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| **Packets** | **Latency** |
| **Gigabit** | **Byte** |
| **Bit** | **Buffering** |
| **Bandwidth** | **Fiber Optic** |

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| I am a unit of data that moves between an origin and a destination on the internet. When any file (e-mail message, HTML file, graphic, etc.) is sent from one place to another on the internet, protocols divide the files to create me to be an efficient size for routing. Typically I am made up of 1,000 or 1,500 bytes. | I am a way of explaining how much time it takes to transmit or receive packets on a network. I am affected by how far packets need to travel, how many networks packets need to travel over, and the quality of the networks the packets travel over. Gigabit internet networks typically have very low lag time, meaning data travels faster. |
| I am a unit of information equal to one billion (109) bits. This term is usually only used to describe download and upload speeds for internet connections. This type of Internet connection can transfer data at a rate of 1 billion bits per second. | I am a unit of data that is usually equivalent to 8 bits. I am often used to describe file sizes and computational memory. |
| I am a basic unit of information in computing and digital communications, usually represented as a 1 or 0. I am the smallest unit of data in most computers. | I am the process of storing data while it is being processed or transferred. The higher bandwidth and lower latency of gigabit internet connections reduces delays caused by me. |
| I am an electronic byway that connects the internet to your computer. Increasing me allows a faster internet connection. | I am a technology that uses glass (or plastic) threads to transmit data. Gigabit internet networks rely on me because of my capability to transmit data with high speed and low latency. |

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| **Upload** | **Download** |
| **4K** | **Internet of Things (IOT)** |
| **Augmented reality** |  |
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| I enable a user to send data to a remote system such as a server so that the remote system can store a copy. On a gigabit network, I am usually symmetrical with download speeds, meaning users can upload and download data at the same speed. | I allow a user to copy data from one computer system to another, typically over the Internet. On a gigabit network, I am usually symmetrical with upload speeds, meaning users can upload and download data at the same speed. |
| I am the resolution of an electronic display, usually 3,840 pixels along the horizontal line of the display, and 2,160 pixels vertically. I am an example of a technology that works seamlessly on gigabit internet connections. | I ama physical device - vehicle, building, or other item - that is connected to the internet, and contains electronics, software, sensors that enable me to collect and exchange data. I am an example of a technology that works seamlessly on gigabit internet connections. |
| I am a live direct or indirect view of a physical, real-world environment whose elements are supplemented by computer-generated sensory input such as sound, video, graphics or GPS data (like on Pokemon Go!). I am an example of a technology that works seamlessly on gigabit internet connections. |  |