































The Internet

1.1.1		Innovation	A novel or improved idea, device, product, etc, or the development thereof.
1.1.3		Bit	A contraction of "Binary Digit". A bit is the single unit of information in a computer, typically represented as a 0 or 1.
1.1.3		Bit rate	(sometimes written bitrate) the number of bits that are conveyed or processed per unit of time. e.g. 8 bits/sec.
1.1.3		Protocol	A set of rules governing the exchange or transmission of data between devices.
1.1.3		Bandwidth	Transmission capacity expressed in bits/second
1.1.3		Latency	Time it takes for a bit to travel from sender to receiver
1.1.5		Binary Numbers	Numbers expressed in the binary numeral system or base-2 numeral system which represents numeric values using two different symbols: typically 0 (zero) and 1 (one).
1.1.7		ASCII	ASCII - American Standard Code for Information Interchange. ASCII is the universally recognized raw text format that any computer can understand.
1.1.7		code	(v) to write code, or to write instructions for a computer.

1.2.8		IETF	Internet Engineering Task Force - develops and promotes voluntary Internet standards and protocols, in particular the standards that comprise the Internet protocol suite (TCP/IP).
1.2.8		Internet	A group of computers and servers that are connected to each other.
1.2.8		Net Neutrality	The principle that all Internet traffic should be treated equally by Internet Service Providers.
1.2.8		RFC	Request for comments
1.2.8		Moore's Law	Moore's law states that every 18 months or so, computers and digital technology will double in speed and capacity while the costs get cut in half. So, for example: If something costs \$200 now, in about a year you can have the same thing for \$100, or something twice as good for \$200.
1.2.9		IP address	A number assigned to any item that is connected to the Internet.
1.2.9		Packets	Small chunks of information that have been carefully formed from larger chunks of information.
1.2.10		Redundancy	This means if one system goes down, the connection between other systems will not be broken.
1.2.11		TCP	Transmission Control Protocol - provides reliable, ordered, and error-checked delivery of a stream of packets on the internet. TCP is tightly linked with IP and usually seen as TCP/IP in writing.

1.2.11		Fault tolerance	Property that enables a system to continue operating properly in the event of the failure of (or one or more faults within) some of its components.
1.2.12		DNS	The service that translates URLs to IP addresses.
1.2.12		Domain name	An identification string that defines a realm of administrative autonomy, authority or control within the Internet. Domain names are formed by the rules and procedures of the Domain Name System (DNS). Any name registered in the DNS is a domain name.
1.2.12		Subdomain	A domain that is part of a larger domain
1.2.12		DoS	Denial of Service - an attempt to shut down a website or server by flooding it with requests.
1.2.12		DDoS	Distributed Denial of Service – This is a type of denial of service in which the requests come from hundreds or thousands of IP addresses.
1.2.12		DNS Spoofing	a form of computer hacking in which corrupt Domain Name System data is introduced into a DNS, causing the name server to return an incorrect IP address, which results in diverting traffic to the attacker's computer (or any other computer).
1.2.13		HTTP	HyperText Transfer Protocol - the protocol used for transmitting web pages over the Internet
1.2.13		URL	An easy-to-remember address for calling a web page (like www.code.org).
1.2.13		Abstraction	Reducing information and detail to focus on essential characteristics.
1.2.13		Server	A computer that awaits and responds to requests for data
1.2.13		Client	A computer that requests data stored on a server