

**HPISD CURRICULUM
(TECH APPS GRADE 3-5)**

EST. NUMBER OF DAYS:

Unit Name	Strand 1: Creativity and innovation	
Unit Overview	The student uses creative thinking and innovative processes to construct knowledge and develop digital products.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> • Audience, format, and purpose are important when creating a product. • Discovery and exploration are important when creating. • Adaptation and flexibility during the creative process are necessary to complete products. 	
Concepts	creativity and innovation	
Guiding/Essential Questions	<ul style="list-style-type: none"> • What are a variety of resources to create original products? • How can learners for the future use technology to analyze trends and possibilities? • How can learners for the future develop steps for the creation of an innovative process or product? 	
Learning Targets	Performance Levels	Learning Progressions
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p><i>(A) create original products using a variety of resources;</i></p> <p><i>(B) analyze trends and forecast possibilities, developing steps for the creation of an innovative process or product; and</i></p>	

	<i>(C) use virtual environments to explore systems and issues.</i>	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		
National Assessment Connections		
Resources		

EST. NUMBER OF DAYS:

UNIT NAME	STRAND 2: Communication and collaboration	
Unit Overview	The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> ● Communication and collaboration with peers and experts exists on a local and global level. ● We learn about other people and cultures when collaborating. ● Audience, format, and purpose are important when collaborating on a project. 	
Concepts	communication and collaboration	
Guiding/Essential Questions	<ul style="list-style-type: none"> ● Utilizing different media individually and collaboratively, what products will students draft, edit, and publish? ● How can font attributes, color, white space, and graphics ensure that products are 	

	<p>appropriate for multiple communication media, including monitor display, web, and print?</p> <ul style="list-style-type: none"> ● How can personal learning communities and social environments allow for effective collaboration? ● How are students guided to select and use appropriate collaboration tools? ● What are ways to evaluate the product for relevance to the assignment or task? ● Are students given the opportunity to perform basic software application functions, including opening applications and creating, modifying, printing, and saving files? 	
Learning Targets	Performance Levels	Learning Progressions
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p><i>(A) draft, edit, and publish products in different media individually and collaboratively;</i></p> <p><i>(B) use font attributes, color, white space, and graphics to ensure that products are appropriate for multiple communication media, including monitor display, web, and print;</i></p> <p><i>(C) collaborate effectively through personal learning communities and social environments;</i></p> <p><i>(D) select and use appropriate collaboration tools;</i></p> <p><i>(E) evaluate the product for relevance to the assignment or task; and</i></p> <p><i>(F) perform basic software application functions, including opening applications and creating,</i></p>	

	<i>modifying, printing, and saving files.</i>	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		
National Assessment Connections		
Resources		

EST. NUMBER OF DAYS:

UNIT NAME	STRAND 3: Research and information fluency	
Unit Overview	The student acquires and evaluates digital content.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> ● People learn new information and find answers to questions using different resources. ● Some resources are more appropriate than others for different tasks. 	
Concepts	Research and information fluency	
Guiding/Essential Questions	<ul style="list-style-type: none"> ● What are various search strategies? ● What strategies are appropriate to specific search engines? ● What are methods of collecting and organizing information from a variety of formats, including text, audio, video, and graphics? ● How is information validated and evaluated for relevance and appropriateness? ● By what methods can we acquire information appropriate to specific tasks? 	

Learning Targets	Performance Levels	Learning Progressions
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p>(A) use various search strategies such as keyword(s); the Boolean identifiers and, or, and not; and other strategies appropriate to specific search engines;</p> <p>(B) collect and organize information from a variety of formats, including text, audio, video, and graphics;</p> <p>(C) validate and evaluate the relevance and appropriateness of information; and</p> <p>(D) acquire information appropriate to specific tasks.</p>	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		
National Assessment Connections		
Resources		

EST. NUMBER OF DAYS:

Unit Name	STRAND 4: Critical thinking, problem solving, and decision making	
Unit Overview	The student researches and evaluates projects using digital tools and resources.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> • Problems require a plan or solution. • Design is important to produce the final product. • Editing and revising your work throughout your project is crucial to the final product. 	

