Cisco Router Basic Commands Cheat sheet

Command	OSI Layer	Description	Example
show interface	Layer 1	the show interfaces command displays statistics for the network interfaces	show interface
show ip interface brief	Layer 1	to display the usability status of interfaces configured for various IP addresses, use the show ip interface brief command in privileged EXEC mode	show ip interface brief
show run int	Layer 1	shows the portion of the configuration in NVRAM that defines the actual interface	show run int vlan 2902
show run | sec	Layer 1	display a section of the show run configuration	sh run | sec vlan 2902
write	Layer 1	They essentially achieve the same things by saving the running configuration to the memory so that after a reload it retains the same configuration.	wr
no shut	Layer 1	enable the interface to move from administration down status to UP	no shut
term len	Layer 1	set your terminal to display without any breaks	term len 0
show arp	Layer 2	display the Address Resolution Protocol (ARP), enter the show arp command in EXEC mode.	show arp
show mac-address-table	Layer 2	to display the Address Resolution Protocol (ARP), enter the show	show mac-address-table

		arp command in EXEC mode	
traceroute	Layer 3	the traceroute command allows you to determine the path a packet takes to get to a destination from a given source by returning the sequence of hops the packet has traversed	traceroute 10.1.1.1
ping	Layer 3	the ping command is a very common method for troubleshooting the accessibility of devices	Ping 10.1.1.1
loopback	Layer 3		int loopback 0 ip add 1.1.1.1 255.255.255.255
Passive interface	Layer 3	doesn't form adjacencies or give out internal information	passive-interface f1/1
router rip	Layer 3	enables Routing Information Protocol (RIP)	router rip version 2 network 10.0.0.0 no auto-summary
ospf	Layer3	enables Open Shortest Path First (OSPF)	router ospf 1 network 10.0.0.0 0.0.0.255 area 0 network 10.1.0.0 0.0.0.255 area 0 sh ip ospf neighbor sh run | section ospf sh ip ospf database

			u all ip ospf priority 100 auto-cost reference-bandwidth 10000 area 1 range 10.0.0.0 255.255.0.0 (summary route)
eigrp	Layer3	enables Enhanced Interior Gateway Routing Protocol (EIGRP)	router eigrp 100 network 10.0.0.0 0.0.255.255
ip route	Layer 3	sets a static route in the IP routing table	ip route 10.1.1.1 255.255.255.0 10.0.2.1
DNS	Layer 4	enables DNS-based host name-to-address translation. This command is enabled by default.	ip domain lookup ip name-server ip domain list ip domain name ip ospf name-lookup
telnet	Layer 4	log on to a host that supports Telnet, use the telnet EXEC command.	telnet hq.example.com