1. What is the difference between a parallel and serial interface?

Parallel interface uses multiple wires to transmit data, while serial interface uses one wire to send data. Parallel wires correspond to one bit each while serial sequentially sends data.

2. What is the difference between a synchronous and asynchronous interface?

Synchronous systems synchronize there sample time to a external clock signal, while asynchronous systems are set to a internal logic such as virtual clock.

3. What is one thing that a communication protocol does?

A communication protocol is able to translated any bits sent to it into useful data that is able to be read as commands or signals.

4. What does the baud rate of a signal mean?

The baud rate of a signal means the number of bits that are transmitted per second.

5. What register in the USART would you use to enable the transmitter hardware?

The CR1 register would be used to enable the transmitter hardware.

6. Does the transmit (TX) line of the USB-USART cable connect to the transmit (TX) or receive (RX) of the STM32F0?

The TX line cable connects to the RX line of the STM32F0.