 							
21st Century Skills							
✓	Creativity	✓	Critical Thinking	✓	Communication		Collaboration
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		

Interdisciplinary Connections

- Mathematics
- Science
- Social Studies

Technology Integration

- [Google Cardboard](#)
- Virtual reality applications

Time Frame	1 Week - December / May
Topic	
Unit 9 - Podcasting & Blogging	
Essential Questions	
<ul style="list-style-type: none"> ● Where does the term “blog” come from? ● What is the difference between a “blog” and “vlog”? ● What is the difference between a “blogging” and “podcasts”? 	
Enduring Understanding	
<ul style="list-style-type: none"> ● Blogging is a form of informal communication on the web. ● Podcasting is a form of audio communication that can be listened to online or downloaded. 	
Alignment to NJSLs	
<ul style="list-style-type: none"> ● 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. ● 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. ● 8.1.8.B.1 - Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web). ● 8.2.8.E.1 - Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used. ● 8.2.8.E.2 - Demonstrate an understanding of the relationship between hardware and software. ● 8.2.8.E.4 - Use appropriate terms in conversation. 	
Key Concepts & Skills	
<ul style="list-style-type: none"> ● Identify chronological and reverse chronological order. ● Identify and examine blogs. ● Produce blogs, podcasts, and TED Talks. 	
Learning Activities	
<ul style="list-style-type: none"> ● Blogs set up on Blogger ● Blogs created and posted ● Podcasts created and posted on Blogger ● TED Talk created 	
Assessments	
<ul style="list-style-type: none"> ● Blogs created ● Podcasts created 	

<ul style="list-style-type: none"> • TED Talk created 							
21st Century Skills							
✓	Creativity	✓	Critical Thinking	✓	Communication		Collaboration
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> • English Language Arts 							
Technology Integration							
<ul style="list-style-type: none"> • Blogger • Audacity 							

Time Frame	2 Week - January / June					
Topic						
Unit 10 - Introduction to Coding						
Essential Questions						
<ul style="list-style-type: none"> • How are algorithms used in coding? • What are the fundamentals of computer programming? • What types of games are there and what makes a good game? • How is computer programming useful in real life? 						
Enduring Understanding						
<ul style="list-style-type: none"> • Coding develops computational thinking skills to help prepare to learn to write code and solve other problems. • Coding creates fun interactive games and drawings. 						
Alignment to NJSLs						
<ul style="list-style-type: none"> • 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. • 8.2.8.E.1 - Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used. • 8.2.8.E.2 - Demonstrate an understanding of the relationship between hardware and software. • 8.2.8.E.3 - Develop an algorithm to solve an assigned problem using a specified set of commands and use peer review to critique the solution. • 8.2.8.E.4 - Use appropriate terms in conversation (e.g., programming, language, data, RAM, ROM, Boolean logic terms). 						
Key Concepts & Skills						
<ul style="list-style-type: none"> • Learn basic coding technique • Identify potential bugs that can occur with coding and take corrective action to fix them 						
Learning Activities						
<ul style="list-style-type: none"> • Define vocabulary related to coding. • Design a game using a coding website or program. • Evaluate games created by other students. 						
Assessments						
<ul style="list-style-type: none"> • A game designed using coding basics. 						
21st Century Skills						
✓	Creativity	✓	Critical	✓	Communication	Collaboration

			Thinking				
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> ● Mathematics ● Science 							
Technology Integration							
<ul style="list-style-type: none"> ● Scratch ● Coding with Chrome ● Makey Makey 							

Time Frame	2 Weeks - January / June
Topic	
Unit 11 - Google Sites	
Essential Questions	
<ul style="list-style-type: none"> ● What is the purpose of a website? ● What types of websites are there? 	
Enduring Understanding	
<ul style="list-style-type: none"> ● Websites can be used to share information online, but putting too much information out there or putting the wrong kind of information out there can be detrimental. 	
Alignment to NJSLs	
<ul style="list-style-type: none"> ● 8.1.8.A.1 - Demonstrate knowledge of a real world problem using digital tools. ● 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. ● 8.1.8.A.3 - Use and/or develop a simulation that provides an environment to solve a real world problem or theory. ● 8.1.8.B.1 - Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web). ● 8.1.8.C.1 - Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries. ● 8.2.8.E.1 - Identify ways computers are used that have had an impact across the range of human activity and within different careers where they are used. ● 8.2.8.E.4 - Use appropriate terms in conversation. 	
Key Concepts and Skills	
<ul style="list-style-type: none"> ● Website creation ● Design and layout ● Incorporating key information ● Displaying data 	
Learning Activities	
<ul style="list-style-type: none"> ● Discussion on the advantages and disadvantages of website use. ● Design of a website to display information. ● Incorporate hyperlinks to provide further information. 	
Assessments	
<ul style="list-style-type: none"> ● Website 	

21st Century Skills							
✓	Creativity	✓	Critical Thinking	✓	Communication	✓	Collaboration
✓	Life & Career Skills	✓	Information Literacy	✓	Media Literacy		
Interdisciplinary Connections							
<ul style="list-style-type: none"> ● English Language Arts ● Mathematics ● Science ● Social Studies 							
Technology Integration							
<ul style="list-style-type: none"> ● Google Sites 							