

GRADES K-2 TECHNOLOGY CURRICULUM

MIDDLE TOWNSHIP PUBLIC SCHOOLS 216 S. MAIN STREET CAPE MAY COURT HOUSE, NJ

Born On Date: May 17, 2018

Content Area:	Technology	Grade(s) K
Unit Plan Title:	Basic Computer Skills and Tools	
Standard		
collaborate and	to create and communicate knowledge.	esize information in order to solve problems individually and
Overview/Ratio	nale	
will enhance lea Computers are k students to be s Students in <u>Kind</u> students will be using computer	rning in all areas of the curriculum. Computer use is being in being used as tools to enhance the learning process. Basic co uccessful in the regular classroom. <u>lergarten</u> will develop skills and behaviors that will serve as able to identify the parts of the computer and the keys nec	ompetencies with computers need to be developed by the foundation for future learning. By the end of kindergarten essary to use the computer as a learning tool. They will begin in to discuss ethical computer use. They will understand and
Strand(s)		
A- Technology O	perations and Concepts: Students demonstrate a sound und	lerstanding of technology concepts, systems and operations.
Technology Star	ıdard(s)	
8.1.2.A.2 8.1.2.A.3	Identify the basic features of a digital device and explain its processing application. Create a document using a word processing application. Compare the common uses of at least two different digital application identify the advantages and disadvantages of using each.	
	Demonstrate developmentally appropriate navigation skills in environments (i.e. games, museums).	virtual

	Enter information into a spreadsheet	t and sort t	ne inforr	mation.
8.1.2.A.6	Identify the structure and componen	ts of a data	ibase.	
8.1.2.A.7	Enter information into a database or	spreadshe	et and fi	lter the information.
nterdisciplin	ary Standard(s)			
Enduring Un	lorstandings: (M/hat are the hig ideas) M/bat cn/	scific up	derstandings about them are desired? What misunderstandings
are predictab		viat spe	cinc une	derstandings about them are desired? What misunderstandings
are predictat	,			
Students will	understand that computers are a tool	to help us	learn.	
Students will	learn how we use a computer to help	us learn.		
Essential Que	estion(s): (What provocative question	is will fost	er inqui	ry, understanding, and transfer of learning?)
	parts of a computer?			
What are the				
	part of the computer used?			
How is each J	part of the computer used?			
How is each J				
How is each How do we u	bart of the computer used? se computers to help us?	and skills	are addı	ressed:
How is each How do we u	bart of the computer used? se computers to help us? an, the following 21 st Century themes			
How is each How do we u	bart of the computer used? se computers to help us?	Inc	dicate wh	ressed: hether these skills are E -Encouraged, T -Taught, or A -Assessed in this unit by marking E, line before the appropriate skill.
How is each How do we u In this unit pl	bart of the computer used? se computers to help us? an, the following 21 st Century themes	Inc	dicate wh	hether these skills are E -Encouraged, T- Taught, or A -Assessed in this unit by marking E,
How is each How do we u In this unit pl	part of the computer used? se computers to help us? an, the following 21 st Century themes Check all that apply.	Inc	dicate wh	hether these skills are E -Encouraged, T -Taught, or A -Assessed in this unit by marking E, line before the appropriate skill.
How is each How do we u In this unit pl	part of the computer used? se computers to help us? an, the following 21 st Century themes Check all that apply. 21 st Century Themes	Inc	dicate wh A on the	hether these skills are E -Encouraged, T -Taught, or A -Assessed in this unit by marking E , line before the appropriate skill. 21st Century Skills

			Ĩ	
	Health Literacy	E	Collaborat	on, Teamwork and Leadership
x	Civic Literacy	E	E Cross-Cultural and Interpersonal Communication	
Х	Financial, Economic, Business and	Е	Communic	ation and Media Fluency
	Entrepreneurial Literacy	E	Accountab	ility, Productivity and Ethics
In this unit plan, th	he following Career Ready Practices are	e addressed:		
• •	v ,			rking E, T, A on the line before the appropriate skill.
E	CRP1. Act as a responsible and conti	ributing citize	en and empl	byee
т	CRP2. Apply appropriate academic and technical skills			
E	CRP3. Attend to personal health and	d financial w	ell-being	
E	CRP4. Communicate clearly and effe	ectively with	reason	
E	CRP5. Consider the environmental, social and economic impacts of decisions			
т	CRP6. Demonstrate creativity and innovation			
E	CRP7. Employ valid and reliable rese	CRP7. Employ valid and reliable research strategies		
E	CRP8. Utilize critical thinking to mak	ke sense of p	roblems and	persevere in solving them
E	CRP9. Model integrity, ethical leadership and effective management			
E	CRP10. Plan education and career paths aligned to personal goals			
т	CRP11. Use technology to enhance productivity			
E	CRP12. Work productively in teams while using cultural global competence			
-		ge and skills	will student	acquire as a result of this unit? What should they eventually
	result of such knowledge and skill?)			
Students will know	v			Students will be able to use the computer mouse.

The basic parts of a computer		Students will be able to use the basic parts of the computer to	
The basic features of the computer	r and how they function	navigate an online program. Students will be able to use the basic parts of the computer to	
		produce a simple digital project.	
Assessment Evidence:		<u> </u>	
Performance Tasks: Students will	exhibit the ability to use the computer to	Other Assessment Measures: Students will be assessed on	
	w well they use the parts of a computer to	class participation, teacher observation, and project	
navigate a program.		assessment.	
Teaching and Learning Act	ions: (What learning experiences and instr	uction will enable students to achieve the desired results?	
	I can identify the parts of a computer-		
Instructional Strategies and Activities	I can explain the jobs for each part of the co	mputer.	
D	l can use a computer mouse l can navigate a computer program.		
-			
	part of a computer. They will identify monit	ligital presentation, students will identify and discuss each basic or, mouse, keyboard, CPU (central processing unit), and ow each part functions and how they function collectively.	
	working in a simple online program. (Star fa	ortunity to practice how the parts of the computer function by II) As students are working independently, this will provide the cudents individually that may require additional support.	
Resources	l		
Computer, Keyboard, Mouse, Star f	all subscription, Smart Board, Tablet		

Suggested Time Frame:	6 weeks

Content Area:	Technology	Grade(s) K
Unit Plan Title:	Technology Applications	
Standard		
	digital tools to access, manage evaluate, and synthesize information in order to solve problems individualle e and communicate knowledge.	y and
Overview/Rationale		
will enhance learning in Computers are being use	Middle Township School District will develop basic computer technology skills, knowledge, and competenc all areas of the curriculum. Computer use is being integrated into all areas of the curriculum and classroom ed as tools to enhance the learning process. Basic competencies with computers need to be developed by Il in the regular classroom.	
students will be able to i using computer applicat demonstrate proper etic	<u>n</u> will develop skills and behaviors that will serve as the foundation for future learning. By the end of kinde identify the parts of the computer and the keys necessary to use the computer as a learning tool. They will ions for simple age appropriate tasks. They will begin to discuss ethical computer use. They will understand quette behavior and body position when using computers.	begin
Strand(s)		
process using technolog Strand C: Communicatio	Innovation: Students demonstrate creative thinking construct knowledge and develop innovative products y n and Collaboration: Students use digital media and environments to communicate and work collaborative o support individual learning and contribute to the learning of others.	
Strand D: Digital citizenship: students understand human, cultural, and societal issues related to technology and practiced legal and ethical behavior. Strand E: Research and Information Fluency		
Strand F: Critical Thinking Problem-Solving and Decision-Making: Students use critical thinking skills to plan and conduct research, manage products, problems, and make informed decisions using appropriate digital tools and resources.		
Technology Standard(s)		

8.1.2.B.1	Illustrate and communicate original ideas and stories using multiple digital tools and <u>resources</u> .
8.1.2.C.1	Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using various media formats
	such as online collaborative tools, and social media.
8.1.2.D.1	Develop an understanding of ownership of print and nonprint information.
8.1.2.E.1	Use digital tools and online resources to explore a problem or issue.
8.1.2.F.1	Use geographic mapping tools to plan and solve problems.

Interdisciplinary Standard(s)

Enduring Understandings: (What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable?)

Students will learn that the use of digital tools and media rich resources enhances creativity and the construction of knowledge.

Students will understand that information accessed through the use of digital tools assists in generating solutions and making decisions.

Students will learn how to create a document with text using a word processing program.

Students will learn how demonstrate the ability to navigate in virtual environments that are developmentally appropriate.

Students will learn that effective use of digital tools assists in gathering and managing information.

Essential Question(s) : (What provocative questions will foster inquiry, understanding, and transfer of learning?)

How can I use digital tools to enhance creativity and knowledge?

How can I transfer what I know to new technological situations and/or experiences?

How can I collaborate and use electronic tools to solve problems?

What are my responsibilities for using technology?

What constitutes misuse and how can it best be prevented?

