Networking and Internet Infrastructure Lesson Plan

Purpose: to help students understand how data is transmitted from one user to another through and network or Internet.

CD.L3B-04 Describe the issues that impact network functionality (e.g., latency, bandwidth, firewalls, server capability).

Learning Objectives

Students will be able to identify components of a local area network within an organization and determine how to most economically expand systems and redistribute configurations to avoid bottlenecks and keep down the total cost of ownership.

Students will understand how communication is enabled on different levels of networking and the hierarchy involved in the Internet at large.

Vocabulary

client computer	print server	WAN
network	email server	MAN
sub-network	network server	PAN
router	Ethernet cable	packets
switch	ISDN cable	ICMP
hub	parallel cable	Network Interface Card
router	peer-to-peer	backbone
Internet	ports	
ISP	LAN	
Internet Protocol Stack		

1. Introduce vocabulary to students with examples.
2. Whole class follow the step-by-step set-up of a computer network at Teach ICT
http://www.teach-ict.com/gcse_new/networks/hardware/resources/NWB_SIM.swf

3. Give students a scenario of a computer set up with the cost per component of their network. Create a goal of the least costly configuration.

Ask students if they want to connect to the Internet: what do you need to do?
If you want to keep your connection secure: what do you need to do?