HPISD CURRICULUM

TECHNOLOGY APPLICATIONS, K-2

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	● 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	● Can you make something new from what you have already learned? ● Can you use different tools to show your learning? ● Can you learn by exploring technology tools? ● Can you plan and complete activities? ● Can you think about and change your plan to complete your activities?	
Learning Targets	**Performance Levels**	**Learning Progressions**
Formative Assessments		
Summative Assessments		
	TEKS	***Specifications***
TEKS ***(Grade Level)*** **/ Specifications**	***(1) The student is expected to:*** ***(A) apply prior knowledge to develop new ideas, products, and processes;*** ***(B) create original products using a variety of resources;***	

	(C) explore virtual environments, simulations, models, and programming languages to enhance learning; ***(D) create and execute steps to accomplish a task; and*** ***(E) evaluate and modify steps to accomplish a task.***	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		
National Assessment Connections		
Resources	***http://globaldigitalcitizen.com/21st-century-fluencies/creativity-fluency/*** ***http://www.gifted.uconn.edu/sem/semart13.html*** ***Dr. Renzulli***	

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EST. NUMBER OF DAYS:

UNIT NAME	**STRAND 2: COMMUNICATION AND COLLABORATION**	
Unit Overview	Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning.	
Generalizations/Enduring Understandings	• 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, collaboration	
Guiding/Essential Questions	• Can you share ideas with your school, community, and world using technology tools?	

	• Can your learn about other cultures by communicating and collaborating with others using technology tools? • Can you make informed decisions about font, color, pictures, and animation to share what you have learned with different groups of people? • Can you save, locate, and apply projects you have made using technology tools?	
Learning Targets	**Performance Levels**	**Learning Progressions**
Formative Assessments		
Summative Assessments		
	TEKS	***Specifications***
TEKS *(Grade Level)* / Specifications	*(2) The student is expected to:* *(A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally;* *(B) participate in digital environments to develop cultural understanding by interacting with learners of multiple cultures;* *(C) format digital information, including font attributes, color, white space, graphics, and animation, for a defined audience and communication medium; and* *(D) select, store, and deliver products using a variety of media, formats, devices, and virtual environments.*	
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	Research and information fluency. The student acquires and evaluates digital content.	
Generalizations/Enduring Understandings	● 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	● Can you find answers to questions using technology tools? ● Can you use technology tools to learn new facts? ● Can you decide if facts are useful?	
Learning Targets	**Performance Levels**	**Learning Progressions**
Formative Assessments		
Summative Assessments		
	TEKS	***Specifications***
TEKS ***(Grade Level)*** **/ Specifications**	*(3) The student is expected to:* ***(A) use search strategies to access information to guide inquiry;*** ***(B) use research skills to build a knowledge base regarding a topic, task, or assignment; and*** ***(C) evaluate the usefulness of acquired digital content.***	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		

National Assessment Connections		
Resources		

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TECHNOLOGY APPLICATIONS, K-2

EST. NUMBER OF DAYS:

UNIT NAME	**STRAND 4: CRITICAL THINKING, PROBLEM SOLVING, AND DECISION MAKING**	
Unit Overview	Critical thinking, problem solving, and decision making. The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources.	
Generalizations/Enduring Understandings	● 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. ● It is important to share knowledge and present findings.	
Concepts	critical thinking, problem solving, decision making	
Guiding/Essential Questions	● Can you share what you know, what you don't know, and what you need to know to solve a problem? ● Can you choose the best technology tool for your activity? ● Can you check your work? ● Can you share what you know using technology tools?	
Learning Targets	**Performance Levels**	**Learning Progressions**
Formative Assessments		
Summative Assessments		
	TEKS	***Specifications***
TEKS *(Grade Level)* / Specifications	*(4) The student is expected to:*	

	(A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem; *(B) evaluate the appropriateness of a digital tool to achieve the desired product;* *(C) evaluate products prior to final submission; and* *(D) collect, analyze, and represent data using tools such as word processing, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages.*	
Processes and Skills		
Topics		
Language of Instruction		
State Assessment Connections		
National Assessment Connections		
Resources		

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TECHNOLOGY APPLICATIONS, K-2

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	● Demonstrates honesty and integrity. ● Makes ethical decisions and choices. ● There are special rules for online behavior. ● Guard personal information. ● If I see something inappropriate I will tell an adult.	
Concepts	digital citizenship	

