1. What types of interfaces is possible to use in the access and backbone networks?

1. metallic interface

2. optical interface

3. wireless interface

1. Match the four different interfaces shown on the left column to the corresponding theoretically reachable transfer rate on the right column.

|  |  |  |
| --- | --- | --- |
| USB 3.0 |  | Up to 600 Mbit/s |
|  |  |  |
| Thunderbolt |  | Up to 5 Git/s |
|  |  |  |
| Bluetooth 2.0 |  | Up to 10 Gbit/s |
|  |  |  |
| Wi-Fi (802.11n) |  | Up to 3 Mbit/s |

1. Modify the following texts so that the statements will be true.

USB interface is a interface type . All devices connected to the USB interface among themselves the entire bandwidth.

1. Match the four different transfer modes shown on the left column to the corresponding type of their specification on the right column.

|  |  |  |
| --- | --- | --- |
| Super Speed + Mode |  | specification USB 3.0 |
|  |  |  |
| High Speed Mode |  | specification USB 2.0 |
|  |  |  |
| Full Speed Mode |  | specification USB 3.1 |
|  |  |  |
| Super Speed Mode |  | specification USB 1.1 |

1. Select the USB device that is used for the extension of USB bus.

**x** **USB HUB**

□ USB function

1. Modify the following texts so that the statements will be true.

Interface USB 3.0 is a bus, which is a of interface USB 2.0 and the new interface USB Superspeed. This concept the usage of USB 2.0 terminal equipments on USB 3.0 controllers. However, there is one fundamental restriction. to use both buses simultaneously at one terminal device.

1. What kind of packets are used by USB SuperSpeed?

1. Link Management Packet LMP

2. Transaction Packet TP

3. Data Packet DP

4. Isochronous Timestamp Packet ITP

1. Fill in the following figure the correct labels into individual parts:



Display Port

Display Port

Thunderbolt

Controller

Thunderbolt

Controller

Thunderbolt Cable

PCI-Express bus

PCI-Express bus

1. Modify the following texts so that the statements will be true.

is a key component for data transfer on Thunderbolt interface.

The is part of transmitting and receiving equipment.

The is designed for communication with delay and of QoS (Quality of Service) requests.