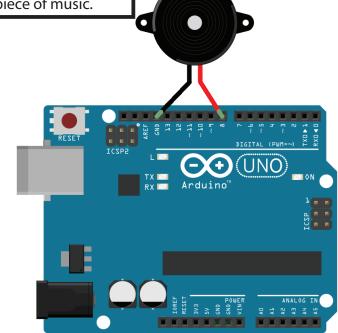
# Buzzers

### **Basic Information**

A **piezo buzzer** is a simple component that can be used to produce a series of low quality notes and music. It does this by turning the pin (pin 8) on and off thousands of times a second. Wire up the **circuit** as you can see to the right and try out the code below. The code is very simple. It starts playing a musical note (**frequency** 1760), waits 300 **milliseconds** (0.3 seconds) then turns it off again with **notone**. It continues this for 2 other notes. Using this method, we can string together a number of notes one after each other to produce a piece of music.





<u>fritzin</u>

#### Tunes

Try and figure out the name of each song below. If you still can't get the tune, try adding the notes in brackets. A --- means a longer pause

- 1. C, D, E, C, C, D, E, C (E, F, G, E, F, G)
- 2. C, C, D, C, F, E --- , (C, C, D, C, G, F)
- 3. E, E, E, E, E, E, E, E, G, C, D, E, C
- 4. D, B, A, G, D, ---, D, D, D, B, A, G, E

## **Frequencies**

These are the frequences for different musical notes

- A 1760
- B 1976
- C 2093
- D 2349
- E 2637
- F 2794
- G 3136

## **Now try**

- 1. Try and produce a simple scale (notes going up) with 7 notes.
- 2. Try out the Tunes above, see if you can figure out their names.
- 3. Try and produce your own song.