In this unit plan, the following 21st Century themes and skills are addressed:

E							
	Check all that apply.		Indicate whether these skills are E -Encouraged, T- Taught, or A -Assessed in this unit by marking E ,				
			Т, А	T, A on the line before the appropriate skill.			
	21 ^s	^t Century Themes		21 st Century Skills			
	Х	Global Awareness		т	Critical Thinking & Problem Solving		
		Environmental Literacy		т	Creativity and Innovation		
	Health Literacy			E	Collaboration, Teamwork and Leadership		
	Х	Civic Literacy		E	Cross-Cultural and Interpersonal Communication		
	X Financial, Economic, Business and			E	Communication and Media Fluency		
		Entrepreneurial Literacy		E	Accountability, Productivity and Ethics		

In this unit plan, the following Career Ready Practices are addressed:

Indicate whether these skills are E-Encouraged, T-Taught, or A-Assessed in this unit by marking E, T, A on the line before the appropriate skill.

E	CRP1. Act as a responsible and contributing citizen and employee
т	CRP2. Apply appropriate academic and technical skills
E	CRP3. Attend to personal health and financial well-being
E	CRP4. Communicate clearly and effectively with reason

	E	CRP5. Consider the environmental, social and economic impacts of decisions			
	т	CRP6. Demonstrate creativity and innovation			
	E	CRP7. Employ valid and reliable research strategies			
	E	CRP8. Utilize critical thinking to make sense of problems and p	ersevere in solving them		
	Е	CRP9. Model integrity, ethical leadership and effective manage	ement		
	E	CRP10. Plan education and career paths aligned to personal go	pals		
	т	CRP11. Use technology to enhance productivity			
	E	CRP12. Work productively in teams while using cultural global	competence		
	-	Goals/Objectives: (What key knowledge and skills will students a result of such knowledge and skill?)			
	Students will know the names of the basic parts of a computer and other available technologies.				
		v the basic features of the computer and other available			
		how they function.			
		v how to use a computer program to complete an			
assignment. Students will know how to illustrate and communicate original ideas and					
stories using digital tools and media rich resources such as kid pix.					
Students will be able to use digital tools to access, manage, evaluate and					
synthesize information or to solve problems individually and collaboratively					
and communicate knowledge.					
Assess	sment Evider	nce:			
Perfor	mance Tasks	5: (Other Assessment Measures:		
Stude	nts will be as	ssessed on assigned projects.	Students will be assessed on class participation and teacher		

Students will be assessed on their a	ability to apply learned technology concepts	observation.
and operations.		
Students will be assessed on their a	ability to produce grade appropriate	
documents. Students will work wit		
Students will work with Chromeboo		
Teaching and Learning Acti	ons: (What learning experiences and instru	ction will enable students to achieve the desired results?
	Students will create projects (math problems	, simple pictures, research) using Kid Pix.
Instructional Strategies and	Students will create documents with age app	ropriate vocabulary and writing using Microsoft Word.
Activities	Students will create a multi-slide presentatio	n using PowerPoint.
	Students will create a mini newspaper using	a template.
D	Students will collaborate with peers to create	e a video presentation using a variety of available digital tools.
	Students will use available technologies such	as online software to enhance or practice grade level skills.
	Students will create graphs using data collect	ed.
	Students will create projects and site sources	used in said products.
	Students will demonstrate appropriate digita	I citizenship when gathering information for projects.
	Students will demonstrate the ability to cite a projects.	sources appropriately when gathering information for assigned
	Students will practice using navigational tool	s such as Google Earth and Discovery Atlas' Interactive maps.
	Students will compare existing digital tools to	o tools that were using the past to create same projects students
	will create a map using digital tools.	
	Students will explore various types of digital	tools and their intended uses.
	Students will additionally determine whethe	r these digital tools are harmful or helpful, thus practicing digital
	citizenship.	
Resources		
IPads, Tablets, Chromebooks, comp	uters, Printers, Star fall, Kid Pix, Brain Pop Jr. Bo	ook Flix, Tumble books, Interactive White Board
Suggested Time Frame:	6 weeks	

Content Area:	Technology		Grade K			
Unit Plan Title:	nit Plan Title: Technology Education and Design					
Standard						
the nature and im	lucation, Engineering, Design, and Computational Think pact of technology, engineering, technological design, o society, and the environment. ale					
will enhance learn Computers are bei students to be suc Students in <u>Kinder</u> students will be at using computer ap	nts in Middle Township School District will develop bas ning in all areas of the curriculum. Computer use is bein ing used as tools to enhance the learning process. Basi ccessful in the regular classroom. <u>rgarten</u> will develop skills and behaviors that will serve ble to identify the parts of the computer and the keys n oplications for simple age appropriate tasks. They will b per etiquette behavior and body position when using co	g integrated into all areas of the competencies with compute as the foundation for future lenecessary to use the computer begin to discuss ethical computer	he curriculum and classroom. rs need to be developed by earning. By the end of kindergarten as a learning tool. They will begin			
Strand(s)						
Strand A: The Natu Strand B: Technolo Strand C: Design Strand D: Abilities	ure of Technology Creativity and Innovation ogy and Society for a Technological World ational Thinking Programming					
Technology Standa	ard(s)					
8.2.2.A.1						
8.2.2.A.2 Describe how designed products and systems are useful at school, home and work.						
8.2.2.A.3	8.2.2.A.3 Identify a system and the components that work together to accomplish its purpose.					
8.2.2.A.4 Choose a product to make and plan the tools and materials needed.						
8.2.2.A.5	Choose a product to make and plan the tools and mater Collaborate to design a solution to a problem affecting					

8.2.2.B.1	Identify how technology impacts or improves life.
8.2.2.B.2	Demonstrate how reusing a product affects the local and global environment.
8.2.2.B.3	Identify products or systems that are designed to meet human needs.
8.2.2.B.4	Identify how the ways people live and work has changed because of technology.
8.2.2.C.1	Brainstorm ideas on how to solve a problem or build a product.
8.2.2.C.2	Create a drawing of a product or device that communicates its function to peers and discuss.
8.2.2.C.3	Explain why we need to make new products.
8.2.2.C.4	Identify designed products and brainstorm how to improve one used in the classroom.
8.2.2.C.5	Describe how the parts of a common toy or tool interact and work as part of a system.
8.2.2.D.1	Collaborate and apply a design process to solve a simple problem from everyday experiences.
8.2.2.D.2	Discover how a product works by taking it apart, sketching how parts fit, and putting it back together.
8.2.2.D.3	Identify the strengths and weaknesses in a product or system.
8.2.2.D.4	Identify the resources needed to create technological products or systems.
8.2.2.D.5	Identify how using a tool (such as a bucket or wagon) aids in reducing work.
8.2.2.E.1	List and demonstrate the steps to an everyday task.
8.2.2.E.2	Demonstrate an understanding of how a computer takes input through a series of written commands and then interprets and displays information as output.
8.2.2.E.3	Create algorithms (a sets of instructions) using a pre-defined set of commands (e.g., to move a student or a character through a maze).
8.2.2.E.4	Debug an algorithm (i.e., correct an error).
8.2.2.E.5	Use appropriate terms in conversation (e.g., basic vocabulary words: input, output, the operating system, debug, and algorithm).

Enduring Understandings: (What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable?)

Students will learn that the use of digital tools and media rich resources enhances creativity and the construction of knowledge.

Students will understand that information accessed through the use of digital tools assists in generating solutions and making decisions.

Students will learn how to create a document with text using a word processing program.

Students will learn how demonstrate the ability to navigate in virtual environments that are developmentally appropriate.

Students will learn that effective use of digital tools assists in gathering and managing information.

Essential Question(s) : (What provocative questions will foster inquiry, understanding, and transfer of learning?)

How can I use digital tools to enhance creativity and knowledge?

How can I transfer what I know to new technological situations and/or experiences?

How can I collaborate and use electronic tools to solve problems?

What are my responsibilities for using technology?

What constitutes misuse and how can it best be prevented?

In this unit plan, the following 21st Century themes and skills are addressed:

Check all that apply.	Indicate whether these skills are E -Encouraged, T -Taught, or A -Assessed in this unit by marking E , T , A on the line before the appropriate skill.	
21 st Century Themes		21 st Century Skills
Global Awareness	т	Critical Thinking & Problem Solving

