

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Instructional Technology Curriculum Guide



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ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Instructional Technological Curriculum Guide

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INTERDISCIPLINARY THEMES

Planned interdisciplinary activities can help students to make sensible connections among subjects, while limiting the specialist's tendency to fragment the curriculum into isolated pieces. Such activities provide students with broader personal meaning and the integrated knowledge necessary to solve real-world problems. Teachers are encouraged to independently and cooperatively develop lessons which cover multiple areas simultaneously.

MISSION STATEMENT

The Rochelle Park School District's envisions an educational community which inspires and empowers all students to become self-sufficient and thrive in a complex, global society.

DEPARTMENT VISION

It is the firm belief of the Rochelle Park Township School District technology department that as technology continues to evolve so must we in order support our student into empowered citizenship to compete in today's global market. Continuous developments in the areas of multi-media, telecommunications, and virtual realities find an increasing role in schools and educators must be prepared to address these emerging technologies and understand that technology is vital in the everyday lives of our students, as well as us. Information literacy is the framework for a lifetime of learning.

21ST CENTURY THEMES & SKILLS

Embedded in much of our units of study and problem based learning projects are the 21st Century Themes as prescribed by the New Jersey Department of Education. These themes are as follows:

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

AFFIRMATIVE ACTION COMPLIANCE STATEMENT

The Rochelle Park Township Public Schools are committed to the achievement of increased cultural awareness, respect and equity among students, teachers and community. We are pleased to present all pupils with information pertaining to possible career, professional or vocational opportunities which in no way restricts or limits option on the basis of race, color, creed, religion, sex, ancestry, national origin or socioeconomic status.

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: K

Unit: Exploring Digital Tools

Time Frame: Yearly: On-going

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Technology supports learning in all areas through exploring ideas, solving problems, and making meaning. 		<ul style="list-style-type: none"> ❖ What is technology and where can we find it? ❖ What is the internet? ❖ Are there basic computer operations that can help me use technology more efficiently? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ technology products and systems impact every aspect of the world in which we live. ❖ Digital tools and media-rich resources enhance creativity and the construction of knowledge. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ identify the basic features of a computer and explain how to use them effectively. ❖ use technology terms in daily practice. ❖ demonstrate the ability to navigate in virtual environments that are developmentally appropriate. ❖ describe how technology products, systems, and resources are useful at school, home, and work. ❖ illustrate and communicate original ideas and stories using digital tools and media-rich resources. ❖ read the names of the parts of the computer as they are labeled on the computer. ❖ access the Internet through a bookmarked or hyperlinked site. ❖ move around the site using browser buttons. ❖ type a sentence or two and print and retrieve the document. ❖ illustrate the sentence(s) using a digital drawing program 	<p>8.1.2.A.1 8.1.2.A.2 8.1.2.A.5 8.2.2.A.1 8.1.2.B.1</p>	
		CLASSROOM INTEGRATION	
		<p>Students will have access to a labeled computer in the classroom. The computer will have Internet access with bookmarks and hyperlinks that the students may use when in the computer area. Students will occasionally type documents instead of hand writing document as a special project. Students will navigate a safe virtual environment.</p>	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: K	Unit: Exploring Digital Tools	Time Frame: Yearly: On-going
computer monitor CPU keyboard mouse Internet hyperlink website bookmark virtual drawing program (Kid Pix Studio) digital Camera	classroom computer (all parts labeled) access to the Internet hyperlinks bookmarked sites drawing program (Kid Pix Studio) digital camera	<u>Formative</u> Classroom Observation: state computer parts locate desktop hyperlinks navigation in virtual environment <u>Summative</u> Computer Parts Label Assessment Typed and Printed Sentences Print Illustrations

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: K

Unit: Connecting Digitally with our Community

Time Frame: 3 Months

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Digital tools allow for communication and collaboration anytime/anyplace worldwide. ❖ Technology can be a valuable resource to solve problems, collaboratively, locally and globally. 	<ul style="list-style-type: none"> ❖ How are computers a communication tool, and how far does it reach? ❖ How can technology help us learn about the world around us?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools. ❖ use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions. ❖ draw or write an example of a resolution that he/she would employ regarding one of the following topic(s): <ul style="list-style-type: none"> Making friends Conflict resolution (Kelso) Monsters (unfounded fears) Occupations ❖ use a digital drawing program to complete a task. 	<p>8.1.2.C.1 8.1.2.E.1</p>
		CLASSROOM INTEGRATION
		<p>Students will discuss one of the following: Making friends Conflict resolution (Kelso) Monsters (unfounded fears) Occupations and illustrate, in a digital drawing program, a resolution to the issue discussed.</p>
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>Internet digital tools issue friends conflict conflict resolution occupation(s)</p>	<p>Internet access digital camera and Internet</p>	<p><u>Formative</u> state possible solutions to problem</p> <p><u>Summative</u> Resolution Picture</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: K

Unit: Problem Solving with Digital Tools

Time Frame: 3 Months

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Selection of technology should be based on the desired end product. ❖ Information can be collected, created, organized, and presented using various technological tools. 		<ul style="list-style-type: none"> ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can technology help me know where I am and how to get somewhere? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ the design process is a systematic approach to solving problems. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ use mapping tools to plan and choose alternate routes to and from various locations ❖ brainstorm and devise a plan to repair a broken toy or tool using the design process. ❖ collect and post the results of a digital classroom survey about a problem or issue and use data to suggest solutions. ❖ follow a list of ordinal directions on a digital map and end up the correct location. 	8.1.2.F.1 8.2.2.B.1 8.2.2.D.1	
		CLASSROOM INTEGRATION	
		Use the Smartboard, or similar device, to move an avatar around in a “neighborhood” following ordinal directions. Practice mapping skills by using interactive Internet maps for primary grades.	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
map Compass Rose North South East West Smartboard ordinal direction avatar digital survey	http://www.eduplace.com/kids/socsci/books/applications/imaps/maps/g1_u3/index.html Kids mapping software computer Smartboard	<p><u>Formative</u> Observe students following ordinal directions. State toy repair ideas</p> <p><u>Summative</u> Print document with traced path Printed, plotted map Drawing of repaired toy</p>	

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 1

Unit: Using Digital Tools in a Variety of Ways

Time Frame: 5 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to display data and information in various ways. ❖ Technology can be a communication tools that is interactive, creative, and productive. 	<ul style="list-style-type: none"> ❖ How can we create and share work using technology? ❖ How can technology help us make friends and learn more about the world around us?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ technology products and systems impact every aspect of the world in which we live. ❖ the design process is a systematic approach to solving problems. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ illustrate and communicate original ideas and stories using digital tools and media-rich resources. ❖ use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions. ❖ use mapping tools to plan and choose alternate routes to and from various locations. ❖ describe how technology products, systems, and resources are useful at school, home, and work. ❖ brainstorm and devise a plan to repair a broken toy or tool using the design process. ❖ collect and post the results of a digital classroom survey about a problem or issue and use data to suggest solutions. ❖ create a class survey questioning students on an issue that might affect them. ❖ create a story using a media rich resource like Photostory 3 illustrating the “issue”. ❖ use a digital map to explore coordinates. ❖ use all digital tools during station rotation in the computer lab. 	<p>8.1.2.B.1 8.1.2.E.1 8.1.2.F.1 8.2.2.A.1 8.2.2.B.1 8.2.2.D.1</p> <hr/> <p style="text-align: center;">CLASSROOM INTEGRATION</p> <p>Collaborate with the classroom teacher on a social studies or science curriculum topic that affects their students.</p> <p>Review ordinal directions in the classroom to reinforce the lessons on mapping being done in the classroom.</p> <p>*ExPO Brainstorm and devise a plan to repair a broken toy or tool using the design process.</p>
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 1

Unit: Using Digital Tools in a Variety of Ways

Time Frame: 5 Lessons

<p>digital tools media rich resources communicate technology toys cassette tape cassette recorder Symposium Board North South East West Compass Rose</p>	<p>digital camera/video scanner computer Internet Skype Webcam Wiki/Blog software (PowerPoint, MS Word, Publisher) cassette tape cassette recorder http://www.kidsgames4free.com/arcadegames/3339.html Create a robot at this site in lieu of repair a broken toy activity</p>	<p><u>Formative</u> Observe actions during station rotation Navigate Internet Map State how tech tools are useful Use digital tools appropriately</p> <p><u>Summative</u> Printed survey Photostory Presentation Printed, plotted map Print repaired toy</p>
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**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 1

Unit: Exploring the Internet

Time Frame: 4 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to communicate in many ways. ❖ Technology can be a valuable resource to solve problems collaboratively, locally and globally. 	<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How can technology give us ways to talk to others? ❖ Why do we use computers in a safe and responsible way?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors ❖ effective use of digital tools assist in gathering and managing information ❖ information accessed through the use of digital tools assist in generating solutions and making decisions 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ demonstrate the ability to navigate in virtual environments that are developmentally appropriate. ❖ engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools. ❖ model legal and ethical behaviors when using both print and non-print information by citing resources. ❖ use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions ❖ use mapping tools to plan and choose alternate routes to and from various locations. ❖ create an avatar on a virtual site. ❖ participate in activities and navigate within the virtual site that are challenging and age appropriate. ❖ take an assessment reviewing appropriate behavior when on the Internet and when visiting a virtual environment. ❖ investigate a social issue by investigating information on line and use mapping software. 	<p>8.1.2.A.5 8.1.2.C.1 8.1.2.D.1 8.1.2.E.1 8.1.2.F.1</p>
		CLASSROOM INTEGRATION
		<p>Teachers will coordinate to decide on a ROCHELLE PARK curriculum topic to investigate. Students will investigate the issue both in class and in the lab. Students will use the Internet to collect data.</p>
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>technology digital tools applications environments ethical behavior scenario avatar virtual world cyber safety cyber community cyber ethics</p>	<p>Internet software (Poptropica, My Make Believe Castle) Acceptable Use Policy</p>	<p><u>Formative</u> Observations: Create avatar Point plots on map Articulate social issue Navigate virtual world</p> <p><u>Summative</u> Internet Behavior Assessment Printed, plotted map</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 1

Unit: Word Processing: Identifying the Tools We Use

Time Frame: 5 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on the desired end product. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ Why do I need to know how to type? ❖ Are there basic computer operations that can help me use technology more efficiently? ❖ Why is computer technology important part of everyday life?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ identify the basic features of a computer and explain how to use them effectively. ❖ use basic technology terms in conversations. ❖ discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ create a document with text using a word processing program. ❖ take a digital assessment regarding the parts of the computer and it uses. ❖ create a document incorporating formatting, cutting, pasting, formatting, inserting graphics. ❖ rotate through station having a chance to try a wide variety technology tools. 	<p>8.1.2.A.1 8.1.2.A.2 8.1.2.A.3 8.1.2.A.4</p>
		CLASSROOM INTEGRATION
		<p>Students will have a computer area in the classroom. The computer parts will be labeled. Students will create document in the classroom using skills that they have learned in the computer lab.</p>

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
digital tool application multimedia keyboard keyboarding typing computer monitor touchpad Internet	mouse printer Internet software Smart toys (iPod, MP3, iPod Touch Electronic computer Internet Keyboarding Sites (to be found at Technology teacher websites attached to district websites) Blogs Wikis tech devices that require keyboarding Microsoft Office Suite of programs Type to Learn Type to Learn 3	<p><u>Formative</u> Observe input of digital information Observation during station rotation</p> <p><u>Summative</u> Type To Learn Level Computer Parts Assessment Printed Document Printed Illustration</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 1

