# **The Internet Comprehension Check**

For questions 1-4, match each vocabulary term to the correct definition:

|  |  |
| --- | --- |
| 1. Internet of Things (IOT) | a. a computer that serves data to clients |
| 2. IP Address | b. the system of objects containing embedded computers that can send or receive data over the internet |
| 3. Computer Network | c. a unique number that identifies each computer using the internet |
| 4. Server | d. a group of computers connected to share data and other resources |

1. Internet of Things (IOT) –
2. IP Address –
3. Computer Network –
4. Server –
5. What is the internet and how is it used?
6. Describe how data can be shared across a wide variety of hardware.
7. What is packet switching? Describe the steps data can be transmitted over the internet.
8. Why is packet switching an efficient way to transmit data?
9. Why was the internet and the process of packet switching originally developed?
10. Explain what people mean when they say their data is “in the cloud.”

# **The Internet Comprehension Check Answer Key**

For questions 1-5, match each vocabulary term to the correct definition:

|  |  |
| --- | --- |
| 1. Internet of Things (IOT) | a. a computer that serves data to clients |
| 2. IP Address | b. the system of objects containing embedded computers that can send or receive data over the internet |
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1. Internet of Things (IOT) – b
2. IP Address – c
3. Computer Network – d
4. Server – a
5. What is the internet and how is it used?
   1. The internet is a useful tool that includes the World Wide Web, email, chat, and other applications. People use the internet every day. They share pictures and videos, play games, study, shop, work, and more! The internet has not always been part of our daily life, but it certainly plays a big role now!
6. Describe how data can be shared across a wide variety of hardware.
   1. Hardware like computers, laptops, and cell phones share data through the internet. Electric signals as well as radio waves are both used to transmit data across a variety of hardware.
7. What is packet switching? Describe the steps data can be transmitted over the internet.
   1. Packet switching is a process used by IP to transmit data. In packet switching, the original data to be transmitted is broken up into small chunks. Each of these chunks is called a packet. Packets are sent individually and travel through cell towers, radio waves, or servers and do not need to take the same route or stay in the same order. Once all the packets arrive at the correct destination (IP address), they are reassembled to take the form of the original data.
8. Why is packet switching an efficient way to transmit data?
   1. Packet switching is an efficient way to transmit data because individual packets can travel in the path that is the best for them. Making use of this convenience allows for efficiency when transmitting data.
9. Why was the internet and the process of packet switching originally developed?
   1. The internet and the process of packet switching was originally developed by the United States government during the 1960’s and 1970’s. The military wanted to share information in a way that made it difficult for it to be intercepted, or stopped, by an enemy. Packet switching helped ensure that even if information was intercepted, the enemy might not have access to all of it or might not be able to make sense of it. The World Wide Web was not designed until the 1990’s and was the first “place” people could organize and share information digitally.
10. Explain what people mean when they say their data is “in the cloud.”
    1. When people say their data is “in the cloud,” they do not mean that their data is physically stored in the sky near the clouds. Rather, they mean that their data is being stored on one or more of the internet’s many servers. This means that they can access their data from a variety of locations, as long as they can connect to the internet. If data is backed up on multiple servers, it is less likely to get lost or destroyed. In addition, storing data in the cloud saves memory space on individual devices.