

Master Glossary with Strand and Grade Level Frequency

Technology Applications TEKS Guide

Glossary Term	Definition	Strand(s)	Grade Level(s)
abstraction	the principle of ignoring those aspects of a subject that are not relevant to the current purpose in order to concentrate solely on those that are	Computational Thinking	K, 1, 2, 3, 4, 5, 6, 7, 8
acceptable use policy (AUP)	the set of rules governing how digital devices and networks may be used	Digital Citizenship	K, 1, 2, 3, 4, 5, 6, 7, 8
algorithm	a process, or list of steps, followed to solve a problem or complete a task	Computational Thinking	K, 1, 2, 3, 4, 5, 6, 7, 8
augmented reality	a technology that combines the real world with computer-generated content, such as visuals, sounds, and other sensory elements.	Practical Technology Concepts	4
bar graph	a graphic means of quantitative comparison by rectangles with lengths proportional to the measure of the data or things being compared	Data Literacy	2
binary number system	a positional, base-two representation of numbers using only 1 and 0	Data Literacy	7, 8
block-based programming	a visual programming language that uses graphical blocks to build sequences of code	Computational Thinking	5, 6
Boolean data	a type of data that stores only two types of values, such as true or false	Data Literacy	8
Boolean expression	an expression that always yields two values, either true or false.	Data Literacy	6

Boolean operator	an operator, such as AND, OR, or NOT, that connects words together to either narrow or broaden a set of results in a search	Data Literacy	5, 6, 7, 8
cloud application	a program that is hosted on remote servers and accessed over the internet, as opposed to being installed on a local device	Practical Technology Concepts	6
cloud architecture	the infrastructure that combines hardware, software, and other components to create a cloud computing environment	Practical Technology Concepts	6, 7, 8
code	instructions for a computer (as within a piece of software); the symbolic arrangement of statements or instructions in a computer program, or the set of instructions in such a program;	Computational Thinking	K, 1, 2, 5, 6, 7, 8
conditional	a step or event that allows for the execution of an additional step based on certain criteria, such as blocks of code in computer science	Computational Thinking	2, 3, 4, 5, 6
cookie	a small file or part of a file stored on a World Wide Web user's computer, created and subsequently read by a website server, and containing personal information	Digital Citizenship	4
copyright law	the body of laws and regulations that govern the exclusive rights of an author or creator to make copies, license, and otherwise exploit their literary, musical, or artistic work	Digital Citizenship	3, 4, 5, 6
creative commons	a set of various licenses that allow people to share their copyrighted work to be copied, edited, built upon, etc., while retaining the copyright to the original work (often used attributively)	Digital Citizenship	6

cyberbullying	bullying that involves the use of any electronic communication device, including through the use of a cellular or other type of telephone, a computer, a camera, electronic mail, instant messaging, text messaging, a social media application, an Internet website, or any other Internet-based communication tool	Digital Citizenship	1, 2, 3, 4, 5, 6, 7, 8
cybersecurity	precautions taken to guard against crime that involves the internet, especially unauthorized access to computer systems and data connected to the internet	Digital Citizenship	5, 6, 8
cybersecurity attack	any kind of malicious activity that attempts to collect, disrupt, deny, degrade, or destroy information system resources or the information itself	Digital Citizenship	7
data	factual information (such as observations, measurements, or statistics) used as a basis for reasoning, discussion, or calculation; often includes both useful and irrelevant or redundant information and must be processed to be meaningful	Computational Thinking	3, 4, 5, 6
data	factual information (such as observations, measurements, or statistics) used as a basis for reasoning, discussion, or calculation; often includes both useful and irrelevant or redundant information and must be processed to be meaningful	Data Literacy Digital Citizenship Practical Technology Concepts	K, 1, 2, 3, 4, 5, 6, 7, 8
data storage	means that files and documents are recorded digitally and saved in a system for future use	Practical Technology Concepts	6, 7, 8