	<ul style="list-style-type: none"> It is important to share knowledge and present findings. 	
Concepts	Critical thinking, problem solving, and decision making	
Guiding/Essential Questions	<ul style="list-style-type: none"> What are ways to identify information regarding a problem and explain the steps toward the solution? What are some ways to collect, analyze, and represent data to solve problems while using tools such as word processing, databases, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages? Through self and peer review for relevance to the assignment or task, how can students evaluate student-created products? How will students evaluate technology tools applicable for solving problems? 	
Learning Targets	Performance Levels	Learning Progressions
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p><i>(A) identify information regarding a problem and explain the steps toward the solution;</i></p> <p><i>(B) collect, analyze, and represent data to solve problems using tools such as word processing, databases, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages;</i></p> <p><i>(C) evaluate student-created products through self and peer review for relevance to the assignment or task; and</i></p>	

	<i>(D) evaluate technology tools applicable for solving problems.</i>	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		
National Assessment Connections		
Resources		

EST. NUMBER OF DAYS:

UNIT NAME	STRAND 5: Digital citizenship	
Unit Overview	The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> ● Demonstrates honesty and integrity. ● Makes ethical decisions and choices. ● There are special rules for online behavior. ● Guard personal information. 	
Concepts	digital ethics and safety	
Guiding/Essential Questions	<ul style="list-style-type: none"> ● What are the expectations for adhering to positive social behavior in the digital environment? ● What actions are respectful of intellectual property of others? ● What behavior/actions show adherence to copyright law and the Fair Use Guidelines for Educational Multimedia is being followed? ● How do we protect and honor the individual 	

	<p>privacy of oneself and others?</p> <ul style="list-style-type: none"> • What are the rules of digital etiquette? • How will students follow rules for digital etiquette? • How do we practice safe, legal, and responsible use of information and technology? • How will we comply with fair use guidelines and digital safety rules? • Which trusted adults do I seek if I encounter inappropriate content? 	
Learning Targets	Performance Levels	Learning Progressions
	The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources.	<ul style="list-style-type: none"> • Digital Citizenship Characteristics • Acceptable Use Policy • Research strategies and techniques. • Correct Citation strategies appropriate for grade level.
Formative Assessments	<ul style="list-style-type: none"> • Students using age appropriate citation strategies. • When participating in age appropriate social learning platforms, students engage in positive social behaviors and digital etiquette. • While online, students engage in safe, legal, and responsible behavior while protecting privacy of self and others. 	
Summative Assessments	Acceptable Use Policy	Cyber Safety Quiz
	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p>(A) <i>adhere to acceptable use policies reflecting positive social behavior in the digital environment;</i></p> <p>(B) <i>respect the intellectual property of others;</i></p> <p>(C) <i>abide by copyright law and the Fair Use</i></p>	<p>example:</p> <ul style="list-style-type: none"> • LARK or Digital Citizenship lesson • Gaggle Cyber safety course

	<p><i>Guidelines for Educational Multimedia;</i> <i>(D) protect and honor the individual privacy of oneself and others;</i> <i>(E) follow the rules of digital etiquette;</i> <i>(F) practice safe, legal, and responsible use of information and technology; and</i> <i>(G) comply with fair use guidelines and digital safety rules.</i></p>	
Processes and Skills		
Topics	<ul style="list-style-type: none"> ● <i>Digital citizenship</i> ● <i>Respecting creative work-plagiarism</i> ● <i>Appropriate search strategies</i> ● <i>Positive social behavior in the digital environment</i> ● <i>Netiquette</i> ● <i>Digital footprint</i> ● <i>13 and younger not allowed on social media and similar sites (CIPA-Child Internet Protection Act)</i> ● <i>Safe adult</i> ● <i>Protect and honor the individual privacy of oneself and others</i> 	
Language of Instruction	<p>AUP intellectual property copyright Fair Use Guidelines for Educational Multimedia privacy password etiquette/netiquette cyberbullying digital citizenship spam secure digital footprint upstander/bystander plagiarism</p>	