Unit: Appropriate Internet Behavior

Time Frame: 3 Lessons

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology is a communication tool that spans the globe; we have a personal responsibility to use it respectfully, as well as being respectful to other users. ❖ Technology use can have positive or negative impact on both users and those affected by their use. 		<ul style="list-style-type: none"> ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ What are my responsibilities in using technology? ❖ Is there ever a time when using another person’s ideas are not stealing or cheating? 	
KNOWLEDGE		SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors. ❖ copying “word for word” is not legal or ethical. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ model legal and ethical behaviors when using both print and non-print information by citing resources. ❖ state at least three reasons that computers are useful to them and to others. ❖ take an assessment regarding safety and appropriateness when using a computer. 	<p>8.1.2.A.3 8.1.2.D.1</p>
			CLASSROOM INTEGRATION
			<p>Student will have access to computer stations in the classroom. Students will have access to specific sites for research and will know that they may not copy “word for word” when gathering information from the Internet or any other printed source.</p>
VOCABULARY		RESOURCES/MATERIALS	
<p>safety ethical advantage disadvantage Interactive Email predator</p>	<p>Acceptable Use Policy consequences appropriate inappropriate cyber safety cyber security cyber ethics</p>	<p>Internet Acceptable Use Policy copyright laws cameras scanners webcams computers software as needed</p>	<p><u>Formative</u> Observations: State three uses of computers State alternative ways to do tasks instead of using computer applications</p> <p><u>Summative</u> Verbal quiz on plagiarism Safety assessment</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 1

Unit: Finding and Using Digital Tools

Time Frame: 5 Lessons

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Digital tools provide enhanced opportunities to design innovative solutions, and express ideas creatively. ❖ Selection of technology should be based on the desired end product. 		<ul style="list-style-type: none"> ❖ How can digital tools be used for creating original and innovative work, ideas, and solutions? ❖ How can we use technology to find information and learn? ❖ What software is available to me at school? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ illustrate and communicate original ideas and stories using digital tools and media-rich resources. ❖ participate in a Survey on all of the different computer applications and hardware that he/she has used. ❖ rate the usefulness of the software/hardware. ❖ create an original media-rich presentation, one that is in line with the ROCHELLE PARK curriculum. 		<p>Include Interdisciplinary Standards</p> <p>8.1.2.A.3 8.1.2.B.1</p>
				CLASSROOM INTEGRATION
				<p>Students will have access to the hardware and software from their classrooms. Students may create original work in class in lieu of more traditional classroom reporting.</p>
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>Digital Story telling hardware computer application software pixel 3 Dimensional Design Textures, Forms</p>		<p>Internet Software Powerpoint Kidspiration Inspiration GollyGee Blocks Photo Story 3 Audacity Digital Blue Cameras digital camera</p>		<p><u>Formative</u> State applications used</p> <p><u>Summative</u> Printed illustration Multi- Media Presentation</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT
Technological Literacy Curriculum Guide**

Grade: 1

Unit: Computer Parts or Identify It!

Time Frame: 4 Lessons

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ In order to use all that computers/programs have to offer, you need to know and understand the parts of the system that makes them work. ❖ Knowing the proper names relating to hardware and software makes it easier to communicate with others about technology. 		<ul style="list-style-type: none"> ❖ Why do you have to know what the parts of a computer are called, if you know how to use it? ❖ Are there basic computer operations that can help me use technology more efficiently? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ identify the basic features of a computer and explain how to use them effectively ❖ use technology terms in daily practice. ❖ discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ take a digital assessment identifying some of the parts of the computer. ❖ identify the function of some of the parts of the computer. 		8.1.2.A.1 8.1.2.A.2 8.1.2.A.3
				CLASSROOM INTEGRATION
				Students will have access to computer stations in the classroom. The stations will have parts of the computers labeled.
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
hard drive DVD tray CPU monitor keyboard power cord connection cords printer ink cartridge, toner paper jam	input device output device	computers computer parts (Internal as well as external – monitor, keyboard, mouse, hard drive, central processing unit, memory chips, processor, fan, laptop, thumb drive-memory stick, microphone, scanner, printer) Internet software		<u>Formative</u> State parts of the computer State difference between application and hardware <u>Summative</u> Computer parts assessment Function of computer parts assessment

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT
Technological Literacy Curriculum Guide**

Grade: 1

Unit: Spreadsheets & Data Bases

Time Frame: 4 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology provides us a way to collect, display, and share information. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can technology help us organize information? ❖ How do I access information for projects in other classes?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ work in spreadsheet program adding columns, identifying cells, alphabetizing, reverse alphabetizing, coloring in cells. ❖ browse through different databases, particularly the library database. ❖ articulate that they are exploring a databases when searching for books in the library. 	8.1.2.A.3
		CLASSROOM INTEGRATION
		<p>The librarian will instruct the students that the library search is actually a look through a database program.</p>
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT

<p>library database database MaxData spreadsheets cell sheet border sum tool sum data column row table</p>	<p>library database Microsoft Excel MaxData</p>	<p><u>Formative</u> State applications used State advantages and disadvantages of computer use Observe database use</p> <p><u>Summative</u> Printed spreadsheet Database assessment</p>
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**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 2

Unit: Exploring and Using Digital Devices

Time Frame: 7 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to display data and information in various ways. ❖ Technology can be a communication tools that is interactive, creative, and productive. 	<ul style="list-style-type: none"> ❖ How can we create and share work using technology? ❖ How can technology help us make friends and learn more about the world around us?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ technology products and systems impact every aspect of the world in which we live. ❖ the design process is a systematic approach to solving problems. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. ❖ Digital tools facilitate local and global communication and collaboration in designing products and systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ identify the basic features of a computer and explain how to use them effectively. ❖ use technology terms in daily practice. ❖ discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ illustrate and communicate original ideas and stories using digital tools and media-rich resources. ❖ use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions. ❖ use mapping tools to plan and choose alternate routes to and from various locations. ❖ information accessed through the use of digital tools assists in generating solutions and making decisions. ❖ describe how technology products, systems, and resources are useful at school, home, and work. ❖ brainstorm and devise a plan to repair a broken toy or tool using the design process. Collect and post the results of a digital classroom survey about a problem or issue and use data to suggest solutions. ❖ communicate with students in the United States or other countries using digital tools to gather information about a specific topic and share results ❖ create a class survey questioning students on an issue that might affect them. ❖ create a story using a media rich resource like Photostory 3 illustrating the “issue”. ❖ use a digital map to explore coordinates. ❖ use all digital tools appropriately during station rotation in the computer lab. ❖ demonstrating competency in using the digital device as it was intended. 	<p>8.1.2.A.1 8.1.2.A.2 8.1.2.A.3 8.1.2.B.1 8.1.2.E.1 8.1.2.F.1 8.2.2.A.1 8.2.2.B.1 8.2.2.D.1 8.2.2.E.1</p> <hr/> <p style="text-align: center;">CLASSROOM INTEGRATION</p> <p>Collaborate with the classroom teacher on a social studies or science curriculum topic that affects their students.</p> <p>Review ordinal directions in the classroom to reinforce the lessons on mapping being done in the classroom.</p> <p>Classroom teachers have access to the digital devices as needed for class projects.</p> <p>*ExPO Brainstorm and devise a plan to repair a broken toy or tool using the design process.</p>

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
digital tools media rich resources communicate collaboration technology toys cassette tape cassette recorder application multimedia keyboard keyboarding typing computer monitor touchpad Internet	mouse printer Internet software Smart toys (iPod, MP3, iPod Touch Electronic	digital camera/video scanner computer Internet Skype webcam Wiki/Blog software (PowerPoint, MS Word, Publisher) cassette tape cassette recorder	<u>Formative</u> Observe use of digital tools <u>Summative</u> Print Survey Print plotted map Illustration of repaired toy Skype Photostory

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 2

Unit: How do I explore a Virtual World?

Time Frame: 5 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to communicate in many ways. ❖ Technology can be a valuable resource to solve problems collaboratively, locally and globally. 	<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How can technology give us ways to talk to others? ❖ Why do we use computers in a safe and responsible way?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ digital tools facilitate local and global communication and collaboration in designing products and systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ demonstrate the ability to navigate in virtual environments that are developmentally appropriate. ❖ engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools. ❖ communicate with students in the United States or other countries using digital tools to gather information about a specific topic and share results. ❖ create an avatar on a virtual site. ❖ participate in activities within the virtual site that are challenging and age appropriate. ❖ take an assessment reviewing appropriate behavior when on the Internet and when visiting a virtual environment. ❖ investigate a social issue by investigating information on line and use mapping software. 	<p>8.1.2.A.5 8.1.2.C.1 8.2.2.E.1</p>
		CLASSROOM INTEGRATION
		Teachers will coordinate to decide on a ROCHELLE PARK curriculum topic to investigate. Students will investigate the issue both in class and in the lab. Students will use the Internet to collect data.
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<ul style="list-style-type: none"> technology digital tools applications environments ethical behavior scenario avatar virtual world cyber safety cyber community cyber ethics 	<ul style="list-style-type: none"> Internet software (Poptropica, My Make Believe Castle) Acceptable Use Policy 	<p><u>Formative</u> Observe navigation within virtual site Participate in online interaction</p> <p><u>Summative</u> Printed avatar Internet Behavior Assessment Print plotted map</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 2

Unit: Problem Solving using a Computer

Time Frame: 6 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology supports learning in all areas through exploring ideas, solving problems, and making meaning. ❖ Technology can be a communication tool that is interactive, creative, and productive. ❖ Information can be collected, organized, created, and presented using technological tools. 	<ul style="list-style-type: none"> ❖ How can we use technology to find information and learn? ❖ Is there more than one kind of technology tool that can be used to create and share group projects? ❖ How can technology showcase what I have learned?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ effective use of digital tools assist in gathering and managing information ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ the design process is a systematic approach to solving problems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions. ❖ use mapping tools to plan and choose alternate routes to and from various locations. ❖ brainstorm and devise a plan to repair a broken toy or tool using the design process. ❖ use the Internet to investigate a problem with a web quest. ❖ create a survey re: the “issue”. ❖ describe how our tech tools allowed us to learn about this issue. ❖ communicate the class findings on a kid friendly, global format. ❖ use mapping tools to following given ordinal directions. 	<p>8.1.2.E.1 8.1.2.F.1</p> <p>8.2.2.B.1 *ExPO</p>
		CLASSROOM INTEGRATION
		<p>Teachers will decided on possible curriculum topics to use for the web quest. Students will have access to the web quest from the classroom. Students may investigate the web quest during center time. All of the posted information will be available from the classroom computer.</p> <p>*ExPO – Devise a plan to repair or improve a toy. Follow a simplified version of the design process.</p>
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>problem solving design process global problem perspective solution evaluate appropriateness</p>	<p>Skype Audacity Wiki Blog http://www.virtualitoy.com Internet sites to create and fix digital toys/music Software (Golly Gee Blocks, Contraptions, Even More Contraptions, Kid Pix Studio)</p>	<p><u>Formative</u> Choice of digital tools State findings of research</p> <p><u>Summative</u> Digital survey Print plotted Map Print illustration of repaired toy</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT
Technological Literacy Curriculum Guide**

Grade: 2

Unit: Communicating Using my Computer

Time Frame: 7 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on the desired end product. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ Why do I need to know how to type? ❖ Are there basic computer operations that can help me use technology more efficiently? ❖ Why is computer technology important part of everyday life?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ identify the basic features of a computer and explain how to use them effectively. ❖ use technology terms in daily practice. ❖ discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ create a document with text using a word processing program. ❖ illustrate and communicate original ideas and stories using digital tools and media-rich resources. ❖ take a digital assessment regarding the parts of the computer and it uses. ❖ create a document incorporating formatting, cutting, pasting, formatting, inserting graphics. 	<p>8.1.2.A.1 8.1.2.A.2 8.1.2.A.3 8.1.2.A.4 8.1.2.B.1</p>
CLASSROOM INTEGRATION		
<p>Students will have a computer area in the classroom. The computer parts will be labeled.</p> <p>Students will create document in the classroom using skills that they have learned in the computer lab.</p>		

