

**WEST JEFFERSON HILLS SCHOOL DISTRICT  
TECHNOLOGY CURRICULUM**

**GRADE 3**

<p style="text-align: center;"><b>PA Academic Standards</b> Student must be able to do</p>	<p style="text-align: center;"><b>Objective</b> Content or process student will be able to know and do</p>	<p style="text-align: center;"><b>Instructional Methods</b></p>	<p style="text-align: center;"><b>Materials/ Resources</b> Textbooks, trade books, workbooks, software, hardware, etc.</p>	<p style="text-align: center;"><b>*Assessment Procedures</b> *Additional adaptations, modifications, accommodations, and enrichment/ acceleration will be provided per IEP</p>	<p style="text-align: center;"><b>*Additional Learning</b> Opportunities for students who do not meet basic standards *Additional adaptations, modifications, and accommodations will be provided per IEP</p>	<p style="text-align: center;"><b>*Extended Learning</b> Opportunities for students who can go beyond the basic standards. *Additional enrichment/acceleration will be provided per IEP</p>
<p>Technology Education 3.6.4. Grade 3</p>						
<p>A. Know that biotechnologies relate to propagating, growing, maintaining, adapting, treating and converting.</p> <ul style="list-style-type: none"> <li>• Identify agricultural and industrial production processes that involve plants and animals.</li> <li>• Identify waste management treatment processes.</li> <li>• Describe how knowledge of the human body influences or impacts ergonomic design.</li> <li>• Describe how biotechnology has impacted various aspects of daily life (e.g., health care, agriculture, waste treatment)</li> </ul>		<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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<p>B. Know that information technologies involve encoding, transmitting, receiving, storing, retrieving and decoding.</p> <ul style="list-style-type: none"> <li>• Identify electronic communication methods that exist in the community (e.g., digital cameras, telephone, internet, television, fiber optics).</li> <li>• Identify graphic reproduction methods.</li> <li>• Describe appropriate image generating techniques (e.g., photography, video).</li> <li>• Demonstrate the ability to communicate an idea by applying basic sketching and drawing techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Students will recognize that damaging school equipment is destroying school property.</li> <li>• Students will communicate about internal technology operations using developmentally appropriate and accurate terminology.</li> <li>• Students will apply basic vocabulary related to the internal operations of the technology (e.g., disks, drives, RAM, ROM, CD-Rom and DVD)</li> <li>• Students will demonstrate respect for other students while using technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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	<ul style="list-style-type: none"> <li>•Students will describe and practice respect for other students while using technology (e.g., do not duplicate software or documents without authorization, do not erase or damage files, documents, or projects)</li> <li>•Students will use prescribed technology writing or drawing tools for communicating and illustrating.</li> <li>•Students will use a drawing program or create a picture story.</li> <li>•Students will select and use the tools in a paint program (e.g., pencil, eraser, spray can paint bucket, paint brush)</li> </ul>					<ul style="list-style-type: none"> <li>• Describe trends and possible future developments in technology.</li> <li>• Create technological design briefs to document problem solving.</li> <li>• Set up and manage a homework hotline, discussion group, threaded discussion and/or email system for students and parents.</li> <li>• Analyze current changes in technologies and predict the effect those changes have on the workforce and society</li> </ul>

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<p>Technology Education 3.6.4. Grade 3</p>						
<p>C. Know physical technologies of structural design, analysis and engineering, finance, production, marketing, research and design.</p> <ul style="list-style-type: none"> <li>• Identify and group a variety of construction tasks.</li> <li>• Identify the major construction systems present in a specific local building.</li> <li>• Identify specific construction systems that depend on each other in order to complete a project.</li> <li>• Know skills used in construction.</li> <li>• Identify examples of manufactured goods present in the home and school.</li> </ul>		<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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<p>Technology Education 3.6.4. Grade 3</p>						
<ul style="list-style-type: none"> <li>• Identify basic resources needed to produce a manufactured item.</li> <li>• Identify basic component operations in a specific manufacturing enterprise (e.g., cutting, shaping, attaching).</li> <li>• Identify waste and pollution resulting from a manufacturing enterprise.</li> <li>• Explain and demonstrate the concept of manufacturing (e.g., assemble as set of papers or ball point pens sequentially, mass produce an object).</li> </ul>						<ul style="list-style-type: none"> <li>• Describe trends and possible future developments in technology.</li> <li>• Create technological design briefs to document problem solving.</li> <li>• Set up and manage a homework hotline, discussion group, threaded discussion and/or email system for students and parents.</li> <li>• Analyze current changes in technologies and predict the effect those changes have on the workforce and society</li> </ul>

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<p>Technology Education 3.6.4. Grade 3</p>						
<ul style="list-style-type: none"> <li>•Identify transportation technologies of propelling, structuring, suspending, guiding, controlling and supporting.</li> <li>•Identify and experiment with simple machines used in transportation systems.</li> <li>•Explain how improved transportation systems have changed society.</li> </ul>						