	Environmental Literacy	т	Creativity and Innovation	
	Health Literacy	E	Collaboration, Teamwork and Leadership	
Х	Civic Literacy	E	Cross-Cultural and Interpersonal Communication	
x	Financial, Economic, Business and	E	Communication and Media Fluency	
	Entrepreneurial Literacy E Accountability, Productivity and Ethics			
his unit nla	n, the following Career Ready Practices are	addresse	4.	
•	• •		this unit by marking E, T, A on the line before the appropriate skill.	
E	CRP1. Act as a responsible and contr	ibuting citi	izen and employee	
т	CRP2. Apply appropriate academic a	nd technic	al skills	
E	CRP3. Attend to personal health and	CRP3. Attend to personal health and financial well-being		
E	CRP4. Communicate clearly and effe	ctively wit	h reason	
E	CRP5. Consider the environmental, s	ocial and e	economic impacts of decisions	
т	CRP6. Demonstrate creativity and in	CRP6. Demonstrate creativity and innovation		
E	CRP7. Employ valid and reliable rese	CRP7. Employ valid and reliable research strategies		
E	CRP8. Utilize critical thinking to mak	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them		
Е	CRP9. Model integrity, ethical leader	CRP9. Model integrity, ethical leadership and effective management		
E	CRP10. Plan education and career pa	CRP10. Plan education and career paths aligned to personal goals		
т	CRP11. Use technology to enhance p	roductivity	V Contraction of the second	
Е	CRP12. Work productively in teams	CRP12. Work productively in teams while using cultural global competence		
	ng Goals/Objectives: (What key knowled			

be able to do as a result of such know	owledge and skill?)	
Students will know how to use a co assignment.	omputer program to complete an	Students will be able to use the basic parts of the computer to navigate an online program.
Students will know how to illustrat	e and communicate original ideas and	
stories using digital tools and medi	a rich resources such as kid pix.	
Students will be able to use digital	tools to access, manage, evaluate and	
synthesize information or to solve	problems individually and collaboratively	
and communicate knowledge.		
Assessment Evidence:		
Performance Tasks:		Other Assessment Measures:
Students will be assessed on assign	ed projects.	Students will be assessed on class participation and teacher
Students will be assessed on their a	ability to apply learned technology concepts	observation.
and operations.		
	ability to produce grade appropriate	
documents. Students will work wit		
Students will work with Chromebo	oks appropriately.	
Teaching and Learning Acti		ction will enable students to achieve the desired results?
Instructional Strategies and	Students will create projects (math problems	
Activities	Students will create a multi-slide presentation	propriate vocabulary and writing using Microsoft Word.
D	Students will create a mini newspaper using	•
		e a video presentation using a variety of available digital tools.
	-	as online software to enhance or practice grade level skills.
	Students will create graphs using data collec	
	Students will create projects and site sources	-
		al citizenship when gathering information for projects. sources appropriately when gathering information for assigned
	Students will demonstrate the ability to the	sources appropriately when gamering information for assigned

	projects. Students will practice using navigational tools such as Google Earth and Discovery Atlas' Interactive maps. Students will compare existing digital tools to tools that were using the past to create same projects students will create a map using digital tools. Students will explore various types of digital tools and their intended uses. Students will additionally determine whether these digital tools are harmful or helpful, thus practicing digital citizenship.	
Resources		
IPads, tablets, Chromebooks, computers, Printers, Star fall, Kid Pix, Brain Pop Jr. Book Flix, Tumble books, Interactive White Board		
Suggested Time Frame:	6 weeks	

	Technology			Grade(s) 1
Unit Plan Title:	Basic Technology	Skills and Too	ls	
Standard				
8.1 All students will use d collaborate and to create	-	-	valuate, and synthesize information in order to	solve problems individually and
Overview/Rationale				
will enhance learning in a Computers are being used students to be successful Students in <u>First Grade</u> w Row" keys and additional essential skills necessary create simple word proce	Ill areas of the curr d as tools to enhar in the regular clas ill continue to dev keys on the keyb to expand on the essing documents a	iculum. Comp ice the learnin sroom. elop skills lea bard, includin use of availab and digital pro	will develop basic computer technology skills, buter use is being integrated into all areas of the ng process. Basic competencies with computer rned in Kindergarten. By the end of First Grade g the ability to use shift to capitalize letters. St le technologies, (i.e. IPads, Chromebooks, com ojects. First Graders will continue to explore et body position when using available technology	e curriculum and classroom. The curriculum and classroom. The second to be developed by the students will begin to use "Home udents will continue to practice puters) as a learning tool. They will hical use of the computer. They will
Strand(s)				
	s and Concepts: St	udents demoi	nstrate a sound understanding of technology c	oncepts, systems and operations.
	s and Concepts: St	udents demoi	nstrate a sound understanding of technology c	oncepts, systems and operations.
A- Technology Operation		udents demoi 8.1.P.A.1 8.1.P.A.2	nstrate a sound understanding of technology c Use an input device to select an item and nav Navigate the basic functions of a browser.	
A- Technology Operations	nology systems.	8.1.P.A.1	Use an input device to select an item and nav	igate the screen

	8.1.P.A.5	printer).Demonstrate the ability to access and use resources on a computing device.
Understand and use technology systems.	8.1.2.A.1	Identify the basic features of a digital device and explain its purpose.
Select and use applications effectively	8.1.2.A.2	Create a document using a word processing application.
and productively.	8.1.2.A.3	Compare the common uses of at least two different digital applications and identify the advantages and disadvantages of using each.
	8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
	8.1.2.A.5	Enter information into a spreadsheet and sort the information.
	8.1.2.A.6	Identify the structure and components of a database.
	8.1.2.A.7	Enter information into a database or spreadsheet and filter the information.

Interdisciplinary Standard(s)

Enduring Understandings: (What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable?)

Students will understand that available technologies (i.e. IPads, Tablets, Chromebooks, and Computers) are tools to help us learn.

Students will learn how we use a computer to help us learn. Students will learn how we use an IPAD to help us learn.

Students will learn how we use a Chromebook to help us learn.

Essential Question(s): (What provocative questions will foster inquiry, understanding, and transfer of learning?)

What are the parts of a computer? How is each part of the computer used? How do we use computers to help us? (also IPAD, tablets, and Chromebook)

inis unit pla	an, the following 21 st Century themes and s Check all that apply.		hether these skills are E -Encouraged, T -Taught, or A -Assessed in this unit by marking E	
		T, A on the line before the appropriate skill.		
21 st Century Themes		21 st Century Skills		
X	Global Awareness	т	Critical Thinking & Problem Solving	
	Environmental Literacy	т	Creativity and Innovation	
	Health Literacy	E	Collaboration, Teamwork and Leadership	
Х	Civic Literacy	E	Cross-Cultural and Interpersonal Communication	
Х	Financial, Economic, Business and	E	Communication and Media Fluency	
	Entrepreneurial Literacy			
		T	Accountability, Productivity and Ethics	
•	in, the following Career Ready Practices ar	e addressed		
•	in, the following Career Ready Practices ar	e addressed A-Assessed in	: this unit by marking E, T, A on the line before the appropriate skill.	
ndicate whet	in, the following Career Ready Practices ar her these skills are E-Encouraged, T-Taught, or a	e addressed A-Assessed in ributing citiz	l: this unit by marking E, T, A on the line before the appropriate skill. zen and employee	
edicate wheth	In, the following Career Ready Practices an her these skills are E-Encouraged, T-Taught, or CRP1. Act as a responsible and cont	e addressed A-Assessed in ributing citi: and technica	l: this unit by marking E, T, A on the line before the appropriate skill. zen and employee al skills	
edicate whether E T	an, the following Career Ready Practices an her these skills are E-Encouraged, T-Taught, or A CRP1. Act as a responsible and cont CRP2. Apply appropriate academic	e addressed A-Assessed in ributing citi and technica d financial v	I: this unit by marking E, T, A on the line before the appropriate skill. zen and employee al skills vell-being	
E T E E	an, the following Career Ready Practices an her these skills are E-Encouraged, T-Taught, or A CRP1. Act as a responsible and cont CRP2. Apply appropriate academic CRP3. Attend to personal health an	e addressed A-Assessed in ributing citiz and technica d financial w ectively with	I: this unit by marking E, T, A on the line before the appropriate skill. zen and employee al skills vell-being n reason	
E T E E E E E	in, the following Career Ready Practices ar her these skills are E-Encouraged, T-Taught, or CRP1. Act as a responsible and cont CRP2. Apply appropriate academic CRP3. Attend to personal health an CRP4. Communicate clearly and effe	e addressed A-Assessed in ributing citiz and technica d financial w ectively with social and e	I: this unit by marking E, T, A on the line before the appropriate skill. zen and employee al skills vell-being n reason	
dicate whet E T E E E E	in, the following Career Ready Practices ar her these skills are E-Encouraged, T-Taught, or CRP1. Act as a responsible and cont CRP2. Apply appropriate academic CRP3. Attend to personal health an CRP4. Communicate clearly and effect CRP5. Consider the environmental,	e addressed A-Assessed in ributing citiz and technica d financial w ectively with social and e nnovation	I: this unit by marking E, T, A on the line before the appropriate skill. zen and employee al skills vell-being n reason conomic impacts of decisions	

E CRP9. Model integrity, ethical leadership and effective manal E CRP10. Plan education and career paths aligned to personal T CRP11. Use technology to enhance productivity E CRP12. Work productively in teams while using cultural glob Student Learning Goals/Objectives: (What key knowledge and skills will student be able to do as a result of such knowledge and skill?) Students will know the basic parts of a computer and other available technologies. Students will know how basic features of the computer and other available technologies, and their function.	goals al competence
Students will know how to use a computer program to complete an assignment. Students will know basic features of an operating system.	Students will be able to access available technologies, manage the technologies appropriately and secure technologies when
Students will know how to access available technologies and maintain its	tasks are complete.
integrity.	
Assessment Evidence:	
 Performance Tasks: Students will be assessed on how they use technology vocabulary and their understanding of operations of available technologies. Students will be assessed on their ability to produce grade appropriate documents. Students will work with IPads, Tablets appropriately. Students will work with Chromebooks appropriately. Students will be assessed on how they use the parts of a computer to navigate a program, and how the students access IPads, Tablets, and Chromebooks from a cart and secure technologies when they are finished using them. 	Other Assessment Measures: Students will be assessed on class participation, teacher observation and completed class projects.

