

Unit 1.2 - Learning Targets

IoT Connectivity

Essential Questions

- What is IoT Connectivity?
- What are some of the common IoT connectivity solutions?
- Are there only wireless IoT connectivity solutions?
- What are some things to consider when choosing a connection type?

Key takeaways

- IoT Connectivity refers to how your “thing” is connected to a more powerful computing device and/or the internet.
- Some common connection solutions are:
 - Ethernet
 - Wi-Fi
 - Bluetooth Low Energy
 - Cellular
 - Zigbee
 - LoRa
- Key considerations are:
 - Power
 - Distance
 - Bits

Teaching Tips

Labs in the curriculum will focus on BLE and Wi-Fi. Initially students will connect their “things” to the computer with a USB hardwired connection.

Students will get a deeper understanding of BLE and Wi-Fi when working on future labs.

The ideas of Power, Distance and Bits should be revisited when students are exposed to BLE and Wi-Fi in future labs.