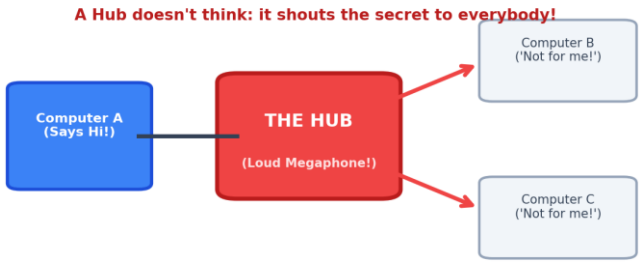
HOW COMPUTERS TALK: COMPUTER NETWORKS

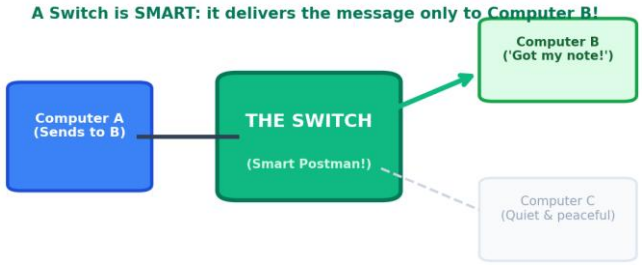
A computer network is two or more computers connected together to share games, videos, and files.

The Core Hardware Devices

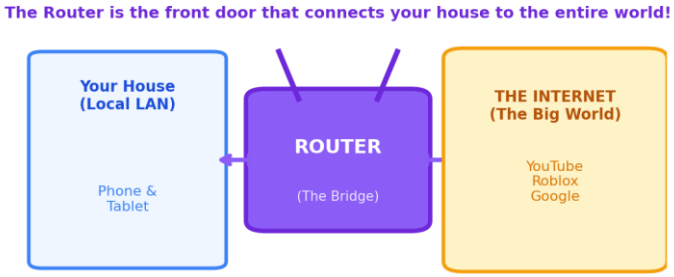
- **The Server (The Master Kitchen):** A super-powerful computer that stores and serves YouTube videos, games, and web pages.
- **The Client (The Customer - You!):** Your phone, tablet, or laptop requesting videos and games from the server.
- **The Hub (The Loud Megaphone - Obsolete):** Connects computers blindly. When Computer A talks, the hub shouts it to everybody in the room!



- **The Switch (The Smart Mail Carrier):** The smart replacement for a hub. It delivers messages directly to the intended computer quietly.



- **The Router (The Front Door / Bridge):** Connects your local room to the worldwide Internet like a digital traffic officer.



Network Media (How Messages Travel)

- **Cables (Wired Highways):** Copper wires (twisted-pair) use safe electric pulses; Fiber optic wires use ultra-fast laser light.
- **Wireless (Invisible Air Waves):** Wi-Fi and Bluetooth turn messages into invisible waves floating through the air so you can roam freely.

Quick Classroom Memory Table

Component	What is it like?	What does it actually do?
Server	The Master Kitchen	Stores and serves videos, games, and web pages.
Client	The Hungry Customer	Requests content (phones, tablets, laptops).
Hub	A loud megaphone	Shouts every message to everybody (obsolete).
Switch	A smart postman	Whispers messages directly to the right computer.
Router	The front door / Airport	Connects your local room to the worldwide Internet.