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>digital tool application multimedia keyboard keyboarding typing computer monitor touchpad Internet</p>	<p>mouse printer Internet software</p>	<p>computer Internet Keyboarding Sites (to be found at Technology teacher websites attached to district websites) Blogs Wikis tech devices that require keyboarding Microsoft Office Suite of programs Type to Learn Type to Learn 3</p>	<p><u>Formative</u> Observe input of digital information</p> <p><u>Summative</u> Type To Learn Level Printed Document Printed Illustration Printed, formatted graphics</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 2

Unit: Computers and My Behavior

Time Frame: 5 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Selection of technology should be based on personal and/or career needs assessment. ❖ Technology use can have positive or negative impact on both users and those affected by their use. 	<ul style="list-style-type: none"> ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ What are my responsibilities in using technology? ❖ Is there ever a time when using another person’s ideas are not stealing or cheating?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors. ❖ effective use of digital tools assist in gathering and managing information. ❖ technology products and systems impact every aspect of the world in which we live. ❖ state that copying “word for word” is not legal or ethical. ❖ A general understanding of the terms copyright and plagiarism. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ discuss the common uses of computer applications and hardware and identify their advantages and disadvantages. ❖ engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools. ❖ model legal and ethical behaviors when using both print and non-print information by citing resources. ❖ use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions. ❖ describe how technology products, systems, and resources are useful at school, home, and work. ❖ state at least three reasons that computers are useful to them and to others. ❖ take an assessment regarding safety and appropriateness when using a computer. 	<p>8.1.2.A.3 8.1.2.C.1 8.1.2.D.1 8.1.2.E.1 8.2.2.A.1</p>
		CLASSROOM INTEGRATION
		<p>Student will have access to computer stations in the classroom. Students will have access to specific sites for research and will know that they may not copy “word for word” when gathering information from the Internet or any other printed source.</p>

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>safety ethical advantage disadvantage interactive Email predator copyright plagiarism</p>	<p>Acceptable Use Policy consequences appropriate inappropriate cyber safety cyber security cyber ethics</p>	<p>Internet Acceptable Use Policy copyright laws cameras scanners webcams computers software as needed</p>
		<p><u>Formative</u> Observe Internet Use State reliable and unreliable Internet sources State technology uses</p> <p><u>Summative</u> Cyber Safety Assessment</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 3

Unit: Tools I Can /Should Use

Time Frame: 7 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology allows us to display data and information in various ways. 	<ul style="list-style-type: none"> ❖ How can we create and share work using technology? ❖ How can technology help us make friends and learn more about the 	
KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations related applications. ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ technology products and systems impact every aspect of the world in which we live. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ determine the benefits of a wide range of digital tools by using them to solve problems. ❖ produce a media-rich digital story about a significant local event or issue based on first-person interviews. ❖ engage in online discussions with learners in the United States or from other countries to understand their perspective on a global problem or issue. ❖ investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps. ❖ select and apply digital tools to collect, organize, and analyze data that support a scientific finding ❖ investigate factors that influence the development and function of technology products and systems. ❖ use a digital format, compare and contrast how a technology product has changed over time due to economic, political, and/or cultural influences. ❖ all digital tools by completing tasks at multiple stations. ❖ produce a media rich presentation on a global issue that relates to the current curriculum including data collected . ❖ examine a digital tool that has changed over time. 	<p>8.1.4.A.5 8.1.4.B.1 8.1.4.C.1 8.1.4.E.1 8.1.4.F.1 8.2.4.A.1 8.2.4.A.2</p> <hr/> <p style="text-align: center;">CLASSROOM</p> <p>Teachers will collaborate on a topic of global significance that the students can use as the basis for a multimedia presentation. Students will have access to edit the document from anywhere in the school.</p> <p>Students will have access to all digital tools as needed for any class project at any time in the school day.</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 3

Unit: Tools I Can /Should Use

Time Frame: 7 Lessons

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
digital tools media rich resources collaboration digital camera touch screen scanner digital video iPod Touch	audio recording software microphone Smartboard Symposium Board Skype/Face to Face computer (disassembled)	digital camera/video s c a n n e r c	<u>Formative</u> State best tools for project State how tech product has changed over time Demonstrate competence in using tech tools <u>Sum</u>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 3

Unit: Exploring A New World

Time Frame: 4 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to communicate in many ways. ❖ Technology can be a valuable resource to solve problems collaboratively, locally and globally. 	<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How can technology give us ways to talk to others? ❖ Why do we use computers in a safe and responsible way?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors. ❖ effective use of digital tools assist in gathering and managing information. ❖ the design process is a systematic approach to solving problems. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ determine the benefits of a wide range of digital tools by using them to solve problems. ❖ engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools. ❖ explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies. ❖ explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology. ❖ investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps. ❖ evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. ❖ develop a product using an online simulation that explores the design process. ❖ design an alternative use for an existing product. ❖ explain the positive and negative effect of products and systems on humans, other species, and the environment. ❖ compare and contrast how technology transfer happens within a technology, among technologies, and among other fields of study. ❖ analyze responses collected from owners/users of a particular product and suggest modifications in the design of the product based on their responses. ❖ create an avatar and explore a virtual environment. 	<p>8.1.4.A.5 8.1.4.C.1 8.1.4.D.1 8.1.4.D.3 8.1.4.E.1 8.1.4.E.2 8.2.4.B.1 8.2.4.D.1</p> <hr/> <p style="text-align: center;">CLASSROOM INTEGRATION</p> <p>Classroom teachers will remind the students of the Acceptable Use Policy that was signed. Students will be reminded of appropriate behavior and safety precautions that need to be practiced when on the computer. Students will be able to edit their computer work from any computer in the school.</p>

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
technology digital tools applications environments collaboration global issues ethical behavior scenario avatar virtual world cyber safety cyber community cyber ethics		Internet software (Poptropica, My Make Believe Castle) Acceptable Use Policy	<u>Formative</u> Observe navigation on Internet Discuss product design Observe navigation through virtual environment <u>Summative</u> e Skype Print created avatar in virtual environment Print product design Technology Transfer Assessment

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 3

Unit: Problem Solving and Sharing

Time Frame: 6 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology supports learning in all areas through exploring ideas, solving problems, and making meaning. ❖ Technology can be a communication tool that is interactive, creative, and productive. ❖ Information can be collected, organized, created, and presented using technological tools. 	<ul style="list-style-type: none"> ❖ How can we use technology to find information and learn? ❖ Is there more than one kind of technology tool that can be used to create and share group projects? ❖ How can technology showcase what I have learned?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ engage in online discussions with learners in the United States or from other countries to understand their perspectives on a global problem or issue ❖ investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps. ❖ evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. ❖ select and apply digital tools to collect, organize, and analyze data that support a scientific finding. ❖ choose a topic to review. ❖ research and choose information considering the source. ❖ create an informational survey about what people know about the topic. ❖ create a multimedia presentation showing the truths and untruths about the topic that were found on the Internet. 	<p>8.1.4.C.1 8.1.4.E.1 8.1.4.E.2 8.1.4.F.1 8.2.4.B.1 8.2.4.B.2 8.2.4.B.3 8.2.4.B.4</p> <hr/> <p style="text-align: center;">CLASSROOM INTEGRATION</p> <p>Decide on a topic with the classroom teacher.</p> <p>Students will have access to edit all work from any computer in the school.</p> <p>Students will have access to present multimedia presentation in class or in the lab.</p>

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>problem solving design process global problem perspective solution evaluate relevance appropriateness real-world electronic scientific findings</p>	<p>Skype Audacity Wiki Blog http://www.virtualitoy.com Internet sites to create and fix digital toys/music software (Golly Gee Blocks, Contraptions, Even More Contraptions, Kid Pix Studio)</p>	<p><u>Formative</u> Choice of digital tools State findings of research</p> <p><u>Summative</u> Digital survey Skype with other students Multimedia presentation</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT
Technological Literacy Curriculum Guide**

Grade: 3

Unit: Tools I Now Use!

Time Frame: 8 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on the desired end product. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ Why do I need to know how to type? ❖ Are there basic computer operations that can help me use technology more efficiently? ❖ Why is computer technology important part of everyday life?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ demonstrate effective input of text and data using an input device. ❖ create a document with text formatting and graphics using a word processing program. ❖ create and present a multimedia presentation that includes graphics. ❖ create a simple spreadsheet, enter data, and interpret the information. ❖ determine the benefits of a wide range of digital tools by using them to solve problems. 	<p>8.1.4.A.1 8.1.4.A.2 8.1.4.A.3 8.1.4.A.4 8.1.4.A.5</p>
		CLASSROOM INTEGRATION
		<p>Students will have access to the computer lab as a homeroom class. Students will also be able to borrow the digital devices from the lab to use when in the classroom to enhance classroom projects.</p>

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<ul style="list-style-type: none"> digital tool application multimedia keyboard keyboarding typing computer monitor touchpad Internet 	<ul style="list-style-type: none"> mouse printer Internet software Smart toys (iPod, MP3, iPod Touch Electronic authoring tool 	<ul style="list-style-type: none"> computer Internet Keyboarding Sites (to be found at Technology teacher websites attached to district websites) Blogs Wikis Tech devices that require keyboarding Microsoft Office Suite of programs Type to Learn Type to Learn 3
		<p><u>Formative</u> Observe input of digital information</p> <p><u>Summative</u> Print Document Multimedia Presentation Print spreadsheet Type To Learn Level</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 3

Unit: Safety and Honesty

Time Frame: 5 Lessons

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology is a communication tool that spans the globe; we have a personal responsibility to use it respectfully, as well as being respectful to other users. ❖ Technology use can have positive or negative impact on both users and those affected by their use. 		<ul style="list-style-type: none"> ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ What are my responsibilities in using technology? ❖ Is there ever a time when using another person’s ideas are not stealing or cheating? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors. ❖ effective use of digital tools assist in gathering and managing information. ❖ knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society. ❖ rules regarding Internet Safety, cyber ethics, cyber security, copyright, and trademark rules. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ determine the benefits of a wide range of digital tools by using them to solve problems. ❖ explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies. ❖ analyze the need for and use of copyrights. ❖ explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology. ❖ evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. ❖ explain the impact of disposing of materials in a responsible way. ❖ explain the purpose of trademarks and the impact of trademark infringement on businesses. ❖ examine ethical considerations in the development and production of a product from its inception through production, marketing, use, maintenance, and eventual disposal by consumers ❖ review accuracy of information gathered from the Internet. ❖ take a grade appropriate Cyber Safety test. ❖ create a multimedia presentation simply explaining cyber ethics, cyber security, copyright rules, and trademark rules. Review the signed school Acceptable Use Policy 	<ul style="list-style-type: none"> 8.1.4.A.5 8.1.4.D.1 8.1.4.D.2 8.1.4.D.3 8.1.4.E.2 8.2.4.C.1 8.2.4.C.2 8.2.4.C.3 	
		CLASSROOM INTEGRATION	
		<p>Teacher will reinforce rules regarding Internet Safety, cyber ethics, cyber security, copyright, and trademark rules</p>	

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
safety ethical advantage disadvantage interactive Email predator digital tools – camera, webcam, scanner, computer	Acceptable Use Policy consequences appropriate inappropriate cyber safety cyber security cyber ethics	Internet Acceptable Use Policy copyright laws cameras scanners webcams computers software as needed	<u>Formative</u> Observe Internet Use State reliable and unreliable Internet sources <u>Summative</u> Cyber Media Presentation Cyber Safety Assessment

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 4

Unit: Using the Tools of the Trade!

