

- Children:
  - Components containing sensors that will send out the information they have collected.
- Parent:
  - A 'home base' that listens to multiple children and then transmits the data to a server.

Goal:

At least 4 children with 2 sensors each monitoring 'something' that connect to an access point. The parent then sends the collected data up to a server for it to be cataloged and monitored. Children should be able to send data directly to the access point directly, or relay the information along the children to the parent.

Running cost/design questions:

- Do we want to relay information between nodes, or only with the "home base"?
- How do children learn about each other? How far of a distance we want to transmit?
  - Feasible distance of radio transmission?
- What kind of biomes are we dealing with (how resilient we need to make the child node)?
- What kind of chip we want to use?
- Good way to have a synchronize time?
- Most important sensors

Things we know:

Radio chip/component that can send and receive:

[https://www.amazon.com/Makerfocus-Wireless-NRF24L01-Antistatic-Compatible/dp/B01IK78PQA/ref=pd\\_lpo\\_147\\_tr\\_t\\_3?encoding=UTF8&psc=1&refRID=R680TJK00Z1ZVPNCHVD0](https://www.amazon.com/Makerfocus-Wireless-NRF24L01-Antistatic-Compatible/dp/B01IK78PQA/ref=pd_lpo_147_tr_t_3?encoding=UTF8&psc=1&refRID=R680TJK00Z1ZVPNCHVD0)

Battery Long Lasting Arduino: <https://openhomeautomation.net/arduino-battery/>

**The whole idea:** <https://maniacbug.wordpress.com/2011/10/19/sensor-node/>