Teaching and Learning Actions: (What learning experiences and instruction will enable students to achieve the desired realInstructional Strategies and ActivitiesI can identify the parts of a computer, Chromebook, tablet and IPAD.I can explain what each part of the computer does. I can use computer icons to access assigned programs. I can navigate an assigned computer programs. I can create a document using a computer program. I can use assigned programs on a Chromebook or IPAD. I can take care of a (n) IPAD, commuter, Chromebook.Students will review parts of a computer. Students will then be provided with an opportunity to pr the parts of the computer function by working in a simple online program. (Star fall) Students will be introduced to the Chromebook and IPads. Students will access the IPads and the Chromebooks in the charging cart. Students will practice managing the devices by unplugging them
Instructional Strategies and ActivitiesI can explain what each part of the computer does. I can use computer icons to access assigned programs. I can navigate an assigned computer programs. I can create a document using a computer program. I can use assigned programs on a Chromebook or IPAD. I can take care of a (n) IPAD, commuter, Chromebook.Students will review parts of a computer. Students will then be provided with an opportunity to pr the parts of the computer function by working in a simple online program. (Star fall) Students will be introduced to the Chromebook and IPads. Students will access the IPads and the
on and securing them back in the charging cart when they are finished. Students will work independent complete an assignment. On the computers using the program Kid Pix. Students will create a simple document that has age appropriate text and graphics. Students will be able to conference with the while they are creating their assignment so that they can Rethink and Revise their work. Students their document as evidence of their completed assignment. Students will share their assignments or peers. As students are working independently, this will provide the teacher with an opportunity to students individually that may require additional support. <i>Consider how will the design will:</i> W = Help the students know Where the unit is going and What is expected? Help the teacher know V students are coming from (prior knowledge and interests)? H= Hook all students and Hold their interest? E= Equip students, help the Experience the key ideas and Explore the issue? R=Provide opportunities to Rethink and Revise their understandings and work?

Resources	
IPads, Chromebooks, tablets, comp	uters, printer, Star fall, Kid Pix, Brain Pop Jr. Book Flix, Tumble books
Suggested Time Frame:	6 weeks

Unit Plan Title:	Technology Applications	
Standard		
	se digital tools to access, manage evaluate, and synthesize ate and communicate knowledge.	e information in order to solve problems individually and
Overview/Rationale		
will enhance learning Computers are being u	n Middle Township School District will develop basic com in all areas of the curriculum. Computer use is being integ used as tools to enhance the learning process. Basic comp sful in the regular classroom.	
Row" keys and additic essential skills necessa create simple word pr	onal keys on the keyboard, including the ability to use shif ary to expand on the use of available technologies, (i.e. IP	ads, Chromebooks, computers) as a learning tool. They will I continue to explore ethical use of the computer. They will
Strand(s)		
process using technolo Strand C: Communicat including at a distance Strand D: Digital citize behavior. Strand E: Research and	tion and Collaboration: Students use digital media and en e to support individual learning and contribute to the lear enship: students understand human, cultural, and societal d Information Fluency	vironments to communicate and work collaboratively ning of others. issues related to technology and practiced legal and ethical
products, problems, a	nd make informed decisions using appropriate digital too	critical thinking skills to plan and conduct research, manage Is and resources.
Technology Standard(c)	

	mobile device.
8.1.2.B.1	Illustrate and communicate original ideas and stories using multiple digital
	tools and <u>resources</u> .
8.1.5.B.1	Collaborative to produce a digital story about a significant local event or
	issue based on first-person interviews.
8.1.P.C.1	Collaborate with peers by participating in interactive digital games or
	activities.
8.1.2.C.1	Engage in a variety of developmentally appropriate learning activities with
	students in other classes, schools, or countries using various media formats
	such as online collaborative tools, and social media.
8.1.2.D.1	Develop an understanding of ownership of print and nonprint information.
8.1.P.E.1	Use the Internet to explore and investigate questions with a teacher's
	support.
8.1.2.E.1	Use digital tools and online resources to explore a problem or issue.
8.1.2.F.1	Use geographic mapping tools to plan and solve problems.

Interdisciplinary Standard(s)

Enduring Understandings: (What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable?)

Students will learn that the use of digital tools and media rich resources enhances creativity and the construction of knowledge.

Students will understand that information accessed through the use of digital tools assists in generating solutions and making decisions.

Students will learn how to create a document with text using a word processing program.

Students will learn how demonstrate the ability to navigate in virtual environments that are developmentally appropriate.

Students will learn that effective use of digital tools assists in gathering and managing information.

Essential Question(s): (What provocative questions will foster inquiry, understanding, and transfer of learning?)

How can I use digital tools to enhance creativity and knowledge?

How can I transfer what I know to new technological situations and/or experiences?

How can I collaborate and use electronic tools to solve problems?

What are my responsibilities for using technology?

What constitutes misuse and how can it best be prevented?

In this unit plan, the following 21st Century themes and skills are addressed:

Check all that apply.		Indicate whether these skills are E -Encouraged, T -Taught, or A -Assessed in this unit by marking E , T, A on the line before the appropriate skill.				
2	21 st Century Themes			21 st Century Skills		
X	Global Awareness		т	Critical Thinking & Problem Solving		
	Environmental Literacy		т	Creativity and Innovation		
	Health Literacy		E	Collaboration, Teamwork and Leadership		
Х	Civic Literacy		E	Cross-Cultural and Interpersonal Communication		
Х	Financial, Economic, Business and		E	Communication and Media Fluency		
	Entrepreneurial Literacy		т	Accountability, Productivity and Ethics		

In this unit plan, the following Career Ready Practices are addressed:

Indicate whether these skills are E-Encouraged, T-Taught, or A-Assessed in this unit by marking E, T, A on the line before the appropriate skill.

E CRP1. Act as a responsible and contributing citizen and em	CRP1. Act as a responsible and contributing citizen and employee					
T CRP2. Apply appropriate academic and technical skills	CRP2. Apply appropriate academic and technical skills					
E CRP3. Attend to personal health and financial well-being	CRP3. Attend to personal health and financial well-being					
E CRP4. Communicate clearly and effectively with reason	CRP4. Communicate clearly and effectively with reason					
E CRP5. Consider the environmental, social and economic in	CRP5. Consider the environmental, social and economic impacts of decisions					
T CRP6. Demonstrate creativity and innovation						
E CRP7. Employ valid and reliable research strategies						
E CRP8. Utilize critical thinking to make sense of problems a	nd persevere in solving them					
E CRP9. Model integrity, ethical leadership and effective ma	nagement					
E CRP10. Plan education and career paths aligned to persona	al goals					
T CRP11. Use technology to enhance productivity						
E CRP12. Work productively in teams while using cultural global	obal competence					
Student Learning Goals/Objectives: (What key knowledge and skills will stude be able to do as a result of such knowledge and skill?)	nts acquire as a result of this unit? What should they eventually					
Students will know how to use a computer program to complete an assignment.	Students will be able to use the basic parts of the computer to navigate an online program.					
Students will know how to illustrate and communicate original ideas and	Students will be able to respect each other's work and use					
stories using digital tools and media rich resources such as kid pix.						
	recourses as directed by the teacher.					
Students will be able to use digital tools to access, manage, evaluate and						
synthesize information or to solve problems individually and collaboratively						
and communicate knowledge.						
Assessment Evidence:	- <u> </u>					
Performance Tasks: Students will be assessed on how they use technology						

Other Assessment Measures: Students will be assessed on
class participation and teacher observation and completed
class projects.

Teaching and Learning Actions: (What learning experiences and instruction will enable students to achieve the desired results?					
Instructional Strategies and Activities D	Students will create projects (math problems, simple pictures, research) using Kid Pix. Students will create documents with age appropriate vocabulary and writing using Microsoft Word. Students will create a multi-slide presentation using PowerPoint. Students will create a mini newspaper using a template. Students will collaborate with peers to create a video presentation using a variety of available digital tools. Students will use available technologies such as online software to enhance or practice grade level skills. Students will create graphs using data collected. Students will create projects and site sources used in said products. Students will demonstrate appropriate digital citizenship when gathering information for projects. Students will demonstrate the ability to cite sources appropriately when gathering information for assigned projects. Students will practice using navigational tools such as Google Earth and Discovery Atlas' Interactive maps. Students will compare existing digital tools to tools that were using the past to create same projects students will create a map using digital tools. Students will explore various types of digital tools and their intended uses. Students will explore various types of digital tools and their intended uses.				
Resources					
IPads, Tablets, Chromebooks, computers, Printers, Star fall, Kid Pix, Brain Pop Jr. Book Flix, Tumble books, Interactive White Board, Word Processing programs such as Microsoft office and Google Docs, Power point, Prezi					
Suggested Time Frame: 6 weeks					

