A network is made up of at least two devices that connect and communicate via a wired or wireless connection. One network switch can connect to another switch to link two networks.

Not only can two network switches be connected, but multiple ones can be connected to form an interconnected network like the internet.

A server is a computer that runs applications and services, ranging from websites to instant messaging. You have just learned about a web server which is a specific type of server. Which of the following statements are true? Choose all that apply.

- A web server can function as website storage and administration.
    - o Web servers have multiple functions and this is just two of them. They can also handle security and manage emails.
- Web servers can handle thousands of requests from clients per second.
    - o Web servers have to be able to handle high volumes of web requests.
- A web server can handle security.
    - o Web servers have multiple functions and this is just one of them. They can also function as website storage and administration and manage emails.

HTML is used to structure content on a webpage - HTML

A web browser is a software application that you use to browse the world wide web. True

Cloud hosting uses a combination of physical and virtual servers. True

Is the following statement true or false? The payload part of IP packets supports multiple protocols to make sure that information arrives as expected. Two of these are Transmission Control Protocol (TCP) and User Datagram Protocol (UDP). UDP is used to send data that must arrive correctly and in order.

False, TCP is used for data that must arrive correctly and in order. This is because TCP can deal with data packets arriving out of order, becoming damaged or corrupted, or dropped or lost albeit at the cost of a small delay.

Which of the following web resources can be transferred using HTTP? Select all that apply.

- HTML Documents are transferred from the web server to the web browser using HTTP.
- Images and Files are transferred to and from the web server using HTTP.

In the first example of a digital clock, which type of file ensured that the display updated with the correct time?

The JavaScript file - When referenced by the HTML file, the JavaScript code controls the functioning of the clock.

Think of your favorite interactive map, social media site or video content site. What features and functionality do you think web applications provide to their users? Select all that apply.

- Personalized content.
- Dynamically updated content.
- A high level of interactivity.

Yes, in comparison to a standard website a web application is more dynamic, interactive, and personalized.

As a developer, there are several web browser developer tools available to you. For example, there is a console tab that outputs JavaScript logs and errors from a web application. Which of the following statements are true? Choose all that apply.

- The Sources tab shows all content resolved for the current page.
  - The Sources tab includes HTML, CSS, JavaScript, images and videos.
- The Network tab allows you to inspect the timeline and details of HTTP requests and responses for a webpage.
  - The Network tab is an important and useful developer tool.
- The Memory tab displays the parts of your code that are consuming the most resources.
  - This feature helps you to identify if and where your code needs improvement.