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Technology Devices 3.7.4. Grade 3						
A. Explore the use of basic tools, simple materials and techniques to safely solve problems. • Describe the scientific principles on which various tools are based. • Group tools and machines by their function. • Select and safely apply appropriate tools and materials to solve simple problems. •		<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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<p>B. Select appropriate instruments to study materials.</p> <ul style="list-style-type: none"> <li>• Develop simple skills to measure, record, cut and fasten.</li> <li>• Explain appropriate instrument selection for specific tasks.</li> </ul>						<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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<p>Technology Devices 3.7.4. Grade 3</p>						
<p>C. Identify basic computer operations and concepts.</p> <ul style="list-style-type: none"> <li>• Identify the major parts necessary for a computer to input and output data.</li> <li>• Explain and demonstrate the basic use of input and output devices (e.g., keyboard, monitor, printer, mouse).</li> <li>• Explain and demonstrate the use of external and internal storage devices (e.g., disk drive, CD drive).</li> </ul>	<ul style="list-style-type: none"> <li>• Students will demonstrate functional operation or technology components.</li> <li>• Students will use developmentally appropriate technology resources to access information and communicate electronically output devices.               <ul style="list-style-type: none"> <li>a. Use device in response to software (e.g., point and click, arrow and enter, return keys)</li> <li>b. Use keyboard effectively (e.g., knows location and function of keys, begins touch typing strategies)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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	<ul style="list-style-type: none"> <li>• Students will retrieve and save information (e.g., text documents, digital photos, music, videos)</li> <li>• Print documents, text, or images.</li> <li>• Students will demonstrate appropriate behavior of the computer, treat equipment and disks with respect.</li> <li>• Students will navigate through a CD-Rom.</li> <li>• Students can create an electronic bookmark.</li> </ul>					<ul style="list-style-type: none"> <li>• Describe trends and possible future developments in technology.</li> <li>• Create technological design briefs to document problem solving.</li> <li>• Set up and manage a homework hotline, discussion group, threaded discussion and/or email system for students and parents.</li> <li>• Analyze current changes in technologies and predict the effect those changes have on the workforce and society</li> </ul>

**WEST JEFFERSON HILLS SCHOOL DISTRICT  
TECHNOLOGY CURRICULUM**

**GRADE 3**

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<p>Technology Devices 3.7.4. Grade 3</p>						
<p>D. Use basic computer software.</p> <ul style="list-style-type: none"> <li>• Apply operating system skills to perform basic computer tasks.</li> <li>• Apply basic word processing skills</li> <li>• Identify and use simple graphic and presentation graphic materials generated by the computer.</li> <li>• Apply specific instructional software.</li> </ul>	<ul style="list-style-type: none"> <li>• Students will demonstrate functional operation of technology components.</li> <li>• Students will demonstrate correct ergonomic use of technology.</li> <li>• Students will use multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias)</li> <li>• Students will access information sources (e.g., CD-Roms, encyclopedias, pre-bookmarked sites)</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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TECHNOLOGY CURRICULUM**

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<p>Technology Devices 3.7.4 Grade 3</p>						
	<ul style="list-style-type: none"> <li>•Students will communicate electronically under teacher supervision (e.g., video, audio, email)</li> <li>•Students will use word processing to create a document and use developmentally appropriate editing tools.</li> <li>•Students will insert a graphic into a word processing document.</li> <li>•Students will use developmentally appropriate technology resources to access information and communicate electronically.</li> </ul>					<ul style="list-style-type: none"> <li>• Describe trends and possible future developments in technology.</li> <li>• Create technological design briefs to document problem solving.</li> <li>• Set up and manage a homework hotline, discussion group, threaded discussion and/or email system for students and parents.</li> <li>• Analyze current changes in technologies and predict the effect those changes have on the workforce and society</li> </ul>

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Technology Devices 3.7.4. Grade 3						
E. Identify basic computer communications systems. <ul style="list-style-type: none"> <li>• Apply a web browser</li> <li>• Apply basic electronic mail functions.</li> <li>• Use on-line searches to answer age appropriate questions.</li> </ul>	<ul style="list-style-type: none"> <li>• Students will communicate with others using telecommunications with support from teachers (e.g., email, video, Web pages)</li> <li>• Students will use technology tools for individual and collaborative communication activities to share products with audiences inside and outside the classroom.</li> <li>• Students will plan, design, and present an academic product to classroom or community (e.g., slideshow, drawings, video production)</li> <li>• Students will recognize electronic information sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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Technology Devices 3.7.4 Grade 3						
	<ul style="list-style-type: none"> <li>• Students will identify potential sources of information about a topic (e.g., video or cassette tapes, Web pages, CD-Rom)</li> <li>• Students will locate information in a resource selected by a teacher (e.g., Web page, CD-Rom)</li> <li>• Students will access CD-Roms on a network</li> <li>• Students will print documents on a network provider.</li> <li>• Student can open a Web browser.</li> <li>• Students will enter a uniform resource location.</li> </ul>					<ul style="list-style-type: none"> <li>• Describe trends and possible future developments in technology.</li> <li>• Create technological design briefs to document problem solving.</li> <li>• Set up and manage a homework hotline, discussion group, threaded discussion and/or email system for students and parents.</li> <li>• Analyze current changes in technologies and predict the effect those changes have on the workforce and society</li> </ul>

