CPX | Sounds, Part 1

Connect the Circuit Playground Express to MicroBlocks.

Click a *play note* block to play one note. Experiment with the note, octave, and duration to make different notes.

> play note C octave 0 during 500 ms

Put *play note* blocks together to make tunes.

> play note C octave 1 during 400 ms
> play note D octave 1 during 400 ms
> play note E octave 1 during 400 ms
> play note C octave 1 during 400 ms

```
when started
repeat 2
    play note C octave 1 during 400 ms
    play note D octave 1 during 400 ms
    play note E octave 1 during 400 ms
    play note C octave 1 during 400 ms
repeat 2
    play note E octave 1 during 400 ms
    play note F octave 1 during 400 ms
    play note G octave 1 during 800 ms
```

File
New
Open
Save
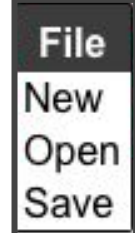
Select open and choose the music folder to see more examples of songs!
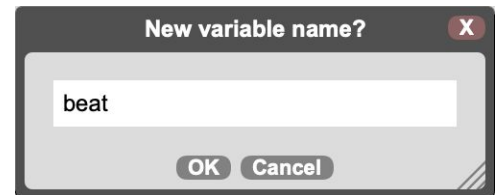
http://microblocks.fun

CPX | Sounds, Part 2

Connect the Circuit Playground Express to MicroBlocks.

To make longer tunes, you can use a variable for note durations so you can change the speed. Click on the variables category to create a new variable.

Variables

Add a variable

New variable name?   X

beat

OK   Cancel

Now you can customize the length of the note easily in the *play note* block. Use the *repeat* block for parts of the song that repeat.

```
when started
set beat ▾ to 200
repeat 2
    play note C octave 1 during beat ms
    play note D octave 1 during beat ms
    play note E octave 1 during beat ms
    play note C octave 1 during beat ms
repeat 2
    play note E octave 1 during beat ms
    play note F octave 1 during beat ms
    play note G octave 1 during 2 × beat ms
```

What happens when you change the beat from 200 to 50?

```
set beat ▾ to 50
```

Want to make a sound effect?
Try out this script!

```
for i in 50
    play midi key i + 50 for 3 milliseconds
```

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