Quick guide to DNS.

DNS record types.			
	Type	**Name**	**Function**
Zone	SOA	Start of Authority	Defines a DNS zone of authority
	NS	Name Server	Identifies servers for a zone
Basic	A	Address	Name to address translation
	PTR	Pointer	Address to name translation
	MX	Mail Exchanger	Controls EMail routing
Optional	CNAME	Canonical Name	Nicknames for a host
	HINFO	Host info	Identifies hardware and OS
	RP	Responsible Person	Technical contact for a host
	WKS	Well Known Services	Services provided by a host
	TXT	Text	Comments

The SOA Record : The **SOA** record marks the start of a *zone*. A DNS domain maps into at least two zones : One for forward DNS - translating a hostname to an IP address, and the other for reverse DNS - translating an IP address to a hostname.

The NS Record : The **NS** (**N**ame **S**erver) record identifies the servers that are authoritative for a given zone. This is the format of a NS record :

IN NS servername

Where **IN** is for **IN**ternet.
and **servername** is the actual Domain Name server.

The A Record : The **A** (**A**ddress) records provide the mapping from hostname to IP addresses. This is the format of the **A** record:

hostname IN NS XXX.XXX.XXX.XXX

Where **XXX.XXX.XXX.XXX** is the IP address for the hostname.

The PTR Record : The **PTR** (**P**oin**t**e**r**) records provides the reverse mapping from IP address to hostname. As with the **A** record, a host must have one for each network interface.

The MX Record : The **MX** (**M**ail E**x**change) records are used by the mail systems to route mail more efficiently. An **MX** record also provides a way to deliver mail to an alternate host when the destination host is not available. This is the format of an **MX**

name IN MX preference host

Where **name** is the client machine.
preference defines which host is most desirable. Host with a low preference value are tried first, with 0 the most desirable, and 65535 the least.
host is the actual mail host for the domain.

The CNAME Record : The **CNAME** (**C**anonical **name**) records are used to assign nicknames (or aliase) to a host. Nicknames are commonly used to either shorten a name, or to associate a function to a host. CNAME's must refer to a real name, not another CNAME. This is the format of a CNAME.

nickname IN CNAME hostname

The HINFO Record : The **HINFO** (**H**ost **info**rmation) record specifies the manufacturer and the operating system type. Most sites do not use HINFO records because of security reasons, if everyone knows what type of hardware you have and what type of OS is running, you are more vulnerable to break-ins. This is the format of the HINFO record.

host IN HINFO "hosttype" "os"

The RP Record : The **RP** (**R**esponsible **P**erson) record, is a new type of record, that offers a way to assign an EMail (with the @ sign replaced by a . , eg. ahj@aber.ac.uk would become ahj.aber.ac.uk) address to a host. This is the format of an **RP** record.

host IN RP email-address

The WKS Record : The **WKS** records are used to list well known services that a host supports. Again for security reasons, most do not use it.

The TXT Record : The **WKS** record is used to add text to hosts DNS records. This is the format of the **TXT** record.

host IN TXT "Text information"