	Technology	Grade 1				
Unit Plan Title: Technology Education and Design						
Standard						
the nature and im		ing-Programming: All students will develop an understanding of computational thinking in the designed world as they relate to the				
Overview/Rationa	ale					
will enhance learn Computers are be	ning in all areas of the curriculum. Computer use is bein	ic computer technology skills, knowledge, and competencies that g integrated into all areas of the curriculum and classroom. c competencies with computers need to be developed by				
Row" keys and ad essential skills neo create simple wor continue to demo	ditional keys on the keyboard, including the ability to u cessary to expand on the use of available technologies, of processing documents and digital projects. First Grad	rten. By the end of First Grade students will begin to use "Home se shift to capitalize letters. Students will continue to practice (i.e. IPads, Chromebooks, computers) as a learning tool. They will ers will continue to explore ethical use of the computer. They will hen using available technology (i.e. IPads, Chromebooks, and				
Row" keys and ad essential skills nee create simple wor continue to demo computers).	ditional keys on the keyboard, including the ability to u cessary to expand on the use of available technologies, of processing documents and digital projects. First Grad	se shift to capitalize letters. Students will continue to practice (i.e. IPads, Chromebooks, computers) as a learning tool. They will ers will continue to explore ethical use of the computer. They will				
Row" keys and ad essential skills new create simple wor continue to demo computers). Strand(s) Strand A: The Nat Strand B: Technol Strand C: Design Strand D: Abilities	ditional keys on the keyboard, including the ability to u cessary to expand on the use of available technologies, of processing documents and digital projects. First Grad nstrate proper etiquette behavior and body position w ure of Technology Creativity and Innovation	se shift to capitalize letters. Students will continue to practice (i.e. IPads, Chromebooks, computers) as a learning tool. They will ers will continue to explore ethical use of the computer. They will				
Row" keys and ad essential skills new create simple wor continue to demo computers). Strand(s) Strand A: The Nat Strand B: Technol Strand C: Design Strand D: Abilities Strand E: Comput	ditional keys on the keyboard, including the ability to u cessary to expand on the use of available technologies, rd processing documents and digital projects. First Grad nstrate proper etiquette behavior and body position w ure of Technology Creativity and Innovation ogy and Society 5 for a Technological World ational Thinking Programming	se shift to capitalize letters. Students will continue to practice (i.e. IPads, Chromebooks, computers) as a learning tool. They will ers will continue to explore ethical use of the computer. They will				
Row" keys and ad essential skills new create simple wor continue to demo computers). Strand(s) Strand A: The Nat Strand B: Technol Strand C: Design Strand D: Abilities Strand E: Comput	ditional keys on the keyboard, including the ability to u cessary to expand on the use of available technologies, rd processing documents and digital projects. First Grad nstrate proper etiquette behavior and body position w ure of Technology Creativity and Innovation ogy and Society 5 for a Technological World ational Thinking Programming	se shift to capitalize letters. Students will continue to practice (i.e. IPads, Chromebooks, computers) as a learning tool. They will ers will continue to explore ethical use of the computer. They will hen using available technology (i.e. IPads, Chromebooks, and				
Row" keys and ad essential skills new create simple wor continue to demo computers). Strand(s) Strand A: The Nat Strand B: Technol Strand C: Design Strand D: Abilities Strand E: Comput	ditional keys on the keyboard, including the ability to u cessary to expand on the use of available technologies, rd processing documents and digital projects. First Grad nstrate proper etiquette behavior and body position w ure of Technology Creativity and Innovation ogy and Society 6 for a Technological World ational Thinking Programming ard(s) Define products produced as a result of technology or of Describe how designed products and systems are useful	se shift to capitalize letters. Students will continue to practice (i.e. IPads, Chromebooks, computers) as a learning tool. They will ers will continue to explore ethical use of the computer. They will hen using available technology (i.e. IPads, Chromebooks, and				
Row" keys and ad essential skills new create simple wor continue to demo computers). Strand(s) Strand A: The Nat Strand B: Technol Strand C: Design Strand D: Abilities Strand E: Comput Technology Stand 8.2.2.A.1	ditional keys on the keyboard, including the ability to u cessary to expand on the use of available technologies, rd processing documents and digital projects. First Grad nstrate proper etiquette behavior and body position will ure of Technology Creativity and Innovation ogy and Society 6 for a Technological World ational Thinking Programming ard(s) Define products produced as a result of technology or a	se shift to capitalize letters. Students will continue to practice (i.e. IPads, Chromebooks, computers) as a learning tool. They will ers will continue to explore ethical use of the computer. They will hen using available technology (i.e. IPads, Chromebooks, and <u>of nature.</u> I at school, home and work. er to accomplish its purpose.				

8.2.2.A.5	Collaborate to design a solution to a problem affecting the community.	
8.2.2.B.1	Identify how technology impacts or improves life.	
8.2.2.B.2	Demonstrate how reusing a product affects the local and global environment.	
8.2.2.B.3	Identify products or systems that are designed to meet human needs.	
8.2.2.B.4	Identify how the ways people live and work has changed because of technology.	
8.2.2.C.1	Brainstorm ideas on how to solve a problem or build a product.	
8.2.2.C.2	Create a drawing of a product or device that communicates its function to peers and discuss.	
8.2.2.C.3	Explain why we need to make new products.	
8.2.2.C.4	Identify designed products and brainstorm how to improve one used in the classroom.	
8.2.2.C.5	Describe how the parts of a common toy or tool interact and work as part of a system.	
8.2.2.C.6	Investigate a product that has stopped working and brainstorm ideas to correct the problem.	
8.2.2.D.1	Collaborate and apply a design process to solve a simple problem from everyday experiences.	
8.2.2.D.2	Discover how a product works by taking it apart, sketching how parts fit, and putting it back together.	
8.2.2.D.3	Identify the strengths and weaknesses in a product or system.	
8.2.2.D.4	Identify the resources needed to create technological products or systems.	
8.2.2.D.5	Identify how using a tool (such as a bucket or wagon) aids in reducing work.	
8.2.2.E.1	List and demonstrate the steps to an everyday task.	
8.2.2.E.2	Demonstrate an understanding of how a computer takes input through a series of written commands and then interprets and displays information as output.	
8.2.2.E.3	Create algorithms (a sets of instructions) using a pre-defined set of commands (e.g., to move a student or a character through a maze).	
8.2.2.E.4	Debug an algorithm (i.e., correct an error).	
8.2.2.E.5	Use appropriate terms in conversation (e.g., basic vocabulary words: input, output, the operating system, debug, and algorithm).	

RF.K.3. Know and apply grade-level phonics and word analysis skills in decoding and encoding words.

Enduring Understandings: (What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable?)

Students will learn that the use of digital tools and media rich resources enhances creativity and the construction of knowledge.

Students will understand that information accessed through the use of digital tools assists in generating solutions and making decisions.

Students will learn how to create a document with text using a word processing program.

Students will learn how demonstrate the ability to navigate in virtual environments that are developmentally appropriate.

Students will learn that effective use of digital tools assists in gathering and managing information.

Essential Question(s) : (What provocative questions will foster inquiry, understanding, and transfer of learning?)

How can I use digital tools to enhance creativity and knowledge?

How can I transfer what I know to new technological situations and/or experiences?

How can I collaborate and use electronic tools to solve problems?

What are my responsibilities for using technology?

What constitutes misuse and how can it best be prevented?

In this unit plan, the following 21st Century themes and skills are addressed:

Check all that apply. 21st Century Themes		Indicate whether these skills are E-Encouraged, T-Taught, or A-Assessed in this unit by marking E, T, A on the line before the appropriate skill. 21 st Century Skills			
	Х	Global Awareness		т	Critical Thinking & Problem Solving
		Environmental Literacy		т	Creativity and Innovation
		Health Literacy		E	Collaboration, Teamwork and Leadership

X	Civic Literacy	Е	Cross-Cultural and Interpersonal Communication			
X						
	Financial, Economic, Business and Entrepreneurial Literacy	E	Communication and Media Fluency			
		Т	Accountability, Productivity and Ethics			
In this unit plan	n, the following Career Ready Practices are	addroccod				
-	· · · ·		• this unit by marking E, T, A on the line before the appropriate skill.			
E	CRP1. Act as a responsible and contr	ibuting citiz	en and employee			
т	CRP2. Apply appropriate academic a	nd technica	l skills			
E	CRP3. Attend to personal health and	financial w	ell-being			
E	CRP4 Communicate clearly and effe	CRP4. Communicate clearly and effectively with reason				
E	CRP5. Consider the environmental, social and economic impacts of decisions					
Т	CRP6. Demonstrate creativity and innovation					
E	CRP7. Employ valid and reliable research strategies					
Е	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them					
Ε	CRP9. Model integrity, ethical leadership and effective management					
E	`	CRP10. Plan education and career paths aligned to personal goals				
т	CRP11. Use technology to enhance productivity					
E	CRP12. Work productively in teams while using cultural global competence					
Student Learnin	Student Learning Goals/Objectives: (What key knowledge and skills will students acquire as a result of this unit? What should they eventually					
be able to do as	be able to do as a result of such knowledge and skill?)					
	now the names of the basic parts of a com	puter and o	other			
available techn	available technologies.					

