

Finch Snap! Card 05

# Beep Speak!



1. Go to the **Sound** area of your Snap Controls Panel.



Controls Panel.



2. Select the Finch Buzzer operations brick below.

Finch Buzzer 440 Hz 500 ms

Finch Buzz+Wait 440 Hz 500 ms



### Finch Buzzer Hz ms:

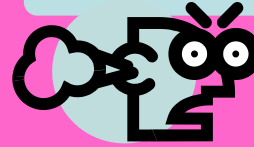
Buzzer with a sound of the frequency specified for the time specified (milliseconds). Range is 20 to 20,000 for frequency.

### Finch Buzz+Wait Hz ms:

Same as Finch Buzzer, but also causes a halt for the amount of time specified.

<http://www.finchrobot.com/software/snap>

3. Experiment with the different Hertz and ms controls!



Note: The higher ranges of Hz can cause discomfort.

Note	Hz
A	440
B	494
C	262
D	294
E	330
F	349
G	392

4. **Extension Task:** Can you identify the beginning of the song played from the code segment below and complete the song using the Note chart to the left?

```

when space key pressed
  Finch Buzzer 330 Hz 500 ms
  wait 1 secs
  Finch Buzzer 294 Hz 500 ms
  wait 1 secs
  Finch Buzzer 262 Hz 500 ms
  wait 1 secs
  Finch Buzzer 294 Hz 500 ms
  wait 1 secs
  Finch Buzzer 330 Hz 500 ms
  wait 1 secs
  Finch Buzzer 330 Hz 500 ms
  wait 1 secs
  Finch Buzzer 330 Hz 500 ms
  wait 1 secs
  
```

Why use Hz values to generate sounds?



The human ear has an eardrum which vibrates at a frequency between 20 and 20,000 Hz