	citation privacy policy avatar	
State Assessment Connections		
National Assessment Connections		
Resources	<p>SweetSearch http://www.sweetsearch.com/</p> <p>KidRex http://www.kidrex.org/</p> <p>Google Custom Search Engine https://www.google.com/cse/</p> <p>Common Sense Media https://www.commonensemedia.org</p> <p>LARK http://goo.gl/i0PJGg LARK poster http://goo.gl/c5JEIB</p> <p>Netsmartz http://www.netsmartz.org/Educators</p> <p>Brain Pop Jr http://www.brainpopjr.com/artsandtechnology/technology/internetsafety/</p> <p>Be Safe Online http://www.netsmartzkids.org/LearnWithClicky/BeSaf erOnline</p> <p>Hector's World http://goo.gl/1QHnaU</p>	

	<p>Online Safety http://www.brainpop.com/technology/computersandinternet/onlinesafety/preview.weml</p> <p>Email and IM http://www.brainpop.com/technology/computersandinternet/emailandim/preview.weml</p> <p>Cyberbullying http://www.brainpop.com/technology/computersandinternet/cyberbullying/</p> <p>Know the Rules http://www.netsmartzkids.org/LearnWithClicky/KnowTheRules</p> <p>Netiquette http://www.brainpop.com/socialstudies/culture/digital-etiquette/</p> <p>Build your wildself http://www.buildyourwildself.com</p> <p>Digital passport http://www.digitalpassport.org</p> <p>FEMA http://www.fema.gov</p>	
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EST. NUMBER OF DAYS:

UNIT NAME	STRAND 6: Technology operations and concepts	
Unit Overview	The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> ● Vocabulary is essential. ● Skills are required to complete tasks effectively. 	

Concepts	technology concepts, file management, network navigation, troubleshooting, keyboarding	
Guiding/Essential Questions	<ul style="list-style-type: none"> ● What are ways to demonstrate an understanding of technology concepts? ● What are appropriate ways to manipulate and manage files? ● What are the methods of navigating network files and applications both locally and remotely? ● How can you troubleshoot minor technical problems with hardware and software? ● What are proper touch keyboarding techniques and ergonomic strategies? 	
Learning Targets	Performance Levels	Learning Progressions
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p><i>(A) demonstrate an understanding of technology concepts, including terminology for the use of operating systems, network systems, virtual systems, and learning systems appropriate for Grades 3-5 learning;</i></p> <p><i>(B) manipulate files using appropriate naming conventions; file management, including folder structures and tagging; and file conversions;</i></p> <p><i>(C) navigate systems and applications accessing peripherals both locally and remotely;</i></p> <p><i>(D) troubleshoot minor technical problems with hardware and software using available resources such as online help and knowledge bases; and</i></p> <p><i>(E) use proper touch keyboarding techniques and ergonomic strategies such as correct hand and body positions and smooth and rhythmic keystrokes.</i></p>	

Processes and Skills		
Topics	<i>Technology Concepts and Terminology</i> <i>File Management</i> <i>Keyboarding</i> <i>Troubleshooting</i> <i>Peripherals</i>	
Language of Instruction	network network drives portal operating systems network systems virtual systems naming conventions file management tagging file conversions peripherals troubleshoot touch keyboarding file name file type remote platform file size compatibility hardware software folder right click scroll	
State Assessment Connections		
National Assessment Connections		
Resources	<i>Learning.com</i> http://learning.com <i>MIS Troubleshooting Videos</i> http://goo.gl/XCYhXj	