Students will know the basic featu	res of the computer and other available			
technologies, and how they function	on.			
Students will know how to use a c	omputer program to complete an			
assignment.				
Students will know how to illustra	te and communicate original ideas and			
stories using digital tools and med	ia rich resources such as kid pix.			
Students will be able to use digital	tools to access, manage, evaluate and			
_	problems individually and collaboratively			
and communicate knowledge.				
Assessment Evidence:				
	he assessed on how they use technology	Other Assessment Measures: Students will be assessed on		
-	be assessed on how they use technology			
•	g of operations of available technologies.	class participation and teacher observation and completed		
	ability to produce grade appropriate	class projects.		
documents. Students will work with				
Students will work with Chromebo	ooks appropriately.			
Students will be assessed on how	they use the parts of a computer to navigate			
a program, and how the students a	access IPads and Chromebooks from a cart			
and secure technologies when the	y are finished using them.			
Teaching and Learning Act	ions: (What learning experiences and instru	ction will enable students to achieve the desired results?		
	Students will create projects (math problems	s, simple pictures, research) using Kid Pix.		
Instructional Strategies and	Students will create documents with age app	propriate vocabulary and writing using Microsoft Word.		
Activities	Activities Students will create a multi-slide presentation using PowerPoint.			
	Students will create a mini newspaper using	•		
	-	e a video presentation using a variety of available digital tools.		
		n as online software to enhance or practice grade level skills.		
	Students will create graphs using data collec			
	Students will create projects and site sources	al citizenship when gathering information for projects.		
	students will demonstrate appropriate digita	a cruzensnip when gathering information for projects.		

	Students will demonstrate the ability to cite sources appropriately when gathering information for assigned projects. Students will practice using navigational tools such as Google Earth and Discovery Atlas' Interactive maps. Students will compare existing digital tools to tools that were using the past to create same projects students will create a map using digital tools. Students will explore various types of digital tools and their intended uses. Students will additionally determine whether these digital tools are harmful or helpful, thus practicing digital citizenship.		
Resources			
IPads, tablets, Chromebooks, computers, Printers, Star fall, Kid Pix, Brain Pop Jr. Book Flix, Tumble books, Interactive White Board, Word Processir programs such as Microsoft office and Google Docs, Power point, Prezi			
Suggested Time Frame:			

Content Area:	Technology	Grade 2
Unit Plan Title:	Basic Technology Skills and Tools	
Standard		

8.1 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.

Elementary students in the Middle Township School District will develop basic computer technology skills, knowledge, and competencies that will enhance learning in all areas of the curriculum. Computer use is being integrated into all areas of the curriculum and classroom. Computers are being used as tools to enhance the learning process. Basic competencies with computers need to be developed by students to be successful in the regular classroom.

Students in <u>Second Grade</u> will focus on learning proper keyboarding skills. By the end of Second Grade students will have a greater understanding of most of the keys on a keyboard and their proper functions. Students will begin saving, printing, formatting and inserting graphics into simple documents and digital projects. They will use word processing programs to produce simple digital projects and additional programs to create presentations. They will be able to use a browser to navigate to websites. Second Graders will continue to explore ethical use of the computer. They will continue to demonstrate proper etiquette, behavior, and body position when using computers.

Strand(s)

A- Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.

Technology Standard(s)	
8.1.2.A.1	Identify the basic features of a digital device and explain its purpose.
8.1.2.A.2	Create a document using a word processing application.
8.1.2.A.3	Compare the common uses of at least two different digital applications and
	identify the advantages and disadvantages of using each.
8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual
	environments (i.e. games, museums).
8.1.2.A.5	Enter information into a spreadsheet and sort the information.
8.1.2.A.6	Identify the structure and components of a database.
8.1.2.A.7	Enter information into a database or spreadsheet and filter the information.

Interdisci	plinarv	Standard	(s)

Enduring Understandings: (What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable?)

Students will understand that available technologies (i.e. IPads, Chromebooks, and Computers) are tools to help us learn.

Students will learn how we use a computer to help us learn. Students will learn how we use an IPAD to help us learn.

Students will learn how we use a Chromebook to help us learn.

Essential Question(s): (What provocative questions will foster inquiry, understanding, and transfer of learning?)

What are the parts of a computer? How is each part of the computer used? How do we use computers to help us? (also IPAD and Chromebook)

Check all that apply. Indicate whether these skills are E-Encouraged, T-Taught, or A-Assessed in this unit by marking I T, A on the line before the appropriate skill.				
21 st Century Themes 21 st Century Skills		21 st Century Skills		
x	Global Awareness	T Critical Thinking & Problem Solving		
	Environmental Literacy		т	Creativity and Innovation

	Health Literacy	E	Collaborat	on, Teamwork and Leadership	
x	Civic Literacy	E	Cross-Cultu	ral and Interpersonal Communication	
x	Financial, Economic, Business and	т	Communic	ation and Media Fluency	
	Entrepreneurial Literacy	т	Accountab	lity, Productivity and Ethics	
In this unit plan t	he following Career Ready Practices are	e addressed:			
• •				rking E, T, A on the line before the appropriate skill.	
E	CRP1. Act as a responsible and contributing citizen and employee				
т	CRP2. Apply appropriate academic and technical skills				
E	CRP3. Attend to personal health and financial well-being				
E	CRP4. Communicate clearly and effectively with reason				
E	CRP5. Consider the environmental, social and economic impacts of decisions				
т	CRP6. Demonstrate creativity and innovation				
E	CRP7. Employ valid and reliable research strategies				
E	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them				
E	CRP9. Model integrity, ethical leadership and effective management				
E	CRP10. Plan education and career paths aligned to personal goals				
Т	CRP11. Use technology to enhance productivity				
E	CRP12. Work productively in teams while using cultural global competence				
	· · ·			acquire as a result of this unit? What should they eventually	
-	result of such knowledge and skill?)				
Students will the	basic parts of a computer and other ava	ailable techn	ologies.	Students will be able to (do)	

	ures of the computer and other available	Students will be able to use the basic parts of the computer to
technologies, their function(s).		navigate an online program.
Students will know how to use a co	omputer program to complete an	Students will be able to use the computer to complete
assignment.		assignments. Students will be able to use the computer to
Students will know basic features of		create documents and digital projects. Students will be able to
Students will know how to access a	available technologies.	use basic computer icons and technology vocabulary when
		appropriate. Students will be able to physically access available
		technologies, manage the technologies appropriately, and
		secure technologies when tasks are complete.
Assessment Evidence:		
Performance Tasks: Students will b	be assessed on how they use technology	Other Assessment Measures: Students will be assessed on
vocabulary and their understanding	g of operations of available technologies.	class participation, teacher observation and completed class
Students will be assessed on their a	ability to produce grade appropriate	projects.
documents. Students will work wit	h IPads/tablets appropriately.	
Students will work with Chromebo	oks appropriately.	
Students will be assessed on how t	hey use the parts of a computer to navigate	
a program, and how the students a	ccess IPads and Chromebooks from a cart	
and secure technologies when they	y are finished using them.	
Teaching and Learning Acti	ions: (What learning experiences and instru	iction will enable students to achieve the desired results?
	I can identify the parts of a computer, Chron	nebook and IPAD.
Instructional Strategies and	I can explain what each part of the compute	
Activities	I can use computer icons to access assigned	programs.
	I can navigate to and in an assigned online p	-
	I can create a document using a computer pr	-
	I can create a digital project using a compute	
	I can use assigned programs on a Chromeboo	ok, tablet, or IPAD.

	I can take care of a(n) IPAD, computer, Chromebook, or tablet.
	Students will review the parts of a computer. Students will then be provided with an opportunity to practice how the parts of the computer function by working in a simple online program. (i.e. Star fall) Students will be introduced to Chromebook, IPads, and tablets. Students will access the iPads, tablets and Chromebook in the charging cart. Students will work independently to complete an assignment using available technologies, (i.e. Kid Pix, Word, etc.) Students will create a simple document that has age appropriate text and graphics. Students will be able to conference with the teacher while they are creating their assignment so that they can Rethink and Revise their work. Students will print their document as evidence of their completed assignment. Students will share their assignments with their peers. As students are working independently, this will provide the teacher with an opportunity to work with students individually that may require additional support.
	 Consider how will the design will: W = Help the students know Where the unit is going and What is expected? Help the teacher know Where the students are coming from (prior knowledge and interests)? H= Hook all students and Hold their interest? E= Equip students, help the Experience the key ideas and Explore the issue? R=Provide opportunities to Rethink and Revise their understandings and work? E=Allow students to Evaluate their work and its implications? T=be Tailored (personalized to the different needs, interests and abilities of learners? O=be Organized to maximize initial and sustained engagement as well as effective learning?
Resources	
IPads, Chromebooks, computers, p	printer, Star fall, Kid Pix, Brain Pop Jr. Book Flix, Tumble books

Suggested Time Frame:	6 weeks
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D – Indicates differentiation at the Lesson Level (Identify Modifications for ELL, Gifted and Talented, Title 1, Special Education)

