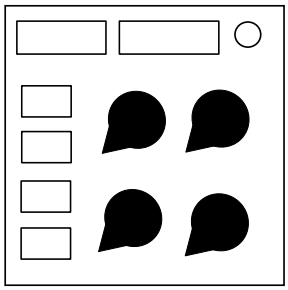
On the Subject of Sound Design



Mmm sounds.

- The module will consist of four dials labelled **A (Attack), R (Release), P (Pitch), and PW (Pulse Width).** The four buttons on the left side of the module correspond to the four types of **Waveforms (sine, triangle, saw, and square).** There is also a **Submit** button and a **Play** button.
- The dials will turn upon clicking them. This will set the value of the dial from 0 (south west) to another number depending on how many times the dial can rotate. The Waveform buttons can be pressed to select a Waveform. Upon pressing them, they will move in. They will move back out when another button is pressed. The Submit button will submit the chosen values, and the Play button will repeat the sound clip.

The following list will explain the functions of the four dials:

- **Attack:** The attack of a sound is how long the sound takes to fade in. This is represented by a 0% (South west), 50% (North), or 100% (South East) on the dial.
- **Release:** The release of a sound is how long the sound takes to fade out. This is represented by a 0% (South west), 50% (North), or 100% (South East) on the dial.
- **Pitch:** The pitch of a sound is how high or low the sound is (the sound will always be on a C major scale). This is represented by a C (South West), D (West), etc. for every 45 degrees.
- **Pulse Width:** The pulse width of a **square wave** is the elapsed time between the edges of a single pulse (rising and falling movement of a sound wave). This is represented by a 0% (South west), 50% (North), or 100% (South East) on the dial. A higher pulse width will sound "harsher" and more "8-bit" than a lower one. Any other wave will not have a pulse width, therefore the knob will stay at 0%

The following list will explain the functions of the leftmost four buttons:

- **Sine:** The sine wave is the basic type for a sound, and sounds smooth and clean.
- **Triangle:** The triangle wave is similar to both a sine and square wave, but not exactly. It will sound buzzy and clear but not as much as a square and sine wave.
- **Saw:** The saw wave is the buzziest of all the waveforms, sounding very jagged like a saw.
- **Square:** The square wave contains the elements of a sine wave, but sounds buzzy and rich.

To solve this module, you will need to recreate the sound heard by selecting the Waveform, Attack, Release, Pitch, and Pulse Width. Once you do this, hit Submit to lock in your answer.