data visualization	the practice of translating information into a visual context, such as a map or graph, to make data easier for the human brain to understand and pull insights from	Data Literacy	2, 5
debug	to eliminate errors in or malfunctions of	Computational Thinking	3, 4, 6, 7
decompose	breaking a problem into smaller pieces, or subprocesses, to describe, understand, or better solve the problem	Computational Thinking	K, 1, 2, 3, 4, 5, 6, 7, 8
digital etiquette	electronic standards of conduct or procedures that have to do with thinking about others when using digital devices	Digital Citizenship	3, 4, 5, 6, 7, 8
digital footprint	one's unique set of digital activities, actions, and communications that leave a data or digital trace on the internet or on a computer or other digital device and can identify the particular user or device	Digital Citizenship	3, 4, 5, 6, 7, 8
digital identity	the collection of data about an individual, organization or electronic device that exists online	Digital Citizenship	3
digital tool	a software, application, computer program, or other electronic device designed to perform a specific task, improve a function, or facilitate a process through digital technology	Data Literacy	5
emerging technologies	technologies that are currently developing, or that are expected to be available in the near future	Creativity and Innovation	3, 4, 5, 6, 7
ergonomic	designed to be comfortable, safe, and efficient to use, especially in or as a work environment	Practical Technology Concepts	K, 1, 2, 3, 4, 5
fair use	reasonable and limited use of copyrighted material so as not to infringe upon copyright	Digital Citizenship	6

file	a medium used for saving and managing data in a computer system	Practical Technology Concepts	3, 4, 5, 6, 7, 8
file naming convention	a set of established rules for naming files within a system, designed to clearly describe the content of each file and its relationship to other files	Practical Technology Concepts	6, 7, 8
flowchart	a diagram that shows step-by-step progression through a procedure or system especially using connecting lines and a set of conventional symbols	Computational Thinking	7
hacking	the act of identifying and then exploiting weaknesses in a computer system or network, usually to gain unauthorized access to personal or organizational data	Digital Citizenship	6
hierarchy	an organizational system in which each lower level is entirely subsumed in the successive upper level; each upper level is made up of one or more entire lower levels	Practical Technology Concepts	6, 7, 8
identity theft	the fraudulent appropriation and use of someone's identifying or personal data or documents, such as a credit card	Digital Citizenship	6
innovation	a new way of doing something; a new product or way of thinking	Creativity and Innovation Data Literacy	8
input	data to be entered into a computer for processing; information fed into a data processing system or computer	Practical Technology Concepts	6
integers	the natural numbers, their opposites, and zero	Data Literacy	8
intellectual property	property that results from original creative thought, as patents, copyright material, and trademarks; an individual product of original creative thought	Digital Citizenship	6, 7, 8

internet	a global network of linked computers, servers, phones, and smart appliances that communicate with each other using the transmission control protocol (TCP) standard to enable the fast exchange of information and files, along with other types of services	Practical Technology Concepts	3, 5
intranet	a network operating like the internet but having access restricted to a limited group of authorized users	Practical Technology Concepts	3, 5
iteration	repetition of steps within a program to create efficiency	Computational Thinking	6, 7, 8
keyword	a word used to classify or organize digital content, or to facilitate an online search for information	Data Literacy	1, 2, 4, 5, 6, 7, 8
learning management system	a software application used to organize and distribute e-learning materials, assignments, and assessments; track and calculate grades; and facilitate communication among students and teachers	Practical Technology Concepts	3, 5
limiter	a tool that allows a user to limit their search results by certain criteria such as date of publication, material type, or language	Data Literacy	5, 6, 7, 8
loop	a sequence of instructions that is repeated until a prescribed condition, such as agreement with a data element or completion of a count, is satisfied	Computational Thinking	2, 3, 4, 5, 6
malware	an inclusive term for any software with a subversive purpose	Digital Citizenship	6
mental agility	the capacity to respond to events in a flexible way and be able to move quickly between different ideas	Creativity and Innovation	2, 3, 4, 5