Content Area:	Technology	Grade 2	
Unit Plan Title: Technology Applications			
Standard			
collaborate and to o	use digital tools to access, manage evaluate, and synthesize in create and communicate knowledge.	oformation in order to solve problems individually and	
Overview/Rationale			
will enhance learnin Computers are bein students to be succo Students in <u>Second</u> understanding of m graphics into simple additional programs	s in Middle Township School District will develop basic comput ng in all areas of the curriculum. Computer use is being integrat g used as tools to enhance the learning process. Basic compet essful in the regular classroom. <u>Grade</u> will continue to build on skills learned in first grade. By ost of the keys on a keyboard and their proper functions. Study e documents and digital projects. They will use word processing s to create presentations. They will be able to use a browser to of the computer. They will continue to demonstrate proper eti	ted into all areas of the curriculum and classroom. encies with computers need to be developed by the end of Second Grade students will have a greater ents will begin saving, printing, formatting and inserting g programs to produce simple digital projects and o navigate to websites. Second Graders will continue to	
Strand(s)			
Strand B: Creativity process using techn Strand C: Communi including at a distar	and Innovation: Students demonstrate creative thinking const ology cation and Collaboration: Students use digital media and environ nce to support individual learning and contribute to the learnin izenship: students understand human, cultural, and societal iss	onments to communicate and work collaboratively go of others.	
behavior. Strand E: Research a Strand F: Critical Th	and Information Fluency inking Problem-Solving and Decision-Making: Students use crit , and make informed decisions using appropriate digital tools a		

	e	and stories using multiple digital
	tools and <u>resources</u> .	
8.1.2.D.1	Develop an understanding of ownership of	
8.1.2.E.1	Use digital tools and online resources to e	
8.1.2.F.1	Use geographic mapping tools to plan and	d solve problems.
Interdisciplina	ary Standard(s)	
Enduring Und	lerstandings: (What are the big ideas? What	at specific understandings about them are desired? What misunderstandings
are predictab	• • •	
Students will	learn that the use of digital tools and medi	ia rich resources enhances creativity and the construction of knowledge.
Students will	understand that information accessed thro	ough the use of digital tools assists in generating solutions and making decisions.
Students will	understand that mormation accessed the	bugh the use of digital tools assists in generating solutions and making decisions.
Students will	learn how to create a document with text	using a word processing program.
Students will	learn how demonstrate the ability to navig	gate in virtual environments that are developmentally appropriate.
		gate in virtual environments that are developmentally appropriate. ists in gathering and managing information.
Students will	learn that effective use of digital tools assi	ists in gathering and managing information.
Students will	learn that effective use of digital tools assi	
Students will Essential Que	learn that effective use of digital tools assi estion(s): (What provocative questions will parts of a computer? How is each part of t	ists in gathering and managing information.
Students will Essential Que What are the	learn that effective use of digital tools assi estion(s): (What provocative questions will parts of a computer? How is each part of t	ists in gathering and managing information. foster inquiry, understanding, and transfer of learning?)
Students will Essential Que What are the Chromebook	learn that effective use of digital tools assi estion(s): (What provocative questions will parts of a computer? How is each part of t	ists in gathering and managing information. foster inquiry, understanding, and transfer of learning?) the computer used? How do we use computers to help us? (also IPAD, tablet, and
Students will Essential Que What are the Chromebook	learn that effective use of digital tools assi estion(s): (What provocative questions will parts of a computer? How is each part of t	ists in gathering and managing information. foster inquiry, understanding, and transfer of learning?) the computer used? How do we use computers to help us? (also IPAD, tablet, and skills are addressed: Indicate whether these skills are E-Encouraged, T-Taught, or A-Assessed in this unit by marking E,
Students will Essential Que What are the Chromebook) In this unit pla	learn that effective use of digital tools assi estion(s): (What provocative questions will parts of a computer? How is each part of t an, the following 21 st Century themes and s	ists in gathering and managing information. foster inquiry, understanding, and transfer of learning?) the computer used? How do we use computers to help us? (also IPAD, tablet, and skills are addressed:

	X	Global Awareness	E	Critical Thinking & Problem Solving	
		Environmental Literacy	т	Creativity and Innovation	
		Health Literacy	Е	Collaboration, Teamwork and Leadership	
	Х	Civic Literacy	Е	Cross-Cultural and Interpersonal Communication	
	х	Financial, Economic, Business and	Е	Communication and Media Fluency	
		Entrepreneurial Literacy	т	Accountability, Productivity and Ethics	
In this (In this unit plan, the following Career Ready Practices are addressed:				
Indica	te whether t	hese skills are E -Encouraged, T- Taught, or A	-Assessed in t	his unit by marking E, T, A on the line before the appropriate skill.	
	E	CRP1. Act as a responsible and contributing citizen and employee			
	т	CRP2. Apply appropriate academic and technical skills			
	E	CRP3. Attend to personal health and financial well-being			
	E	CRP4. Communicate clearly and effectively with reason			
	E	CRP5. Consider the environmental, social and economic impacts of decisions			
	т	CRP6. Demonstrate creativity and innovation			
	E	CRP7. Employ valid and reliable research strategies			
	E	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them			
	E	CRP9. Model integrity, ethical leadership and effective management			
	E	CRP10. Plan education and career paths aligned to personal goals			
	т	CRP11. Use technology to enhance productivity			
	E	CRP12. Work productively in teams while using cultural global competence			

Student Learning Goals/Objectives	: (What key knowledge and skills will student	s acquire as a result of this unit? What should they eventually
be able to do as a result of such know	owledge and skill?)	
available technologies. Students will know the basic featur technologies, and how they functic Students will know how to use a co assignment. Students will know ba		Students will be able to use the computer mouse properly. Students will be able to use the basic parts of the computer to navigate an online program. Students will use the computer to complete a simple finished document using a simple desktop publishing program. Students will use basic computer icons and technology vocabulary. Students will be able to physically obtain available technologies, manage the technologies appropriately and secure technologies when tasks are complete.
Assessment Evidence:		
vocabulary and their understanding Students will be assessed on their a documents. Students will work wit Students will work with Chromebo Students will be assessed on how t	oks appropriately. hey use the parts of a computer to navigate ccess IPads and Chromebooks from a cart	Other Assessment Measures: Students will be assessed on class participation and teacher observation and completed class projects.
Teaching and Learning Acti Instructional Strategies and Activities D	ons: (What learning experiences and instru I can identify the parts of a computer, Chrom I can explain what each part of the computer I can use computer icons to access assigned	r does.

	I can navigate a assigned computer programs.		
	I can create a document using a computer program.		
	I can use assigned programs on a Chromebook or IPAD.		
	I can take care of a(n) IPAD, commuter, Chromebook.		
	Students will review the parts of a computer. Students will then be provided with an opportunity to practice how the parts of the computer function by working in a simple online program. (Star fall) Students will be introduced to the Chromebooks and IPads. Students will access the iPads and the Chromebook in the charging cart. Students will practice managing the devices by un-connecting, logging on and securing them back in the charging cart when they are finished. Students will work independently to complete an assignment. On the computers using the program Kid Pix. Students will create a simple document that has age appropriate text and graphics. Students will be able to conference with the teacher while they are creating their assignment so that they can Rethink and Revise their work. Students will print their document as evidence of their completed assignment. Students will share their assignments with their peers. As students are working independently, this will provide the teacher with an opportunity to work with students individually that may require additional support.		
Resources			
IPads, Tablets, Chromebooks, computers, printer, Star fall, Kid Pix, Brain Pop Jr. Book Flix, Tumble books			
Suggested Time Frame:	6 weeks		

D – Indicates differentiation at the Lesson Level (Identify Modifications for ELL, Gifted and Talented, Title 1, Special Education)

