**Introduction to Computer Science and Micro:Bit**

* + \*\*All individual work\*\*
* 1 CS basics ~ 1 hour
  + Computers are stupid
    - Example: write out the steps to making a pb&j (and then actually make one using their set of instructions :))
* 2 Micro: bit basics ~3 hours
  + Vocab [slides](https://drive.google.com/drive/folders/12p0yv4zEkNFWT27LiqKhpbnj6db7Ao_y)
    - Variables
    - Conditionals
    - Loops
    - Pin I/O
    - Buttons
    - Radio
* 3 Security and Encryption module: ~7 - 9 hours
  + No coding in this, it will be all logic/problem-solving based
* 4 Extra Modules ~ 2 - 5 hours:
  + 1 Student
    - Flashing Heart
    - Smiley Face
    - Coin Flipper
    - Name Tag
    - Dice
    - Micro Chat
    - Mood Radio
    - Snap The Dot
    - Crashy Bird
    - Karel The LED
* 5 Final Project: ~4 hours
  + \*\*Paired programming if they want\*\*
  + Break the lock
    - Teens will work together to break the lock
    - The lock will give off a code that will signal the key (1-7 in binary)
    - Rebecca will give clues if more difficult
    - Unlocking the lock will grant access to the source code
  + Modify the lock (After obtaining the source code)
    - Modify to the desired outcome

Working code: <https://makecode.microbit.org/17071-54036-90995-40288>