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Technology Devices 3.7.4 Grade 3						
	<ul style="list-style-type: none"> <li>•Students will use required software and complete required tasks for an online project.</li> <li>•Students can develop and implement a project using online resources.</li> </ul>					

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<p>Science, Technology and Science Endeavors 3.8.4 Grade 3</p>						
<p>A. Know that people select, create, and use science and technology and that they are limited by social and physical restraints.</p> <ul style="list-style-type: none"> <li>• Identify and describe positive and negative impacts that influence or result from new tools and techniques.</li> <li>• Identify how physical technology (e.g., construction, manufacturing, transportation, informational technology and biotechnology are used to meet human needs.</li> <li>• Describe how scientific discoveries and technological advancements are related.</li> </ul>	<ul style="list-style-type: none"> <li>• Students will analyze current changes in technologies and predict the effect those changes have on the workplace and society.</li> <li>• Students will demonstrate and practice safe and correct security procedures (e.g., protect password)</li> <li>• Students will discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.</li> <li>• Students will describe three to five uses of technology in daily life.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Cooperative Learning</li> <li>• Demonstration</li> <li>• Video Taping of student presentations</li> <li>• Simulation</li> <li>• Guided Practice</li> <li>• Role Playing</li> <li>• Experimental/ Inquiry Learning</li> <li>• Modeling</li> <li>• Flexible Grouping</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• CCC</li> <li>• Transparencies</li> <li>• Posters</li> <li>• Study Prints</li> <li>• United Streaming</li> <li>• Websites</li> <li>• Internet</li> <li>• Software</li> <li>• Black Line Masters</li> </ul>	<ul style="list-style-type: none"> <li>• Tests/Quizzes</li> <li>• Oral Presentation</li> <li>• Daily homework</li> <li>• Experiments</li> <li>• Journals</li> <li>• Notebooks</li> <li>• Essays</li> <li>• Student projects</li> <li>• Small group instruction</li> <li>• Individual instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Re-teach</li> <li>• Structure</li> <li>• Study Guides</li> <li>• Extended times</li> <li>• Alternative assignments</li> <li>• Peer/tutor</li> <li>• Planned courses for exceptional students shall be modified as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Manage a complex technology system such as a local area network, video distribution at a school, or lighting for a production.</li> <li>• Access different research components</li> <li>• Analyze and synthesize data</li> <li>• Organize/summarize charts and graphs</li> <li>• Apply metacognitive skills</li> <li>• Solve problems</li> <li>• Participate in simulations</li> <li>• Use a systems model to study and evaluate technology</li> </ul>

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<p>Science, Technology and Science Endeavors 3.8.4 Grade 3</p>						
<ul style="list-style-type: none"> <li>•Identify interrelationships among technology, people, and their world.</li> <li>•Apply the technological design process to solve a simple problem.</li> </ul>	<ul style="list-style-type: none"> <li>•Students will use technology resources for problem solving, self-directed learning, and extended learning activities.</li> <li>•Based on a problem selected by the teacher, use technology to:                             <ul style="list-style-type: none"> <li>-collect data</li> <li>-interpret data</li> <li>-express a solution</li> </ul> </li> </ul>					<ul style="list-style-type: none"> <li>• Describe trends and possible future developments in technology.</li> <li>• Create technological design briefs to document problem solving.</li> <li>• Set up and manage a homework hotline, discussion group, threaded discussion and/or email system for students and parents.</li> <li>• Analyze current changes in technologies and predict the effect those changes have on the workforce and society</li> </ul>

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<p>Science, Technology and Science Endeavors 3.8.4 Grade 3</p>						
<p>B. Know how human ingenuity and technological resources satisfy specific human needs and improve the quality of life.</p> <ul style="list-style-type: none"> <li>•Identify and distinguish between human needs and improving the quality of life.</li> <li>•Identify and distinguish between natural and human-made resources.</li> <li>•Describe a technological invention and the resources that were used to develop it.</li> </ul>						



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<p>Science, Technology and Science Endeavors 3.8.4 Grade 3</p>						
<p>C. Know the pros and cons of possible solutions to scientific and technological problems in society.</p> <ul style="list-style-type: none"> <li>• Compare the positive and negative expected and unexpected impacts of technological change.</li> <li>• Identify and discuss examples of technological change in the community that have both positive and negative impacts.</li> </ul>						