Alaska Computer Science Standards

Vocabulary Word List

Grade 6-8

This is vocab that is used with the [Code program](https://studio.code.org) (code.org)

**Vocabulary Word Definition**

**Abstraction** a simplified representation of something more complex. Abstractions allow you to hide details to help you manage complexity, focus on relevant concepts, and reason about problems at a higher level.

**Algorithm** A list of steps to finish a task.

**Analog** Any continuously changing signal that is not restricted to finite set of values. For example, the wave forms of spoken words are an analog signal.

**Animation** a series of images that create the illusion of motion by being shown rapidly one after the other

**ASCII** American Standard Code for Information Interchange; the universally recognized raw text format that any computer can understand

**Array** A data structure in JavaScript used to represent a list

**Behavior** An action that a sprite performs continuously until it’s told to stop.

**Binary** A way of representing information using only two options.

**Binary Alphabet** The two options used in your binary code.

**Bit** A contraction of "Binary Digit"; the single unit of information in a computer, typically represented as a 0 or 1

**Boolean** A single value of either TRUE or FALSE

**Boolean Expression** in programming, an expression that evaluates to True or False.

**Bug** Part of a program that does not work correctly.

**Circuit** A device that provides a path for an electric current to flow, often modifying that current. In computers, circuits allow for simple logical and mathematical operations using electricity.

**Citation** A quotation from or reference to a book, paper, or author, especially in a scholarly work.

**Click** Press the mouse button

**Code** (v) to write code, or to write instructions for a computer.

**Command** An instruction for the computer. Many commands put together make up algorithms and computer programs.

**Comment** A note in the source code of a computer program that helps explain the code to people who read it

**Condition** A statement that a program checks to see if it is true or false. If true, an action is taken. Otherwise, the action is ignored.

**Conditionals** Statements that only run under certain conditions.

**Constant** A variable used throughout a program that never changes value

**Copyright** the exclusive legal right to print, publish, perform, film, or record literary, artistic, or musical material, and to authorize others to do the same

**Creative Common**  A collection of public copyright licenses that enable the free distribution of an otherwise copyrighted work, used when an author wants to give people the right to share, use, and build upon a work that they have created

**Critique** To critically evaluate in a detailed and constructive manner

**Crowdsourcing** Getting help from a large group of people to finish something faster

**CSS** Cascading Style Sheets; a language used to describe how HTML elements should be styled

**CSS Class** An identifier that allows multiple elements in an HTML document to be styled in the same way

**CSS Selector** the part of a CSS rule-set that defines which HTML elements the style should be applied to

**Cyberbully** Using technology tools to deliberately upset someone else.

**Cyberbullying** Doing something on the internet, usually again and again, to make another personal feel angry, sad, or scared.

**Debugging** Finding and fixing problems in an algorithm or program.

**Decode** to change how information is represented so that it can be read by a person

**Decrypt**:to change information so that its hidden meaning is shown

**Define** Figure out the details of the problems that you are trying to solve

**Digital** Data or signals represented by a finite number of values. Analog signals (which can have infinite values) must be converted to digital in order to be computed with

**Digital Citizen** Someone who acts safely, responsibly, and respectfully online

**Digital Footprint** The collected information about an individual across multiple websites on the Internet.

**DNS** short for Domain Name System, this system translates domain names (like example.com) to IP addresses (like 93.184.216.34)

**Double-Click** Press the mouse button very quickly

**Drag** Click your mouse button and hold as you move the mouse pointer to a new location

**Drop** Release your mouse button to "let go" of an item that you are dragging

**DSL/Cable** A method of sending information using telephone or television cables.

**Empathy** In design, paying attention to a user's feelings and needs when designing a product.

**Encode**:to change how information is represented so that it can be read by a computer

**Encrypt** to change information so that its meaning is hidden

**Event**:An action that causes something to happen.

**Expression** Any valid unit of code that resolves to a value

**Feature** An individual functional element of a software item, such as the ability to do something new, work across multiple platforms, or perform more efficiently