Guiding/Essential Questions	● Can you show that you know how to follow the rules for using technology tools? ● Can you follow the rules for copyright and being safe on the internet? ● Can you be responsible with programs, words, pictures, sounds, and movies found while using technology tools? ● Who can you go to if you find something inappropriate?	
Learning Targets	**Performance Levels**	**Learning Progressions**
	● Demonstrates digital classroom rules ● Demonstrates internet and computer knowledge ● Uses technology safely ● Uses citations and copyright rules when appropriate	1. Digital classroom rules 2. Internet/Computer basics 3. Safety 4. AUP 5. Copyright & Citations
Formative Assessments		
Summative Assessments		
	TEKS	***Specifications***
TEKS *(Grade Level)* **/ Specifications**	*(5) The student is expected to:* ***(A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment;*** ***(B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws; and*** ***(C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.***	Use appropriate search strategies and citations for copyright rules.
Processes and Skills	● Understand responsibilities of AUP ● Following digital classroom rules ● Getting approval from safe adults ● Identifying personal information and safe adults ● Knowledge and vocabulary for internet use ● Giving credit to other resources ● Paraphrasing vs. Plagiarism ● Citing work ● Using (re-using) search filters for pictures	
Topics	digital citizenship and safety, AUP, copyright	

Language of Instruction	AUP privacy password digital citizenship netiquette copyright safe adult personal information appropriate/inappropriate paraphrasing plagiarism	
State Assessment Connections		
National Assessment Connections		
Resources	***https://www.commonsensemedia.org/*** ***http://www.learning.com/***	

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EST. NUMBER OF DAYS:

UNIT NAME	**STRAND 6: TECHNOLOGY OPERATIONS AND CONCEPTS**	
Unit Overview	Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations.	
Generalizations/Enduring Understandings	• Vocabulary is essential. • Skills are required to complete tasks effectively.	
Concepts	technology terminology and concepts, file management, keyboarding	
Guiding/Essential Questions	• Can you use technology vocabulary correctly? • Can you use the correct technology tool to save, find, organize, and solve problems? • Can you open a program and make, change, print, and save the activities you create? • Can you use tools like the keyboard, mouse, printer, and cloud/drive when using technology?	

	● Can you find keys on the left side of the keyboard with your left hand and right side of the keyboard with your right hand? ● Can you use letters, numbers, punctuation, symbols, spacebar, shift, tab, and enter when you type? ● Can you find and use the help section while using technology tools?	
Learning Targets	**Performance Levels**	**Learning Progressions**
Formative Assessments		
Summative Assessments		
	TEKS	***Specifications***
TEKS ***(Grade Level)*** **/ Specifications**	*(6) The student is expected to:* *(A) use appropriate terminology regarding basic hardware, software applications, programs, networking, virtual environments, and emerging technologies;* *(B) use appropriate digital tools and resources for storage, access, file management, collaboration, and designing solutions to problems;* *(C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files;* *(D) use a variety of input, output, and storage devices;* *(E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten-Grade 2 learning;* *(F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning; and* *(G) use the help feature online and in applications.*	
Processes and Skills	● Learning and identifying parts of a computer ● Knowing the difference between hardware and software ● Learning and identifying software features and operating systems ● Navigating network tools and files	

	• Understanding logins • Performing basic functions: opening, creating, modifying, printing, saving • Demonstrating proper keyboard techniques • Navigating the internet and demonstrating knowledge of internet processes	
Topics		
Language of Instruction	Commands: open, save, new, print hardware/software application menu bar: file, view, edit, insert, tools, help tool bar: formatting tools (font, color, size, style), alignment tools (centered, left, right, justified, columns) task bar: Chrome, Windows, Start Menu, folder, system tray minimize maximize close/x out Internet: URL, website, search engine, search box, database, omnibox network drives home screen/home button (iPad) CPU monitor storage devices: flashdrive, cd, dvd, cloud keyboard mouse USB local/network Devices: desktop, laptop, tablet, iPad, chromebook, mobile device keyboarding: home row, letters, numbers, punctuation, symbols, enter, spacebar, tab, Ctrl +Alt+Del, shift Login: username, password	
State Assessment Connections		
National Assessment Connections		
Resources	***http://www.learning.com/***	