Time Frame: 7 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to display data and information in various ways. ❖ Technology can be a communication tools that is interactive, creative, and productive. 	<ul style="list-style-type: none"> ❖ How can we create and share work using technology? ❖ How can technology help us make friends and learn more about the world around us?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations related applications. ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ technology products and systems impact every aspect of the world in which we live. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ determine the benefits of a wide range of digital tools by using them to solve problems. ❖ produce a media-rich digital story about a significant local event or issue based on first-person interviews. ❖ engage in online discussions with learners in the United States or from other countries to understand their perspective on a global problem or issue. ❖ investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps. ❖ select and apply digital tools to collect, organize, and analyze data that support a scientific finding ❖ investigate factors that influence the development and function of technology products and systems. ❖ using a digital format, compare and contrast how a technology product has changed over time due to economic, political, and/or cultural influences. ❖ use all digital tools by completing tasks at multiple stations. ❖ produce a media rich presentation on a global issue that relate to the current curriculum including data collected for the presentation. ❖ examine a digital tool that has changed over time. 	<p>8.1.4.A.5 8.1.4.B.1 8.1.4.C.1 8.1.4.E.1 8.1.4.F.1 8.2.4.A.1 8.2.4.A.2</p>
		CLASSROOM INTEGRATION
		<p>Teachers will collaborate on a topic of global significance that the students can use as the basis for a multimedia presentation. Students will have access to edit the document from anywhere in the school.</p> <p>Students will have access to all digital tools as needed for any class project at any time in the school day.</p>
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>digital tools media rich resources collaboration digital camera touch screen scanner digital video iPod Touch</p>	<p>audio recording software microphone Smartboard Sympodium Board Skype/Face to Face computer (disassembled)</p>	<p>digital camera/video scanner computer Internet Skype Webcam Wiki/Blog software (PowerPoint, MS Word, Publisher)</p>
		<p><u>Formative</u> State benefits of technology tools Demonstrate competence in using digital tools</p> <p><u>Summative</u> Skype Presentation</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 4

Unit: Virtually Connecting

Time Frame: 5 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
❖ Technology allows us to communicate in many ways.	❖ In a world of constant change, what skills should we learn?
❖ Technology can be a valuable resource to solve problems collaboratively, locally and globally.	❖ How can technology give us ways to talk to others?
	❖ Why do we use computers in a safe and responsible way?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors. ❖ effective use of digital tools assist in gathering and managing information. ❖ the design process is a systematic approach to solving problems. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ determine the benefits of a wide range of digital tools by using them to solve problems. ❖ engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools. ❖ explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies. ❖ explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology. ❖ investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps. ❖ evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. ❖ develop a product using an online simulation that explores the design process. ❖ design an alternative use for an existing product. ❖ explain the positive and negative effect of products and systems on humans, other species, and the environment. ❖ compare and contrast how technology transfer happens within a technology, among technologies, and among other fields of study. ❖ analyze responses collected from owners/users of a particular product and suggest modifications in the design of the product based on their responses. ❖ create an Avatar. Explore a virtual site with the avatar. 	<p>8.1.4.A.5 8.1.4.C.1 8.1.4.D.1 8.1.4.D.3 8.1.4.E.1 8.1.4.E.2 8.2.4.B.1 8.2.4.D.1</p>
		CLASSROOM INTEGRATION
		<p>Provide access to electronic and non-electronic research information. Give students age appropriate opportunities to explore virtual environments</p>

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
technology digital tools applications environments collaboration global issues ethical behavior scenario avatar virtual world cyber safety cyber community cyber ethics		Internet software (Poptropica, My Make Believe Castle) Acceptable Use Policy	<u>Formative</u> Observe navigation on Internet State most appropriate tools for research Observe navigation through virtual environment <u>Summative</u> Skype Print avatar Print product design Technology Transfer Assessment

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 4

Unit: Problem Solving On The Net

Time Frame: 7 Lessons

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology supports learning in all areas through exploring ideas, solving problems, and making meaning. ❖ Technology can be a communication tool that is interactive, creative, and productive. ❖ Information can be collected, organized, created, and presented using technological tools. 		<ul style="list-style-type: none"> ❖ How can we use technology to find information and learn? ❖ Is there more than one kind of technology tool that can be used to create and share group projects? ❖ How can technology showcase what I have learned? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ the design process is a systematic approach to solving problems. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ engage in online discussions with learners in the United States or from other countries to understand their perspectives on a global problem or issue ❖ investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps. ❖ evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. ❖ select and apply digital tools to collect, organize, and analyze data that support a scientific finding. ❖ develop a product using an online simulation that explores the design process. ❖ design an alternative use for an existing product. ❖ explain the positive and negative effect of products and systems on humans, other species, and the environment. ❖ compare and contrast how technology transfer happens within a technology, among technologies, and among other fields of study ❖ analyze responses collected from owners/users of a particular product and suggest modifications in the design of the product based on their responses. ❖ brainstorm technology issues that effect children in the US. ❖ research information on the issue. ❖ discuss accuracy of research. ❖ create and administer a survey re: the chosen topic. ❖ create a presentation about the topic. ❖ Suggest solutions to the perceived problem(s). 	<ul style="list-style-type: none"> 8.1.4.C.1 8.1.4.E.1 8.1.4.E.2 8.1.4.F.1 8.2.4.B.1 8.2.4.B.2 8.2.4.B.3 8.2.4.B.4 8.2.4.D.1 	
		CLASSROOM INTEGRATION	
		<p>Teacher will work in conjunction with the technology teacher.</p> <p>Students will have an opportunity to do research in the classroom as well as in the lab.</p>	

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
problem solving design process global problem perspective solution evaluate relevance appropriateness real-world electronic	authoring tool summarize contraption	Skype Audacity Wiki Blog http://www.virtualitoy.com Internet sites to create and fix digital toys/music Software (Golly Gee Blocks, Contraptions, Even More Contraptions, Kid Pix Studio)	<u>Formative</u> State findings of research Observe use of the design process <u>Summative</u> Digital survey Skype Print design Presentation of design

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT
Technological Literacy Curriculum Guide**

Grade: 4

Unit: Putting it All Together: Word Processing

Time Frame: 6 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on the desired end product. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ Why do I need to know how to type? ❖ Are there basic computer operations that can help me use technology more efficiently? ❖ Why is computer technology important part of everyday life?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ demonstrate effective input of text and data using an input device. ❖ create a document with text formatting and graphics using a word processing program. ❖ create and present a multimedia presentation that includes graphics. ❖ create a simple spreadsheet, enter data, and interpret the information. ❖ determine the benefits of a wide range of digital tools by using them to solve problems. ❖ produce a media-rich digital story about a significant local event or issue based on first-person interviews. ❖ create documents in a word processing program that include text formatting, clip art, digital images imported from a digital camera. ❖ create a media-rich digital presentation that includes all of the items above. (The content will relate to a significant local event or be based first person interviews) ❖ access several databases. ❖ create a simple database. 	<p>8.1.4.A.1 8.1.4.A.2 8.1.4.A.3 8.1.4.A.4 8.1.4.A.5</p>
		CLASSROOM INTEGRATION
		The topics chosen will integrate with the classroom science and/or social curriculum. Students will have access to compose and edit work from the classroom.
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT

digital tool application multimedia keyboard keyboarding typing computer monitor touchpad Internet	mouse printer Internet software Smart toys (iPod, MP3, iPod Touch Wiki Blog Electronic authoring tool	computer Internet Keyboarding Sites (to be found at Tech teacher websites attached to district websites) Blogs Wikis tech devices that require keyboarding Microsoft Office Suite of programs Type to Learn Type to Learn 3	<u>Formative</u> Observe use of electronic authoring tool(s) <u>Summative</u> Print document Multimedia presentation Type To Learn Level
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**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 4

Unit: Safety and Ethics on the Net

Time Frame: 5 Lessons

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology is a communication tool that spans the globe; we have a personal responsibility to use it respectfully, as well as being respectful to other users. ❖ Technology use can have positive or negative impact on both users and those affected by their use. 		<ul style="list-style-type: none"> ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ What are my responsibilities in using technology? ❖ Is there ever a time when using another person’s ideas are not stealing or cheating? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. ❖ knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society. ❖ the designed world is the product of a design process that provides the means to convert resources into products and systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ determine the benefits of a wide range of digital tools by using them to solve problems. ❖ explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies. ❖ analyze the need for and use of copyrights. ❖ explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology. ❖ evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. ❖ select and apply digital tools to collect, organize, and analyze data that support a scientific finding. ❖ explain the purpose of trademarks and the impact of trademark infringement on businesses. ❖ examine ethical considerations in the development and production of a product from its inception through production, marketing, use, maintenance, and eventual disposal by consumers ❖ evaluate the function, value, and esthetics of a technological product, system, environment from the perspective of the user and the producer. ❖ take a written or Smart Response assessment on Cyber issues including safety, bullying, Creative Commons guideline and ethics. 	<p>8.1.4.A.5 8.1.4.D.1 8.1.4.D.2 8.1.4.D.3 8.1.4.E.2 8.1.4.F.1 8.2.4.C.2 8.2.4.C.3 8.2.4.G.3</p>	
		CLASSROOM INTEGRATION	
		<p>Students will incorporate what they have learned about cyber ethics and safety when using a computer.</p>	

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
safety ethical advantage disadvantage interactive Email predator digital tools – camera, webcam, scanner, computer	Acceptable Use Policy consequences appropriate inappropriate cyber safety cyber security cyber ethics firewall	internet Acceptable Use Policy copyright laws cameras scanners webcams computers software as needed	<u>Formative</u> Observe Internet Use State reliable and unreliable Internet sources <u>Summative</u> Cyber Issues Assessment Print a factual article Print a false/bogus article

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 5

Unit: Digital Creations

Time Frame: 6 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to display data and information in various ways. ❖ Technology can be a communication tools that is interactive, creative, and productive. 	<ul style="list-style-type: none"> ❖ How can we create and share work using technology? ❖ How can technology help us make friends and learn more about the world around us?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations related applications. ❖ the use of digital tools and media-rich resources enhances creativity and the construction of knowledge. ❖ effective use of digital tools assist in gathering and managing information. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ digital tools facilitate local and global communication and collaboration in designing products and systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ create a multimedia presentation including sound and images. ❖ select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems. ❖ synthesize and publish information about a local or global issue or event on a collaborative, web-based service (also known as a shared hosted service). ❖ gather and analyze findings using data collection technology to produce a possible solution for a content-related or real-world problem. ❖ gather and analyze findings using data collection technology to produce a possible solution for a content-related or real-world problem. ❖ work in collaboration with peers and experts in the field to develop a product using the design process, data analysis, and trends, and maintain a digital log with annotated sketches to record the development cycle. ❖ survey school and global community to decide what should be done ❖ graph findings of survey ❖ create product using a simplified version of the design process that relates to survey findings 	<p>8.1.8.A.3 8.1.8.A.5 8.1.8.B.1 8.1.8.C.1 8.1.8.E.1 8.2.8.E.1</p>
		CLASSROOM INTEGRATION
		Science, classroom and homeroom teachers will collaborate on a curriculum science topic. The students will create a multimedia presentation with imbedded survey data.
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>digital tools media rich resources collaboration global issues synthesize web-based service perspective</p>	<p>digital camera/video scanner computer Internet Skype webcam Wiki/Blog Software (PowerPoint, MS Word, Publisher)</p>	<p><u>Formative</u> State chosen topic List data collection tools</p> <p><u>Summative</u> Multimedia Presentation Printed graphs Printed design sample</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 5

Unit: Exploring the Virtual Internet

Time Frame: 5 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology allows us to communicate in many ways. ❖ Technology can be a valuable resource to solve problems collaboratively, locally and globally. 	<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How can technology give us ways to talk to others? ❖ Why do we use computers in a safe and responsible way?

KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ participate in an online learning community with learners from other countries to understand their perspectives on a global problem or issue, and propose possible solutions. ❖ investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps. ❖ evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. ❖ use an electronic authoring tool in collaboration with learners from other countries to evaluate and summarize the perspectives of other cultures about a current event or contemporary figure. ❖ visit and explore a virtual site using an avatar 	8.1.8.C.1 8.1.8.E.1 8.1.4.E.2 8.1.8.F.1	
		CLASSROOM INTEGRATION	
		Provide access to electronic and non-electronic research information. Give students to age appropriate opportunities to explore virtual environments	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
technology digital tools applications environments collaboration global issues ethical behavior scenario avatar virtual world	Internet software (Poptropica, My Make Believe Castle) Acceptable Use Policy	<p><u>Formative</u></p> Observe navigation on Internet State most appropriate tools for research Observe navigation in virtual world	
		<p><u>Summative</u></p> Skype Print findings of investigation using electronic authoring tools Print avatar in virtual environment	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 5

Unit: Problem Solving Digitally

Time Frame: 7 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology supports learning in all areas through exploring ideas, solving problems, and making meaning. ❖ Technology can be a communication tool that is interactive, creative, and productive. ❖ Information can be collected, organized, created, and presented using technological tools. 	<ul style="list-style-type: none"> ❖ How can we use technology to find information and learn? ❖ Is there more than one kind of technology tool that can be used to create and share group projects? ❖ How can technology showcase what I have learned?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems. ❖ effective use of digital tools assist in gathering and managing information. ❖ the design process is a systematic approach to solving problems. ❖ knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. ❖ the 8 steps of the Design Process <p> 1 Research 2 Conceptualization 3 Feasibility Assessment 4 Establishing the Design Requirements 5 Preliminary Design 6 Detailed Design 7 Production Planning and Tool Design 8 Production </p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems. ❖ participate in an online learning community with learners from other countries to understand their perspectives on a global problem or issue, and propose possible solutions. ❖ gather and analyze findings using data collection technology to produce a possible solution for a content-related or real-world problem. ❖ design and create a product that addresses a real-world problem using the design process and working with specific criteria and constraints. ❖ identify the design constraints and trade-offs involved in designing a prototype (e.g., how the prototype might fail and how it might be improved) by completing a design problem and reporting results in a multimedia presentation. ³⁵₁₇ solve a science-based design challenge and build a prototype using science and math principles throughout the design process. ³⁵₁₇ explain the need for patents and the process of registering one. ³⁵₁₇ compare and contrast current and past incidences of ethical and unethical use of labor in the United States or another country and present results in a media-rich presentation. ³⁵₁₇ evaluate the role of ethics and bias on trend analysis and prediction in the development of a product that impacts communities in the United States and/or other countries. ³⁵₁₇ create a tool, device, item that could be crafted to help solve the global issue. ³⁵₁₇ design, draw and label their invention in a drawing program and use the design plan. 	<p>8.1.8.A.5 8.1.8.C.1 8.1.8.E.1 8.2.8.B.1 8.2.8.B.2 8.2.8.B.3 8.2.8.C.1 8.2.8.C.2 8.2.8.D.1</p> <p align="center">CLASSROOM INTEGRATION</p> <p>In discussing the regular social studies or science curriculum the teacher will share some global issues that affect people in other countries and cultures. Students will brainstorm ideas that could help to rectify problems. Students will be told that they will have an opportunity to create/design an item that could be helpful in a country in need. Students will have access to their creations from the classrooms and can edit their work once it is started in the computer lab.</p>

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
problem solving design process global problem perspective solution evaluate relevance appropriateness real-world electronic Kid Pix Studio Online Learning Community	authoring tool summarize Contraption Patent Prototype Design Process	Skype Audacity Wiki Blog http://www.virtualitoy.com Internet sites to create and fix digital toys/music Software (Golly Gee Blocks, Contraptions, Even More Contraptions, Kid Pix Studio)	<u>Formative</u> State findings of research Observe use of the design process <u>Summative</u> e Skype Print design Multimedia Presentation

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT
Technological Literacy Curriculum Guide**

Grade: 5

Unit: Publishing

Time Frame: 5 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on the desired end product. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ Why do I need to know how to type? ❖ Are there basic computer operations that can help me use technology more efficiently? ❖ Why is computer technology important part of everyday life?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ digital tools and media-rich resources enhance creativity and the construction of knowledge. ❖ information accessed through the use of digital tools assist in generating solutions and making decisions. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program. ❖ plan and create a simple database, define fields, input data, and produce a report using sort and query. ❖ create a multimedia presentation including sound and images. ❖ generate a spreadsheet to calculate, graph, and present information. ❖ synthesize and publish information about a local or global issue or event on a collaborative, web-based service (also known as a shared hosted service). ❖ use an electronic authoring tool in collaboration with learners from other countries to evaluate and summarize the perspectives of other cultures about a current event or contemporary figure. ❖ create a PowerPoint about a topic chose by the classroom teacher that is in line with the ROCHELLE PARK curriculum. ❖ incorporate sound images and graph. Share data on a collaborative web based source. ❖ create a professional looking document using advance word features. (e.g., newsletter, personalized learning plan, business letter or flyer) ❖ create a database. Demonstrate its functionality. 	<p>8.1.8.A.1 8.1.8.A.2 8.1.8.A.3 8.1.8.A.4 8.1.8.B.1 8.1.8.F.1</p> <hr/> <p style="text-align: center;">CLASSROOM INTEGRATION</p> <p>Teacher can offer student the option of presenting/reporting classroom work in these digital formats.</p> <p>All created documents in the lab may be edited from the classroom. All topics will be related to the current curriculum items being taught in the classroom.</p>

VOCABULARY		RESOURCES/MATERIALS	ASSESSMENT/PROJECT
digital tool application multimedia keyboard keyboarding typing computer monitor touchpad Internet Microsoft Excel Microsoft Word Microsoft PowerPoint	mouse printer Internet software Smart toys (iPod, MP3, iPod Touch Wiki Blog Electronic authoring tool Microsoft Access/Data	computer Internet Keyboarding Sites (to be found at Tech teacher websites attached to district websites) Blogs Wikis tech devices that require keyboarding Microsoft Office Suite of programs Microsoft Data Type to Learn Type to Learn 3	<u>Formative</u> Observe use of electronic authoring tool(s) Observe Internet Use <u>Summative</u> Print Document Type To Learn Level Multimedia Presentation Post to Shared Hosted Service Share Database

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 5

Unit: Your Responsibility and the Internet

Time Frame: 7 Lessons

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is a communication tool that spans the globe; we have a personal responsibility to use it respectfully, as well as being respectful to other users. ❖ Technology use can have positive or negative impact on both users and those affected by their use. 	<ul style="list-style-type: none"> ❖ What are an individual’s responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented? ❖ What is intellectual property?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ technology and digital tools require knowledge and appropriate use of operations and related applications. ❖ technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors. ❖ knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society. ❖ information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems. ❖ model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics. ❖ summarize the application of fair use and Creative Commons guidelines. ❖ demonstrate how information on a controversial issue may be biased. ❖ explain the need for patents and the process of registering one. ❖ compare and contrast current and past incidences of ethical and unethical use of labor in the United States or another country and present results in a media-rich presentation. ❖ evaluate the role of ethics and bias on trend analysis and prediction in the development of a product that impacts communities in the United States and/or other countries. 	<p>8.1.8.A.5 8.1.8.D.1 8.1.8.D.2 8.1.8.D.3 8.2.8.C.1 8.2.8.C.2 8.2.8.D.1</p>
		CLASSROOM INTEGRATION
		Students will incorporate what they have learned about cyber ethics and safety when using a computer.

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
safety ethical advantage disadvantage interactive Email predator digital tools – camera, webcam, scanner, computer	Acceptable Use Policy consequences appropriate Inappropriate cyber safety cyber security cyber ethics firewall	Internet Acceptable Use Policy copyright laws cameras scanners webcams computers software as needed
		<p><u>Formative</u> Observe Internet Use Observe choices of Internet tools</p> <p><u>Summative</u> Printed Survey Cyber Issues Assessment</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Microsoft Publisher

Time Frame: 4 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION			
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 			
KNOWLEDGE		SKILLS		NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ Microsoft Publisher and Microsoft Word can produce a finished document using a template with text and tables. ❖ saving as a PDF document has some advantages over saving it as a text document. ❖ many software programs have help systems built in to support the end user. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ open application . ❖ select a publication type. ❖ add graphic and image objects. ❖ install and modify text. ❖ resize and crop objects. ❖ move and group objects. ❖ set margins. ❖ add borders and fills. ❖ add a table. ❖ link text boxes. ❖ add drop cap to first word of text. ❖ adjust text flow around image. ❖ save in PDF format. ❖ use Microsoft Publisher to create a brochure, letterhead, custom envelope, and business card. 		<p>8.1.8.A.1</p>	
				CLASSROOM INTEGRATION	
				<p>Microsoft Publisher Microsoft Word</p>	
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT	
<p>desktop publishing template style format page layout</p>		<p>MS Publisher Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Authentic Assessment: Career Interest – Develop Business Stationary</p>	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Classroom Rules & Procedures: Intro to the Computer Lab **Time Frame:** 4 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION			
<ul style="list-style-type: none"> ❖ Technology use can have positive or negative impact on both users and those affected by their use. ❖ Organizing information on a computer makes it more efficient and readily accessible. 		<ul style="list-style-type: none"> ❖ What are an individual’s responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented? ❖ Are there basic computer operations that can help me use technology more efficiently? 			
KNOWLEDGE		SKILLS		NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the expected classroom and online behaviors and procedures including internet safety, District Acceptable Use Policy, and personal safety. ❖ the basics of using a desktop and folders to store and organize files and different storage locations. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ demonstrate & practice proper procedures and ethical computer behaviors. ❖ endorse Acceptable Use Policy ❖ follow safe practices. ❖ access and login to the network. ❖ save and access saved files and resources on the network or USB devices. ❖ locate network drives. ❖ demonstrate appropriate care for computer components. ❖ perform a backup of data. ❖ rename files. ❖ organize the desktop. ❖ empty the “trash.” ❖ use cleanup and defragmenter. 		<p>8.1.8.D.1 8.1.8.D.2 8.1.8.D.3</p>	
				CLASSROOM INTEGRATION	
				Practices-skills applicable to school-wide computer use.	
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT	
<p>Acceptable Use Policy network login hardware CD backup</p>		<p>Acceptable Use Policy networked computer Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Classroom and Peer Discussions Checklists for Task Completion Formal and Informal Student Observations</p>	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Touch Typing-Mavis Beacon & Learning.com Typing **Time Frame:** 16 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the importance of the shift key and the characters that can be accessed through its use. ❖ correct posture is essential to decrease the possibility of injury due to computer use which is becoming more prevalent in today's society. ❖ the importance of being able to access mathematical symbols and how to use them properly within a document. ❖ keyboarding shortcuts and that they can increase one's productivity. ❖ the importance of speed and accuracy when keyboarding. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. ❖ keyboarding is an essential skill for productivity and efficiency in the 21st Century workplace. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ identify letters above and below the home row. ❖ identify the difference and importance behind the shift key and caps lock key. ❖ identify and use special characters on number keys accessible through using the shift key i.e. !@#\$%^&*(). ❖ complete keyboarding for alphabet, return and shift with accuracy and proper posture and fingering. ❖ identify mathematical symbols (+, -, *, /). ❖ use the numerical keypad for inputting numbers. ❖ learn to use some of the. ❖ combinations of short-cut keys used in the various computer programs. ❖ type twelve (12) or more words per minute at 80% accuracy using proper posture and fingering. 		8.1.8 A.1 8.1.8 A.2 8.1.8 A.3
				CLASSROOM INTEGRATION
				Keyboarding-typing applicable to all computer equipped classrooms
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
home row numeric keypad		Mavis Beacon Teaches Typing NimbleFingers.com Learning.com Keyboarding Netop School V6.2 - Image Sharing Application		<p><u>Formative</u></p> Checklists for Task Completion Formal and Informal Student Observations Program Performance Tracking Dialogue, Reflection and Feedback
				<p><u>Summative</u></p> Typing Assessment Online Assessment Keyboarding Assessment Speed/Accuracy Assessment

