

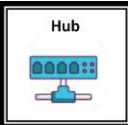

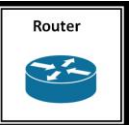




Wired Network vs Wireless Network

PARAMETER	WIRED	WIRELESS
		
Communication Medium	Copper, Fiber etc.	Air
Standard	IEEE 802.3	802.11 family
Mobility and Roaming	Limited	Higher
Security	High	Lower than Wired. Also easy to hack
Speed / Bandwidth	High Speed upto 1 Gbps	Lower speed than Wired Network.
Access to Network	Physical Access Required	Proximity Required
Delay	Low	High
Reliability	High	Lower than Wired
Flexibility to change	Less flexible to changes	More flexible configuration
Working principle	CSMA/CD, operates by detecting the occurrence of a collision.	CSMA/CA , hence reduces possibility of collision by avoiding collision from happening
Interference and Fluctuations vulnerability	Very Less	High
Installation activity	Cumbersome and manpower intensive	Less labor intensive and easy
Installation Time	Takes longer time to perform	Very less deployment time
Dedicated / Shared Connection	Dedicated	Shared
Installation Cost	High	Low
Related equipment	Router, Switch , Hub <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Hub </div> <div style="border: 1px solid black; padding: 2px; text-align: center;">Switch </div> <div style="border: 1px solid black; padding: 2px; text-align: center;">Router </div> </div>	Wireless Router, Access Point <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Access Point </div> <div style="border: 1px solid black; padding: 2px; text-align: center;">Wireless Router </div> </div>
Maintenance (Upgrade) cost	High	Low
Benefits	<ul style="list-style-type: none"> • Greater Speed • Higher noise immunity • Highly reliable • Greater Security 	<ul style="list-style-type: none"> • No Hassles of Cable • Best for mobile devices • Greater mobility • Easy installation and management