**Fiber Optic Cable** A connection that uses light to transmit information

**For Loop** Loops that have a predetermined beginning, end, and increment (step interval).

**Function** A named group of programming instructions. Functions are reusable abstractions that reduce the complexity of writing and maintaining programs

**Frame** a single image within an animation

**Frame Rate** the rate at which frames in an animation are shown, typically measured in frames per second

**Frustrated**:Feeling annoyed or angry because something is not the way you want it.

**Heading** A title or summary for a document or section of a document.

**HTML** Hypertext Markup Language, a language used to create web pages

**HTML Element** A piece of a website, marked by a start tag and often closed with an end tag

**HTML Tag** The special set of characters that indicates the start and end of an HTML element and that element's type

**Hyperlink** A link from a HTML file to another location or file, typically activated by clicking on a highlighted word or image on the screen.

**If-Statement** The common programming structure that implements "conditional statements".

**Internet** A group of computers and servers that are connected to each other

**IP Address** A number assigned to any item that is connected to the Internet

**Identity Theft** When a thief steals someone’s private information in order to pretend to be that person.

**Indentation** The placement of text farther to the right or left of the surrounding text, making it easier to understand the program's structure

**Innovation** A new or improved idea, device, product, etc, or the development thereof

**Input** A device or component that allows information to be given to a computer

**Intellectual Property** A work or invention that is the result of creativity, such as a piece of writing or a design, to which one has rights and for which one may apply for a patent, copyright, trademark, etc.

**Loop** The action of doing something over and over again.

**Models and Simulations** a program which replicates or mimics key features of a real world event in order to investigate its behavior without the cost, time, or danger of running an experiment in real life.

**Online** Connected to the internet

**Output** Any device or component that receives information from a computer

**Packets** Small chunks of information that have been carefully formed from larger chunks of information.

**Parameter** An extra piece of information passed to a function to customize it for a specific need

**Persistence** Trying again and again, even when something is very hard.

**Personal Information** Information that can’t be used to identify you

**Pixel** short for "picture element", the fundamental unit of a digital image, typically a tiny square or dot that contains a single point of color of a larger image

**Private Information** Information that can be used to identify you

**Prepare** Figure out the details of the problems that you are trying to solve

**Program** An algorithm that has been coded into something that can be run by a machine

**Programming** The art of creating a program

**Property** Attributes that describe an object's characteristics

**Prototype** A first or early model of a product that allows you to test assumptions before developing a final version.

**Reflect** Carefully think back on something with the intention of improving the outcome in the future

**Register (Online)** To enter your information in order to sign up and get access to a website.

**Relevant** Closely connected or appropriate to the matter at hand

**Repeat** Do something again

**Search Engine** A program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on the World Wide Web

**Sequencing** Putting commands in correct order so computers can read the commands.

**Servers** Computers that exist only to provide things to others

**Sprite** A graphic character on the screen with properties that describe its location, movement, and look.

**Trustworthy** Able to be relied on as honest or truthful

**Try** Attempt to do something

**Until** A command that tells you to do something only up to the point that something becomes true.

**Usability** How easy, efficient, and satisfying it is to use a human-made object or device (including software)

**User** Someone who uses an object, including software and hardware.

**User Interface** The visual elements of a program through which a user controls or communicates with the application. Often abbreviated UI.

**URL** An easy-to-remember address for calling a web page (like www.code.org)

**Variable** A placeholder for a piece of information that can change.

**Website** A collection of interlinked web pages on the World Wide Web

**Website Content** The raw text, images, and other elements included in a web page

**Website Structure** The purpose of different pieces of content in a web page, used to help the computer determine how that content should be displayed

**While Loop** A loop that continues to repeat while a condition is true.

**Wi-Fi** A wireless method of sending information using radio waves.

**Whitespace** Any character that shows up as a blank space on the screen, such as a space, a tab, or a new line; helps separate different parts of the document to make it easier to read