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Microsoft Digital Image Editor MSDIE

Time Frame: 4 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ there are many images stored online for consumer use that can be used and stored. ❖ working with images uses many different skills and tools which can enhance the image to derive the greatest benefit from its use. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ obtain image files. ❖ save files. ❖ open the toolbars. ❖ use the zoom tool. ❖ correct “red eye” images. ❖ use the clone tool. ❖ use the blend tool. ❖ apply image filters. ❖ resize images. ❖ crop images. ❖ print images in multiples. ❖ use Microsoft Digital Image Editor to render facial images, which are corrected for “red eye” and sharpness. 	<p>8.A.8.A.5</p>	
		CLASSROOM INTEGRATION	
		<p>Microsoft Digital Image Editor Microsoft Word</p>	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
<p>clone filter select red eye blend sepia zoom/enlarge</p>	<p>Microsoft Digital Image Editor JPEG images Netop School V6.2 - Image Sharing Application</p>	<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Display/Print Edited Image Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Authentic Assessment - Portrait: Facial Picture Project</p>	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Microsoft PowerPoint

Time Frame: 2 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Digital tools provide enhanced opportunities to design innovative solutions, and express ideas creatively. 		<ul style="list-style-type: none"> ❖ How can digital tools be used for creating original and innovative works, ideas, and solutions? ❖ How can technology showcase what I have learned? ❖ How can technology enhance a presentation? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ a PowerPoint presentation is one of many ways for people to support discussions with visual support. ❖ one can enhance the effectiveness of a PowerPoint presentation through use of clip art and animation techniques. ❖ when distributing printouts of PowerPoint slides should be used to support the presentation. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ create, save and present a PowerPoint presentation to a group. ❖ use pictures and animation from clip art. ❖ use help and template functions. ❖ use color, background, effects and sound. ❖ create and print handouts. ❖ create header/footer to file. ❖ add sound effects to presentation. ❖ revise the slid design and theme. 	8.1.8.A.3 8.1.8.B.1	
		CLASSROOM INTEGRATION	
		Microsoft PowerPoint Microsoft Word	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
PowerPoint presentation slides graphics formatting clipart animation layout sound effects design	PowerPoint Clip Art library Netop School V6.2 - Image Sharing Application	<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback</p> <p><u>Summative</u> PowerPoint Project</p>	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: EMAIL

Time Frame: 1 Period

ENDURING UNDERSTANDING		ESSENTIAL QUESTION			
<ul style="list-style-type: none"> ❖ Digital tools allow for communication and collaboration anytime/anyplace worldwide. ❖ Email is an essential skill in today’s society; however, it must be used properly. 		<ul style="list-style-type: none"> ❖ How has the use of digital tools improved opportunities for communication and collaboration? ❖ How are computers a communication tool, and how far does it reach? 			
KNOWLEDGE		SKILLS		NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ authoring an email using proper etiquette is an essential 21st Century skill. ❖ using email by accessing an address book and including attachments makes it a more powerful form of communication. ❖ chat systems are embedded in many programs and can improve communication in our global community. ❖ in using email, they have a responsibility to use it appropriately and with proper etiquette. ❖ the use of emoticons and electronic shorthand is only appropriate in certain situations and should not become a replacement for standard English words and phrases. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ open an email application. ❖ attach a file. ❖ remove a file. ❖ add a file. ❖ access recipients from address book. ❖ create & save an email draft. ❖ chat with a colleague or associate. 		<p>8.1.8.A.5 8.1.8.C 1</p>	
				CLASSROOM INTEGRATION	
				<p>Use of email-Demonstration: ROCHELLE PARK EMAIL GMAIL</p>	
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT	
<p>Internet web address hyperlink/ link reply send spam delete drafts e-mail etiquette attachment</p>		<p>Internet Access Email service Poll Everywhere.com Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> checklists for task completion formal and informal student observations dialogue, reflection and feedback</p> <p><u>Summative</u> Assessment: Email and Attachments, Question and Answer</p>	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Internet Browser Skills

Time Frame: 1 Period

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the importance of surfing the internet safely. ❖ the benefits of customizing their chosen web browser by organizing favorites, using helper applications, browser applications and setting a homepage. ❖ toolbars help facilitate efficient surfing of the web. ❖ computers track their every click on the web and is saved for future retrieval. ❖ the purpose and effectiveness of the various toolbars that software producers offer. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ use favorites (folders, names, etc..). ❖ use the Go menu to previous page. ❖ use, add and remove tool bars. ❖ manage bookmarks. ❖ download and use alternate browser software: Mozilla, Chrome, Safari. ❖ save a webpage. ❖ turn Cookies on and off. ❖ seat a URL as homepage. ❖ turn on pop-up blocker. ❖ complete an online assessment on internet browsing skills. 		<p>8.1.8.A.5</p>
				CLASSROOM INTEGRATION
				<p>Web browsers: Google Chrome Internet Explorer Mozilla Firefox</p>
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>Internet Acceptable Use Policy favorites/bookmarks search engine help menus toolbars cookies URL</p>		<p>Internet access list of appropriate search engines Acceptable Use Policy Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Display Navigation in Web Browser; Bookmark Use. Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Online Assessment – Question and Answer</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Mapping Software

Time Frame: 3 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Information is spread worldwide within seconds due to technological advancements and has an immediate impact. 		<ul style="list-style-type: none"> ❖ Why is the evaluation and appropriate use of accurate information more important than ever in the technological age? ❖ How can learn about the world around us? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ navigating using Google Earth, Google Maps, and Mapquest can help them explore the world around them. ❖ it is important to manipulate the view in navigation programs to retrieve desired information. ❖ the information on the internet is not always accurate and checking validity of information is essential. ❖ there are many examples of free software and applications that can be accessed that contain mapping capabilities. <p><small>35</small> <small>17</small> NOAA is the National Oceanic and Atmospheric Administration (NOAA) which is a federal agency focused on the condition of the oceans and the atmosphere.</p> <p><small>35</small> <small>17</small> a checklist can help focus and face work to ensure a long-range project is completed on time.</p>		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ enter a start point and destination. ❖ switch between various views. ❖ adjust view by use of “A, D, W, S” keys. ❖ zoom in or out of map. ❖ follow street level view use arrow and short cut cuts. ❖ create and publish an unlisted personal map. ❖ share-collaborate personal map. ❖ locate public transit. ❖ locate gas stations and fuel prices. ❖ determine currency of map software. 		<p>8.1.8.E.1 8.1.8.A.5</p>
				CLASSROOM INTEGRATION
				<p>Google Earth Google Maps Mapquest NOAA</p>
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>pegman satellite view traffic view map view street vie longitude latitude azimuth NOAA</p>		<p>Google maps Yahoo maps GoogleEarth NOAA.gov Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Google Maps Assessment: Determine location on virtual map. Assessment- Terms and Usage</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Word Processing (MS Word)

Time Frame: 4 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the basics of Microsoft Word, making the software package more efficient. ❖ implementing basic techniques will improve mastery and thus will be beneficial for increased productivity. ❖ many software programs have help systems built in to support the end user. ❖ a hyperlink is a link from a hypertext file or document to another location or file, typically activated by clicking on a highlighted word or image on the screen. ❖ the diversity of software programs make them very useful for a variety of situations such as mathematical symbolism, tables, and hyperlinks. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ access/hide the ribbon. ❖ access/modify Office Button. ❖ clear text formatting. ❖ adjust line spacing. ❖ add-insert-delete a page. ❖ adjust line spacing. ❖ insert a image file. ❖ adjust margins. ❖ add a header/footer. ❖ adjust page orientation. ❖ align text vertically and horizontally. ❖ use thesaurus and spell checker. ❖ insert file information into headers and footers. ❖ use online program help. ❖ insert and remove hyperlink. ❖ use keyboard shortcuts. ❖ use subscripts/superscripts. ❖ use borders. ❖ save vs. save as. ❖ create columns. 		8.1.8.A.1 8.1.8.A.2 8.1.8.A.3 8.1.8.A.4 8.1.8.E.1
				CLASSROOM INTEGRATION
				Microsoft Word
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
format graphics columns margins justify landscape/portrait indent alignment superscript subscript hyperlink layout		Microsoft Word 2007 Microsoft.com Tutorials Google Docs Netop School V6.2 - Image Sharing Application		<u>Formative</u> Classroom Observations of On-screen Work Quizzes Checklists for Task Completion Dialogue, Reflection and Feedback <u>Summative</u> Projects Created and Saved to Network Folders Online Assessment

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Internet Safety-Bullying Prevention

Time Frame: 2 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology use can have positive or negative impact on both users and those affected by their use. ❖ Information is spread worldwide within seconds due to technological advancements and has an immediate impact. 		<ul style="list-style-type: none"> ❖ What are an individual’s responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented? ❖ Why is the evaluation and appropriate use of accurate information more important than ever in the technological age? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ selecting a safe screen name and a secure password will help to protect their personal identity. ❖ cyberbullying is aggravated harassment transmitted through technological means, such as emails, text messages, cell phone communications, pagers, or <u>social networking websites</u>. ❖ the signs of online predator behavior and the steps they should take if they have encounter this. ❖ what are copyrighted and trademarked materials and how they can use them appropriately in their academic work. <p>³⁵₁₇ filtering is used to make online research more efficient.</p> <p>³⁵₁₇ P2P is an abbreviation for Peer-to-peer, which denotes a network or data communications in which no dedicated server is involved</p>		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ use a blog or chat room without revealing personal identity. ❖ identify appropriate screen names. ❖ demonstrate acceptable password selection. ❖ use proper online etiquette when texting/chatting. ❖ identify online predatory practices. ❖ distinguish fair use from copyrighted material. ❖ identify filtered sites. ❖ use P2P sites appropriately. 		<p>8.1.8.D.1 8.1.8.D.2 8.1.8.C.1</p>
				CLASSROOM INTEGRATION
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>online cyberbullying screen name password personal information spamming chat blog social networking site predator prey grooming intimidation anonymous privacy</p>		<p>Website Resources: DARE.com NSTeens.org Netsmartz.org Ikeepsafe.org Flatclassroomproject.Ning.com Facebook/safety tips Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Checklists for Task Completion Dialogue, Reflection and Feedback</p> <p><u>Summative</u> PowerPoint - Jeopardy</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 6

