

HPISD CURRICULUM
(TECHNOLOGY APPLICATIONS, GRADE 8)

EST. NUMBER OF DAYS:

UNIT NAME	UNIT 1: CREATIVITY AND INNOVATION	
Unit Overview	<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. 	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> • Learner of the future will be more successful if she or he can leverage a variety of technology to achieve learning objectives. • Technology can help explore and understand content so students can apply in a real world setting. 	
Concepts	CREATIVITY AND INNOVATION	
Guiding/Essential Questions	<ul style="list-style-type: none"> • What media should be used for this project? • What does student need to produce for the project? • What tools will help me with my project? • How will my project be presented? 	
	Performance Levels	Learning Progressions
Learning Targets		
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	§126.16. Technology Applications, Grade 8, <i>The student is expected to:</i>	

	<p><i>(A) identify, create, and use files in various formats, including text, raster and vector graphics, video, and audio files;</i></p> <p><i>(B) create, present, and publish original works as a means of personal or group expression;</i></p> <p><i>(C) explore complex systems or issues using models, simulations, and new technologies to develop hypotheses, modify input, and analyze results; and</i></p> <p><i>(D) analyze trends and forecast possibilities.</i></p>	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		
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UNIT NAME	UNIT 2: COMMUNICATION AND COLLABORATION	
Unit Overview	The student collaborates and communicates both locally and globally 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"> • How do you communicate in a digital world? • How do you connect and collaborate with a dynamic community? • Can you follow technical directions when learning a new tool? 	
	Performance Levels	Learning Progressions
Learning Targets		
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p>§126.16. Technology Applications, Grade 8, <i>The student is expected to:</i> <i>(A) create and manage personal learning networks to collaborate and publish with peers, experts, or others using digital tools</i></p>	

	<p><i>such as blogs, wikis, audio/video communication, or other emerging technologies;</i></p> <p><i>(B) communicate effectively with multiple audiences using a variety of media and formats; and</i></p> <p><i>(C) create and publish products using technical writing strategies.</i></p>	
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UNIT NAME	UNIT 3: RESEARCH AND INFORMATION FLUENCY	
Unit Overview	The student acquires, analyzes, and manages content from digital resources	
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. • Communication varies based on the intended audience 	
Concepts	Searching and Advanced searching skills, Ability to evaluate and verify resources. Determine the most appropriate search engine for the task.	
Guiding/Essential Questions	<ul style="list-style-type: none"> • How do I organize my investigation? • What search strategies will help students find the best information? • How will the students find reliable and valid information? • How does the student organize and communicate the information? 	
	Performance Levels	Learning Progressions
Learning Targets		
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	§126.16. Technology Applications, Grade 8, (A) create a research plan to guide inquiry;	

	<p><i>(B) plan, use, and evaluate various search strategies, including keyword(s) and Boolean operators;</i></p> <p><i>(C) select and evaluate various types of digital resources for accuracy and validity; and</i></p> <p><i>(D) process data and communicate results.</i></p>	
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EST. NUMBER OF DAYS:

UNIT NAME	UNIT 4: CRITICAL THINKING, PROBLEM SOLVING, AND DECISION MAKING	
Unit Overview	The student makes informed decisions by applying critical-thinking and problem-solving skills.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> ● Problems require a plan for solution. ● Design is important to produce the final product. ● Editing and revising your work throughout your project is crucial to the final product. ● It is important to share knowledge and present findings. ● Curiosity, questions and application of prior knowledge lead to solutions. 	
Concepts	CRITICAL THINKING, PROBLEM SOLVING, AND DECISION MAKING	
Guiding/Essential Questions	<ul style="list-style-type: none"> ● Can students identify questions pertinent to their investigation? ● Can the student find sufficient variety of information to make an informed decision? ● Can students connect their prior learning and apply it to their new knowledge? 	
	Performance Levels	Learning Progressions
Learning Targets		
Formative Assessments		
Summative Assessments		
	TEKS	Specifications
TEKS (Grade Level) / Specifications	§126.16. Technology Applications, Grade 8, <i>The student is expected to:</i>	

	<p><i>(A) identify and define relevant problems and significant questions for investigation;</i></p> <p><i>(B) plan and manage activities to develop a solution, design a computer program, or complete a project;</i></p> <p><i>(C) collect and analyze data to identify solutions and make informed decisions;</i></p> <p><i>(D) use multiple processes and diverse perspectives to explore alternative solutions;</i></p> <p><i>(E) make informed decisions and support reasoning; and</i></p> <p><i>(F) transfer current knowledge to the learning of newly encountered technologies.</i></p>	
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EST. NUMBER OF DAYS:

UNIT NAME	UNIT 5: DIGITAL CITIZENSHIP	
Unit Overview	The student practices safe, responsible, legal, and ethical behavior while using technology 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. • The digital environment necessitates effective management of your digital presence. 	
Concepts	Digital Safety, Netiquette, Copyright, AUP, Cyber Bullying	
Guiding/Essential Questions	<ul style="list-style-type: none"> • Can students cite their sources? • Do they understand fair use guidelines? • How do they manage their digital presence? • How do students protect themselves and others online? 	
	Performance Levels	Learning Progressions
Learning Targets	<ul style="list-style-type: none"> • Knows and applies copyright and fair use guidelines • Remains safe in a digital environment by following digital ethics, cyber safety and digital citizenship guidelines • Actively contributes to a positive digital environment by monitoring and reporting any negative activity. 	
Formative Assessments		
Summative Assessments		

	TEKS	Specifications
TEKS (Grade Level) / Specifications	<p>§126.16. Technology Applications, Grade 8</p> <p>(A) <i>understand, explain, and practice copyright principles, including current laws, fair use guidelines, creative commons, open source, and public domain;</i></p> <p>(B) <i>practice and explain ethical acquisition of information and standard methods for citing sources;</i></p> <p>(C) <i>practice and explain safe and appropriate online behavior, personal security guidelines, digital identity, digital etiquette, and acceptable use of technology; and</i></p> <p>(D) <i>understand and explain the negative impact of inappropriate technology use, including online bullying and harassment, hacking, intentional virus setting, invasion of privacy, and piracy such as software, music, video, and other media.</i></p>	
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UNIT NAME	UNIT 6: TECHNOLOGY OPERATIONS AND CONCEPTS	
Unit Overview	The student demonstrates a thorough understanding of technology concepts, systems, and operations.	
Generalizations/Enduring Understandings	<ul style="list-style-type: none"> • Each field of experience uses a different set of vocabulary. • Certain skills are more appropriate than others when accomplishing certain task. 	
Concepts	TECHNOLOGY OPERATIONS AND CONCEPTS	
Guiding/Essential Questions	<ul style="list-style-type: none"> • Do I know how to use the program I have been asked to use. If not, can I locate the resources necessary for me to learn skills? • Do I have skills that can be applied in many different settings? • Do I understand that learning is a life-long endeavor? • How do I effectively manage my resources? 	
	Performance Levels	Learning Progressions
Learning Targets	<ul style="list-style-type: none"> • Use correct terminology for a task • Select the correct tools, software and hardware, to complete projects • Know the basic steps to resolve technical issues. • Structure your files and information for quick access 	
Formative Assessments		
Summative Assessments		

	TEKS	Specifications
<p>TEKS (Grade Level) / Specifications</p>	<p>§126.16. Technology Applications, Grade 8, <i>The student is expected to:</i></p> <ul style="list-style-type: none"> <i>(A) define and use current technology terminology appropriately;</i> <i>(B) evaluate and select technology tools based on licensing, application, and support;</i> <i>(C) identify, understand, and use operating systems;</i> <i>(D) understand and use software applications, including selecting and using software for a defined task;</i> <i>(E) identify, understand, and use hardware systems;</i> <i>(F) apply troubleshooting techniques, including restarting systems, checking power issues, resolving software compatibility, verifying network connectivity, connecting to remote resources, and modifying display properties;</i> <i>(G) implement effective file management strategies such as file naming conventions, location, backup, hierarchy, folder structure, file conversion, tags, labels, and emerging digital organizational strategies;</i> <i>(H) evaluate how changes in technology throughout history have impacted various areas of study;</i> <i>(I) evaluate the relevance of technology as it applies to college and career readiness, life-long learning, and daily living;</i> <i>(J) use a variety of local and remote input sources;</i> 	

	<p><i>(K) use keyboarding techniques and ergonomic strategies while building speed and accuracy;</i></p> <p><i>(L) create and edit files with productivity tools, including:</i></p> <ul style="list-style-type: none"> <i>(i) a word processing document using digital typography standards such as page layout, font formatting, paragraph formatting, mail merge, and list attributes;</i> <i>(ii) a spreadsheet workbook using advanced computational and graphic components such as complex formulas, advanced functions, data types, and chart generation;</i> <i>(iii) a database by manipulating components, including defining fields, entering data, and designing layouts appropriate for reporting; and</i> <i>(iv) a digital publication using relevant publication standards and graphic design principles;</i> <p><i>(M) plan and create non-linear media projects using graphic design principles; and</i></p> <p><i>(N) integrate two or more technology tools to create a new digital product.</i></p>	
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