metacognition	awareness or analysis of one's own learning or thinking processes	Creativity and Innovation	3, 4, 5
nested loop	a loop statement inside another loop statement	Computational Thinking	7, 8
network	a system of computers and peripherals that are able to communicate with each other; a system containing any combination of computers, computer terminals, printers, audio or visual display devices, or telephones interconnected by telecommunication equipment or cables	Practical Technology Concepts	3, 5
open source	pertaining to or denoting software whose source code is available free of charge to the public to use, copy, modify, sublicense, or distribute; pertaining to or denoting a product or system whose origins, formula, design, etc., are freely accessible to the public	Digital Citizenship	6
operating system	the collection of software that directs a computer's operations, controlling and scheduling the execution of other programs, and managing storage, input/output, and communication resources	Practical Technology Concepts	3, 5
output	the information produced by a computer; the result of data-processing activity when it is presented external to the system, or the process of presenting the data externally	Practical Technology Concepts	6
pattern	a combination of qualities, acts, tendencies, etc., forming a consistent or characteristic arrangement	Computational Thinking	K, 1, 2, 3, 4, 5, 6, 7, 8

phishing	a form of fraud that involves masquerading as a trustworthy entity in an electronic communication (often using forged emails or websites) in order to persuade users to disclose sensitive information such as usernames, passwords, or credit card details	Digital Citizenship	6
pictograph	a diagram representing statistical data by pictorial forms	Data Literacy	2
presentation tools	a category of software used to create content where information is represented in a graphical or visual way to show information to an audience in a format such as a slide deck	Practical Technology Concepts	3
prototype	a simplified version of a potential solution or product	Creativity and Innovation	7, 8
pseudocode	a step-by-step description of an algorithm that uses English text rather than programming language	Computational Thinking	8
public domain	the status of a work, such as a program or document, where the author has irrevocably waived any copyright in the work so that it can be freely copied and used; the status of a literary work or an invention whose copyright or patent has expired or that never had such protection	Digital Citizenship	6
qualitative data	descriptive data that are expressed in words or visuals	Data Literacy	5
quantitative data	data that can be counted or measured	Data Literacy	5
raster	a set of horizontal lines composed of individual pixels, used to form an image on a screen or in matrix printing	Practical Technology Concepts	8
real numbers	the set of all rational and irrational numbers	Data Literacy	8

scholarly inquiry	a systematic process of exploring issues and practices through data collection and analysis to generate findings that are supported by theory and evidence.	Practical Technology Concepts	8
sequence	the following of one thing after another; succession	Computational Thinking	K, 1, 2, 3, 4, 5, 6, 7, 8
short-range wireless technology	technology that allows devices to communicate within a range of a few centimeters to several meters.	Practical Technology Concepts	3, 5
spreadsheet	a computer program that allows the entry, calculation, and storage of data in columns and rows	Practical Technology Concepts	3
storyboard	a visual tool that organizes a sequence of illustrations or images to tell a story or explain a process	Creativity and Innovation	K, 1
text-based programming	a type of coding that involves writing lines of code in a programming language to tell a computer what to do	Computational Thinking	6
troubleshoot	to discover and eliminate problems or malfunctions in (software, mechanical equipment, etc.)	Computational Thinking	2
user account	a digital location that stores a computer username, password, and other information	Digital Citizenship	K, 1
variable	a quantity or function that may assume any given value or set of values; a unit of storage that can be modified during program execution	Computational Thinking	2, 3, 4, 5, 6, 7, 8
vector graphic	a computer image that is stored in memory as lines rather than a series of dots, allowing it to be rotated or proportionally scaled	Practical Technology Concepts	8

virtual reality	the use of computer modeling and simulation that enables a person to interact with an artificial three-dimensional (3-D) visual or other sensory environment.	Practical Technology Concepts	4
word processor	a computer program used to write and revise documents, compose the layout of the text, and preview on a computer monitor how the printed copy will appear	Practical Technology Concepts	3