Unit: Microsoft Paint

Time Frame: 1 Period

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the types of files and which application can be used open the files. ❖ using a paint program can be a valuable tool in advertising, digital photography, academic endeavors, and many other venues. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ open files from remote location. ❖ change the view size, zoom in-out. ❖ save file in requested location. ❖ determine what files will open in Paint. ❖ turn on gridlines to align work. ❖ change font. ❖ fill the document with color. ❖ change brush types-sizes. ❖ access page setup within print menu. ❖ change menus. ❖ change margins. ❖ change scaling. ❖ center vertically-horizontally. ❖ change paper size. ❖ center document. ❖ use Microsoft paint to create a sample architectural drawing. 	8.1.8.A.1
		CLASSROOM INTEGRATION
		Microsoft Paint
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
format margins justify landscape/portrait alignment layout scaling	Microsoft Paint-Application Network Printer Netop School V6.2 - Image Sharing Application	<p><u>Formative</u> Classroom Observations of On-screen Work Checklists for Task Completion Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Authentic Assessment – Create a city landscape image of buildings of various sizes and shapes</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 7

Unit: MSDIE -Microsoft Digital Image Editor

Time Frame: 2 Periods

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when is it appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ there are many images stored online for consumer use that can be readily accessed. ❖ working with images uses many different skills and tools which can enhance the image to derive the greatest benefit from its use. A checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ obtain image files. ❖ save files. ❖ open the toolbars. ❖ use the zoom tool. ❖ correct “red eye” images. ❖ use the clone tool. ❖ use the blend tool. ❖ apply image filters. ❖ convert color images to sepia, black & white, etc. ❖ create a silhouette/mask around an image. ❖ use Microsoft Digital Image Editor to produce images which are corrected for color balance, contrast, and sharpness. 	8.A.8.A.5
		CLASSROOM INTEGRATION
		Microsoft Digital Image Editor Microsoft Word

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
clone filter select red eye blend sepia zoom/enlarge	Microsoft Digital Image Editor- S/W Netop School V6.2 - Image Sharing Application	<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback Print an Edited Image Display an Edited Image</p> <p><u>Summative</u> Authentic Assessment – Modify a high resolution image by removing undesired portions and replacing with cloned pixels.</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 7

Unit: Classroom Rules & Procedures: Intro to the Computer Lab **Time Frame:** 2 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology use can have positive or negative impact on both users and those affected by their use. ❖ Organizing information on a computer makes it more efficient and readily accessible. 		<ul style="list-style-type: none"> ❖ What are an individual’s responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented? ❖ Are there basic computer operations that can help me use technology more efficiently? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the expected classroom and online behaviors and procedures including internet safety, District Acceptable Use Policy, and personal safety. ❖ the basics of using a desktop and folders to store and organize files to different storage locations. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ demonstrate & practice proper procedures and ethical computer behaviors. ❖ endorse Acceptable Use Policy. ❖ access and login to the network. ❖ save and access saved files and resources on the network. ❖ locate network drives. ❖ demonstrate appropriate care for computer components. ❖ perform a backup of data. ❖ rename files. ❖ organize the desktop. 		8.1.8.D.1 8.1.8.D.2 8.1.8.D.3
				CLASSROOM INTEGRATION
				Practices-skills applicable to school-wide computer use.
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
Acceptable Use Policy network login hardware CD backu p ethical		Acceptable Use Policy networked computer Netop School V6.2 - Image Sharing Application		<u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 7

Unit: Basic Computer Skills

Time Frame: 6 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment. ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when is it appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ choosing the most appropriate output for their work product and troubleshooting minor issues with the devices will increase productivity. ❖ what copyrighted and trademarked materials are and how to use them appropriately in their academic work. ❖ the difference between RAM and hard disk space and various storage options. ❖ not all software will work on all hardware. ❖ the significance of file endings and what they tell them about it. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ care properly for the printer, load it, fix paper jams, and select from networked print devices. ❖ change the page setup (on screen and for printing). ❖ create screen capture image. ❖ cut and paste, select all, undo and redo. ❖ obey copyright laws. ❖ determine available RAM/disk space. ❖ store data on various medium. ❖ determine the software associated with a file based on file extension. ❖ identify hardware components. ❖ add a printer and select as default . ❖ capture screen images and export. ❖ use shortcut keys to manipulate data, fields, and windows. ❖ access the network file server. ❖ login to the network. ❖ connect/disconnect computer peripheral devices. 		<p>8.1.8.A.5 8.1.8.D.1</p>
				CLASSROOM INTEGRATION
				<p>Microsoft Office Suite – Windows XP7 OS</p>
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>scanner, CPU, printer, USB, hard drive, bluetooth, wireless, copyright law RAM, memory hard disk space file extensions (txt. xls, docx, ppt. html (i.e. edu, .com, .net) keyboard short cut functions</p>		<p>computer parts/components samples of peripherals (i.e. computer, scanner, printer) sample of copyright law Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Presentations Question and Answer – Multiple Choice</p>

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 7

Unit: GPS & Geocaching

Time Frame: 2 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Information is spread worldwide within seconds due to technological advancements and has an immediate impact. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ Why is the evaluation and appropriate use of accurate information more important than ever in the technological age? ❖ When is it helpful to use a technological tool? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ a GPS device receives its data and has increased in popularity and wide-spread its use is in society. ❖ triangulation (triateration) it the mathematical concept which allows GPS systems to work and its value and vulnerability to communication systems worldwide. ❖ latitude and longitude are used to measure distances of the earth. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ describe a GPS device. ❖ describe how the satellite system. ❖ describe the components of a GPS system. ❖ explain how triangulation works. ❖ plot lat./long coordinates. ❖ determine declination. ❖ determine the vulnerability of the satellite system. 	8.1.8.A.5 8.1.8.E.1	
		CLASSROOM INTEGRATION	
		Garmin GPS Tom Tom	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
satellite receiver navigation tracking mapping ecochache waypoint declination	Websites: Geocaching.com Trimble.com Garmin.com Netop School V6.2 - Image Sharing Application	<u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback <u>Summative</u>	

**ROCHELLE PARK TOWNSHIP SCHOOL
DISTRICT**

Grade: 7

Unit: Microsoft Excel

Time Frame: 4 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment. ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when is it appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the power of using a spreadsheet program to manipulate data including being able to visually represent the data through graphs and charts. ❖ mastery of the basic aspects of the spreadsheet program makes navigating and outputting desired results more efficient, thus improving productivity. ❖ numbers can actually be used differently in a variety of ways and thus must be formatted the proper way to ensure desired outcomes. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ use correct terminology when discussing a spreadsheet application. ❖ navigate the spreadsheet. ❖ format cells for different types of data. ❖ change the viewing area. ❖ add graphics to spreadsheets. ❖ create charts and graphs from the spreadsheet data. ❖ use formulas within the spreadsheet to make calculations more efficient. ❖ adjust cell heights and widths. ❖ use the tool ribbon. ❖ format cells. ❖ change the page layout in setup. ❖ enter data in cells or ranges of cells. ❖ print preview/print the spreadsheet. ❖ use Microsoft Excel to create a student gradebook spreadsheet. 		<p>8.1.8.A.4</p>
				CLASSROOM INTEGRATION
				<p>Microsoft Word Microsoft Excel</p>
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>data column row merge formula grid function chart</p>		<p>Microsoft Office-Excel Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Authentic Assessment – Create a spreadsheet to calculate the average class height of all classroom students Question and Answers - Multiple Choice Assessment at Learning.com online website</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 7

Word Processing (MS Word)

Time Frame: 12 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment. ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when is it appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ customizing an application to meet their needs will allow for optimal efficiency. ❖ a hyperlink is a link from a hypertext file or document to another location or file, typically activated by clicking on a highlighted word or image on the screen. ❖ the diversity of software programs make them very useful for a variety of situations such as mathematical symbolism, tables, hyperlinks. ❖ many software programs have help systems built in to support the end user. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ review of previously taught skills and attitudes. ❖ access/hide the ribbon access/modify Office Button use/modify Quick Access bar. ❖ clear text formatting. ❖ adjust line spacing. ❖ insert a text block. ❖ insert a image file. ❖ format an image. ❖ adjust margins. ❖ add a header/footer. ❖ adjust page layout. ❖ align text vertically and horizontally. ❖ use thesaurus and spell checker. ❖ insert file information into headers and footers. ❖ use online program help. ❖ insert and remove hyperlink. ❖ use keyboard shortcuts. ❖ insert and manipulate tables. ❖ insert tabs. ❖ use subscripts/superscripts. ❖ use borders. ❖ save vs. save as. 	8.1.8.A.1 8.1.8.A.2 8.1.8.A.3 8.1.8.A.4	
		CLASSROOM INTEGRATION	
		Microsoft Word	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
format thesaurus graphics columns margins justify landscape/portrait indent alignment superscript subscript hyperlink layout	Microsoft Word 2007 Microsoft.com Tutorials Google Docs Netop School V6.2 - Image Sharing Application	<p><u>Formative</u> Classroom Observations of On-screen Work. Checklists for Task Completion Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Projects Created and Saved to Network Folders Question and Answers - Multiple Choice Assessment at Learning.com online website</p>	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 7

Unit: Internet Safety-Bullying Prevention

Time Frame: 2 Periods

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology use can have positive or negative impact on both users and those affected by their use. ❖ Digital tools allow for communication and collaboration anytime/anyplace worldwide. 	<ul style="list-style-type: none"> ❖ What are an individual’s responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented? ❖ How has the use of digital tools improved opportunities for communication and collaboration?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ selecting a safe screen name and a secure password will help to protect their personal identity. ❖ cyberbullying is aggravated harassment transmitted through technological means, such as emails, text messages, cell phone communications, pagers, or social networking websites. ❖ the signs of online predator behavior and what steps they should take if they have been contacted inappropriately. ❖ what are copyrighted and trademarked materials and how can you use them appropriately in your academic work. ❖ filtering is used to make online research more efficient.. <p><small>³⁵₁₇ P2P is an abbreviation for Peer-to-peer, which denotes a network or data communications in which no dedicated server is involved</small></p> <p><small>³⁵₁₇ a checklist can help focus and face work to ensure a long-range project is completed on time.</small></p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ protect personal information. ❖ use a blog or chat room without revealing personal identity. ❖ identify and choose appropriate screen names. ❖ demonstrate acceptable password selection. ❖ use proper online etiquette when texting⁷/chatting. ❖ identify online predatory practices and to whom they report these online incidents. ❖ distinguish fair use from copyrighted material. ❖ identify filtered sites. ❖ use P2P sites appropriately. 	<p>8.1.8.D.1 8.1.8.D.2 8.1.8.C.1</p>
		CLASSROOM INTEGRATION
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>online cyberbullying screen name password personal information spamming chat blog social networking site predator prey grooming intimidation anonymous</p>	<p>Website Resources: DARE.com NSTeens.org Netsmartz.org Ikeepsafe.org Flatclassroomproject.Ning.com</p> <p>Facebook- safety tips Netop School V6.2 - Image Sharing Application</p>	<p><u>Formative</u> Checklists for Task Completion Classroom Observations of On-screen Work Dialogue, Reflection and Feedback</p> <p><u>Summative</u> PowerPoint - Jeopardy</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 8