Content Area:	Technology	Grade 2					
Unit Plan Title:	Plan Title: Technology Education and Design						
Standard							
the nature and im individual, global Overview/Rationa Elementary studen	pact of technology, engineering, technological design, co society, and the environment. le nts in Middle Township School District will develop basic	ng-Programming: All students will develop an understanding of Imputational thinking in the designed world as they relate to the computer technology skills, knowledge, and competencies that					
will enhance learning in all areas of the curriculum. Computer use is being integrated into all areas of the curriculum and classroom. Computers are being used as tools to enhance the learning process. Basic competencies with computers need to be developed by students to be successful in the regular classroom.							
understanding of graphics into simp additional prograr	most of the keys on a keyboard and their proper functio le documents and digital projects. They will use word pr ns to create presentations. They will be able to use a br	By the end of Second Grade students will have a greater ns. Students will begin saving, printing, formatting and inserting ocessing programs to produce simple digital projects and owser to navigate to websites. Second Graders will continue to oper etiquette, behavior, and body position when using					
understanding of graphics into simp additional programe explore ethical use	most of the keys on a keyboard and their proper functio le documents and digital projects. They will use word pr ns to create presentations. They will be able to use a br	ns. Students will begin saving, printing, formatting and inserting ocessing programs to produce simple digital projects and owser to navigate to websites. Second Graders will continue to					
understanding of i graphics into simp additional program explore ethical use computers. Strand(s) Strand A: The Nate Strand B: Technolo Strand C: Design Strand D: Abilities	most of the keys on a keyboard and their proper functio le documents and digital projects. They will use word pr ns to create presentations. They will be able to use a br e of the computer. They will continue to demonstrate pr ure of Technology Creativity and Innovation	ns. Students will begin saving, printing, formatting and inserting ocessing programs to produce simple digital projects and owser to navigate to websites. Second Graders will continue to					
understanding of a graphics into simp additional program explore ethical use computers. Strand(s) Strand A: The Nate Strand B: Technolo Strand C: Design Strand D: Abilities Strand E: Computa	most of the keys on a keyboard and their proper functio le documents and digital projects. They will use word pr ns to create presentations. They will be able to use a br e of the computer. They will continue to demonstrate pr ure of Technology Creativity and Innovation ogy and Society for a Technological World ational Thinking Programming	ns. Students will begin saving, printing, formatting and inserting ocessing programs to produce simple digital projects and owser to navigate to websites. Second Graders will continue to					
understanding of a graphics into simp additional program explore ethical use computers. Strand(s) Strand A: The Nate Strand B: Technolo Strand C: Design Strand D: Abilities	most of the keys on a keyboard and their proper functio le documents and digital projects. They will use word pr ns to create presentations. They will be able to use a br e of the computer. They will continue to demonstrate pr ure of Technology Creativity and Innovation ogy and Society for a Technological World ational Thinking Programming	ns. Students will begin saving, printing, formatting and inserting occessing programs to produce simple digital projects and owser to navigate to websites. Second Graders will continue to oper etiquette, behavior, and body position when using					
understanding of a graphics into simp additional program explore ethical use computers. Strand(s) Strand A: The Nate Strand B: Technolo Strand C: Design Strand D: Abilities Strand E: Computa	most of the keys on a keyboard and their proper functio le documents and digital projects. They will use word pr ns to create presentations. They will be able to use a br e of the computer. They will continue to demonstrate pr ure of Technology Creativity and Innovation ogy and Society for a Technological World ational Thinking Programming ard(s)	ns. Students will begin saving, printing, formatting and inserting occessing programs to produce simple digital projects and owser to navigate to websites. Second Graders will continue to oper etiquette, behavior, and body position when using					
understanding of r graphics into simp additional prograr explore ethical use computers. Strand(s) Strand A: The Nate Strand B: Technolo Strand C: Design Strand D: Abilities Strand E: Computa Technology Standa 8.2.2.A.1	most of the keys on a keyboard and their proper functio le documents and digital projects. They will use word prins to create presentations. They will be able to use a bre e of the computer. They will continue to demonstrate print ure of Technology Creativity and Innovation by and Society for a Technological World ational Thinking Programming ard(s) Define products produced as a result of technology or o	And Students will begin saving, printing, formatting and inserting occessing programs to produce simple digital projects and owser to navigate to websites. Second Graders will continue to oper etiquette, behavior, and body position when using					

8.2.2.A.5	Collaborate to design a solution to a problem affecting the community.				
8.2.2.B.1	Identify how technology impacts or improves life.				
8.2.2.B.2	Demonstrate how reusing a product affects the local and global environment.				
8.2.2.B.3	Identify products or systems that are designed to meet human needs.				
8.2.2.B.4	Identify how the ways people live and work has changed because of technology.				
8.2.2.C.1	Brainstorm ideas on how to solve a problem or build a product.				
8.2.2.C.2	Create a drawing of a product or device that communicates its function to peers and discuss.				
8.2.2.C.3	Explain why we need to make new products.				
8.2.2.C.4	Identify designed products and brainstorm how to improve one used in the classroom.				
8.2.2.C.5	Describe how the parts of a common toy or tool interact and work as part of a system.				
8.2.2.C.6	Investigate a product that has stopped working and brainstorm ideas to correct the problem.				
8.2.2.D.1	Collaborate and apply a design process to solve a simple problem from everyday experiences.				
8.2.2.D.2	Discover how a product works by taking it apart, sketching how parts fit, and putting it back together.				
8.2.2.D.3	Identify the strengths and weaknesses in a product or system.				
8.2.2.D.4	Identify the resources needed to create technological products or systems.				
8.2.2.D.5	Identify how using a tool (such as a bucket or wagon) aids in reducing work.				
8.2.2.E.1	List and demonstrate the steps to an everyday task.				
8.2.2.E.2	Demonstrate an understanding of how a computer takes input through a series of written commands and then interprets and displays information as output.				
8.2.2.E.3	Create algorithms (a sets of instructions) using a pre-defined set of commands (e.g., to move a student or a character through a maze).				
8.2.2.E.4	Debug an algorithm (i.e., correct an error).				
8.2.2.E.5	Use appropriate terms in conversation (e.g., basic vocabulary words: input, output, the operating system, debug, and algorithm).				

Enduring Understandings: (What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable?)

Students will learn that the use of digital tools and media rich resources enhances creativity and the construction of knowledge.

Students will understand that information accessed through the use of digital tools assists in generating solutions and making decisions.

Students will learn how to create a document with text using a word processing program.

Students will learn how to create presentations using power point or similar presentation software.

Students will learn how demonstrate the ability to navigate in virtual environments that are developmentally appropriate.

Students will learn that effective use of digital tools assists in gathering and managing information.

Essential Question(s) : (What provocative questions will foster inquiry, understanding, and transfer of learning?)

In this unit plan, the following 21 st Century themes and skills are addressed:						
	Check all that apply.			Indicate whether these skills are E -Encouraged, T -Taught, or A -Assessed in this unit by marking E ,		
	21 st Century Themes		<i>T, A</i> on the line before the appropriate skill. 21st Century Skills			
	X Global Awareness			т	Critical Thinking & Problem Solving	
		Environmental Literacy		т	Creativity and Innovation	
		Health Literacy		E	Collaboration, Teamwork and Leadership	
	X	Civic Literacy		E	Cross-Cultural and Interpersonal Communication	
	x	Financial, Economic, Business and		E	Communication and Media Fluency	

		Entrepreneurial Literacy		E	Accountability, Productivity and Ethics
	In this unit plan, the following Career Ready Practices are addressed:				
maice					his unit by marking E, T, A on the line before the appropriate skill.
<u> </u>	E	CRP1. Act as a responsible and contributing citizen and employee			
	т	CRP2. Apply appropriate academic and technical skills			
	E	CRP3. Attend to personal health and financial well-being			
	E	CRP4. Communicate clearly and effectively with reason			
	E	CRP5. Consider the environmental, social and economic impacts of decisions			
	т	CRP6. Demonstrate creativity and innovation			
	E	CRP7. Employ valid and reliable research strategies CRP8. Utilize critical thinking to make sense of problems and persevere in solving them			
	E				
	E	CRP9. Model integrity, ethical leadership and effective management			
	E CRP10. Plan education and career paths aligned to personal goals				
	т	CRP11. Use technology to enhance productivity			
	E	CRP12. Work productively in teams while using cultural global competence			
Student Learning Goals/Objectives: (What key knowledge and skills will students acquire as a result of this unit? What should they eventually					
be able to do as a result of such knowledge and skill?)					
	Students will know how to use a computer program to complete an assignment.Students will be able to use the functions of a computer in order to navigate an online program.				Students will be able to use the functions of a computer in order to navigate an online program.
Studer	nts will knov	v how to illustrate and communicate o	original	l ideas	and Students will be able to recognize account privacy and work
stories	s using digita	al tools and media rich resources such	as kid	pix.	practices.
Studer	Students will be able to use digital tools to access, manage, evaluate and Students will demonstrate a responsible use of online resource				

synthesize information or to solve and communicate knowledge.	problems individually and collaboratively	Students will be able to log into specific locations and enter password independently. Students will begin to use two hands on the keyboard. Students will be able to locate and print the files with minimal assistance
Assessment Evidence:		
understanding of operations of av Students will be assessed on their documents. Students will work wit Students will work with Chromebo Students will be assessed on how t	ability to produce grade appropriate th IPads appropriately. ooks appropriately. they use the parts of a computer to navigate access IPads and Chromebooks from a cart	Other Assessment Measures: Students will be assessed on class participation and teacher observation and completed class projects.
Teaching and Learning Act	ions: (What learning experiences and instru	iction will enable students to achieve the desired results?
Instructional Strategies and Activities	Students will create a multi-slide presentation Students will create a mini newspaper using Students will collaborate with peers to creat Students will use available technologies such Students will create graphs using data collect Students will create projects and site source	propriate vocabulary and writing using Microsoft Word. on using PowerPoint. a template. te a video presentation using a variety of available digital tools. h as online software to enhance or practice grade level skills. tted.

Students will demonstrate the ability to cite sources appropriately when gathering information for assigned projects.

	will create a map using digital tools. Students will explore various types of digital tools and their intended uses. Students will additionally determine whether these digital tools are harmful or helpful, thus practicing digit citizenship.			
Resources				
IPads, tablets, Chromebooks, computers, Printers, Star fall, Kid Pix, Brain Pop Jr. Book Flix, Tumble books, Interactive White Board, Word Processing programs such as Microsoft office and Google Docs, Power point, Prezi				
Suggested Time Frame:	6 weeks			

D – Indicates differentiation at the Lesson Level (Identify Modifications for ELL, Gifted and Talented, Title 1, Special Education)