Unit: Classroom Rules & Procedures: Network Use

Time Frame: 2 Periods

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology use can have positive or negative impact on both users and those affected by their use. ❖ Organizing information on a computer makes it more efficient and readily accessible. 	<ul style="list-style-type: none"> ❖ What are an individual's responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented? ❖ Are there basic computer operations that can help me use technology more efficiently?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the expected classroom and online behaviors and procedures including internet safety, District Acceptable Use Policy, and personal safety. ❖ the basics of using a desktop and folders to store and organize files and different storage locations including a network drive and flashdrive. ❖ the importance of caring and maintenance of computer hardware. ❖ the importance of backing up their work in case of a computer crash. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ demonstrate & practice proper procedures and ethical computer behaviors. ❖ endorse Acceptable Use Policy. ❖ access and login to the network. ❖ save and access saved files and resources on the network. ❖ locate network drives. ❖ demonstrate appropriate care for computer components. ❖ perform a backup of data. ❖ rename files. ❖ organize the desktop. ❖ find a program or file by using search. 	<p>8.1.8.D.1 8.1.8.D.2 8.1.8.D.3</p>
		CLASSROOM INTEGRATION
		Practices-skills applicable to school-wide computer use.
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
<p>Acceptable Use Policy network login hardware CD backup ethical hacking filter</p>	<p>Acceptable Use Policy networked computer flashdrive Netop School V6.2 - Image Sharing Application</p>	<p><u>Formative</u> Classroom and Peer Discussions Checklists for Task Completion Formal and Informal Student Observations</p> <p><u>Summative</u> True/False Quiz</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 8

Unit:

Time Frame: 13 Periods

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ Selection of technology should be based on personal and/or career needs assessment. ❖ A tool is only as good as the person using it. 	<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ the power of using a spreadsheet program to manipulate data including being able to visually represent the data through graphs and charts. ❖ mastery of the basic aspects of the spreadsheet program makes navigating and outputting desired results more efficient, thus improving productivity. ❖ numbers can actually be used differently in a variety of ways and thus must be formatted the proper way to ensure desired outcomes. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ review previously learned skills ❖ know the terminology related to the application. ❖ navigate about the spreadsheet. ❖ use the tool ribbon. ❖ format cells. ❖ change the page layout in setup. ❖ change the viewing area. ❖ enter data in cells or ranges of cells. ❖ fill cells with data. ❖ print preview/print the spreadsheet. ❖ add graphics or image files. ❖ create charts and graphs. ❖ use formulas. ❖ adjust cell heights. ❖ adjust row width. ❖ calculate average. ❖ sum data. ❖ add, change and delete comments. ❖ draw borders. ❖ insert, merge and delete cells. ❖ adjust cell margins. ❖ create a mail merge. ❖ change workbook views. ❖ freeze pains. ❖ filter data. ❖ Use Microsoft Excel to complete stock market project. 	8.1.8.A.1 8.1.8.A.4 8.1.8.A.5
		CLASSROOM INTEGRATION

VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
data column row merge formula grid function chart	Microsoft Office-Excel Netop School V6.2 - Image Sharing Application	<p><u>Formative</u> Checklists for Task Completion Formal and Informal Student Observations Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Create a stock portfolio spreadsheet which calculates the % change of the total and individual stock values over time and graph the individual stock values in a pie chart.</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 8

Unit: Word Processing (MS Word)

Time Frame: 3 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION	
<ul style="list-style-type: none"> ❖ Selection of technology should be based on personal and/or career needs assessment. ❖ A tool is only as good as the person using it. ❖ Technology is constantly changing and requires continuous learning of new skills. 		<ul style="list-style-type: none"> ❖ In a world of constant change, what skills should we learn? ❖ How do I choose which technological tools to use and when it is appropriate to use them? ❖ How can I transfer what I know to new technological situations/experiences? 	
KNOWLEDGE	SKILLS	NJCCCS	
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ customizing an application to meet their needs will allow for optimal efficiency. ❖ the diversity of software programs make them very useful for a variety of situations such as mathematical symbolism, tables, hyperlinks. ❖ many software programs have help systems built in to support the end user. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ review of previously taught skills and attitudes. ❖ access/hide the ribbon. ❖ access/modify Office Button. ❖ use/modify Quick Access Bar. ❖ adjust line spacing. ❖ insert a text block. ❖ insert a image file. ❖ format an image. ❖ adjust margins. ❖ add a header/footer. ❖ adjust page layout. ❖ align text vertically and horizontally. ❖ use thesaurus and spell checker. ❖ insert file information into headers and footers. ❖ use online program help. ❖ insert and remove hyperlink. ❖ use keyboard shortcuts. ❖ insert and manipulate tables. ❖ insert tabs . ❖ use subscripts/superscripts. ❖ use borders. ❖ use save vs. save as. 	<p>8.1.8.A.1 8.1.8.A.2 8.1.8.A.3 8.1.8.A.4 8.1.8.A.5</p>	
		CLASSROOM INTEGRATION	
		<p>Microsoft Word</p>	
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT	
<p>format thesaurus graphics columns margins justify landscape/portrait alignment superscript subscript hyperlink layout</p>	<p>Microsoft Word 2007 Microsoft.com Tutorials Google Docs Netop School V6.2 - Image Sharing Application</p>	<p><u>Formative</u> Classroom Observations of On-screen Work Checklists for Task Completion Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Create and modify a table which contains specific information about public companies and Save to Network Folders Online Assessment at Learning.com</p>	

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 8

Unit: Internet Safety-Bullying Prevention

Time Frame: 2 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Technology use can have positive or negative impact on both users and those affected by their use. ❖ Digital tools allow for communication and collaboration anytime/anyplace worldwide. 		<ul style="list-style-type: none"> ❖ What are an individual’s responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented? ❖ How has the use of digital tools improved opportunities for communication and collaboration? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ selecting a safe screen name and a secure password will help to protect their personal identity. ❖ cyberbullying is aggravated harassment transmitted through technological means, such as emails, text messages, cell phone communications, pagers, or social networking websites. ❖ what constitutes Cyberbullying. ❖ the signs of online predator behavior and what steps they should take if they have been contacted inappropriately. ❖ what are copyrighted and trademarked materials and how can you use them appropriately in your academic work. ❖ filtering is used to make online research more efficient.. ❖ P2P is an abbreviation for Peer-to-peer, which denotes a network or data communications in which no dedicated server is involved ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ protect personal information. ❖ use a blog or chat room without revealing personal identity. ❖ identify and choose appropriate screen names. ❖ demonstrate acceptable password selection. ❖ use proper online etiquette when texting/chatting. ❖ identify online predatory practices and to whom they report these online incidents. ❖ distinguish fair use from copyrighted material. ❖ identify filtered sites. ❖ identify what text or images are safe/appropriate to post online. ❖ use P2P sites appropriately. 		<p>8.1.8.D.1 8.1.8.D.2 8.1.8.C.1</p>
				CLASSROOM INTEGRATION
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>online cyberbullying screen name password personal information spamming chat blog social networking site predator prey grooming intimidation anonymous</p>		<p>Website Resources: DARE.com NSTeens.org Netsmartz.org Ikeepsafe.org Flatclassroomproject.Ning.com</p> <p>Facebook - safety tips Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Classroom Observations of On-screen Work Checklists for Task Completion Dialogue, Reflection and Feedback</p> <p><u>Summative</u> PowerPoint - Jeopardy</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 8

Unit: 3D Modeling-SketchUp

Time Frame: 6 Periods

ENDURING UNDERSTANDING		ESSENTIAL QUESTION		
<ul style="list-style-type: none"> ❖ Digital tools provide enhanced opportunities to design innovative solutions, and express ideas creatively. ❖ Technology is constantly changing and requires continuous learning of new skills. ❖ A tool is only as good as the person using it. 		<ul style="list-style-type: none"> ❖ How can digital tools be used for creating original and innovative works, ideas, and solutions? ❖ In a world of constant change, what skills should we learn? ❖ How can I transfer what I know to new technological situations/experiences? 		
KNOWLEDGE		SKILLS		NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ using Google SketchUp can be used to draw 3-Dimensional figures once the basic tools are mastered, making the program much more powerful. ❖ implementing basic techniques will improve mastery and thus will be beneficial for increased productivity. ❖ many software programs have help systems built in to support the end user. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. ❖ many software programs have tutorials online which help the end user to work the program effectively. 		<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ use the select tool. ❖ use the paint Bucket. ❖ use the eraser tool. ❖ use the rectangle too. ❖ use the line tool. ❖ use the circle and polygon tool. ❖ use the arc tool. ❖ use the freehand tool. ❖ use the move tool. ❖ use the push/pull tool. ❖ use the scale tool. ❖ use the offset tool. ❖ use the tape measure. ❖ use the text and 3D tools. ❖ use the navigation tool. ❖ use the camera and look around tool. ❖ use the walk tool. ❖ use the section tool. ❖ use the zoom tool. ❖ use the pan tool. ❖ add texture and color. ❖ print their completed project. ❖ use Google SketchUp to produce a finished schematic. 		<p>8.2.8.B.1</p>
		CLASSROOM INTEGRATION		
				<p>Google Sketch-up</p>
VOCABULARY		RESOURCES/MATERIALS		ASSESSMENT/PROJECT
<p>rotate scale push/pull offset protractor axes dimension orbit pan side</p>		<p>Google SketchUp-Free Netop School V6.2 - Image Sharing Application</p>		<p><u>Formative</u> Classroom Observations of On-screen Work Checklists for Task Completion Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Design and draw a necktie/scarf rack which depicts dimensions and textures and then Save to Network Folders</p>

ROCHELLE PARK TOWNSHIP SCHOOL DISTRICT
Technological Literacy Curriculum Guide

Grade: 8

Unit: Social Interaction Networking

Time Frame: 2 Periods

ENDURING UNDERSTANDING	ESSENTIAL QUESTION
<ul style="list-style-type: none"> ❖ Digital tools provide enhanced opportunities to design innovative solutions, and express ideas creatively. ❖ Digital tools allow for communication and collaboration anytime/anyplace worldwide. ❖ Technology use can have positive or negative impact on both users and those affected by their use. 	<ul style="list-style-type: none"> ❖ How can digital tools be used for creating original and innovative works, ideas, and solutions? ❖ How has the use of digital tools improved opportunities for communication and collaboration? ❖ What are an individual’s responsibilities for using technology? ❖ What constitutes misuse and how can it best be prevented?

KNOWLEDGE	SKILLS	NJCCCS
<p>Students will know:</p> <ul style="list-style-type: none"> ❖ there are a myriad of ways to communicate online both for social and school/work purposes. ❖ interacting online has benefits; however, it also has some major consequences if proper etiquette and responsibility are not adhered to. ❖ online communication tools enable the learning community to reach far outside of the classroom walls. ❖ a checklist can help focus and face work to ensure a long-range project is completed on time. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ❖ access/use Ning.com. ❖ access/use Facebook.com. ❖ access and create a document using Google Docs. ❖ set up a Google Phone session. ❖ use wikis. ❖ send proper IM or Text messages. ❖ use Apples’ Face to Face. ❖ use Skype. ❖ use a digital camera. ❖ use the proper and ethical behaviors when interacting online. ❖ participate in an online learning community. ❖ identify biased online information. ❖ use appropriate tools and techniques to engage resources in distant or remote locations. 	8.1.8.C.1 8.1.8.B.1 8.1.8.D.3
		CLASSROOM INTEGRATION
		Google Phone Google Docs
VOCABULARY	RESOURCES/MATERIALS	ASSESSMENT/PROJECT
social networking IM wiki internet phone	internet access Gmail account Ning account Facebook account digital camera headset-microphone Netop School V6.2 - Image Sharing Application	<p><u>Formative</u> Classroom Observations of On-screen Work Checklists for Task Completion Dialogue, Reflection and Feedback</p> <p><u>Summative</u> Question and Answer - Multiple Choice</p>

Interactive resources that are good for everyone

http://www.eduplace.com/kids/socsci/books/applications/imaps/maps/g1_u3/index.html Kids mapping software

Learn geography with these interactive map activities.

<http://www.sheppardsoftware.com/Geography.htm>

Needed:

Software Kid Pix Studio for classrooms