

Counting to the Beat. (you can follow along with my video on VIMEO)

### Lesson 1: where is The beat?

We naturally tap to the beat when we clap or tap along with the music. Rappers and DJs are used to counting 4 beats. So they know where to drop the beat if they are mixing or start rapping.

Not all styles of music fit into Four beats. But 4 is definitely the most common musical measure. Hip Hop, Rap, Grime, Electronic Dance music (DUB, HOUSE, DRUM and BASS) and afro-american rhythms (Reggae, Funk, Rock, Soul, Blues, R&B).

It is important to make sense of the different windows you find in Logic.

Here are some examples:

In the Arrangement, the numbers at the top show the bars, it looks like a ruler with centimeters and millimeters. In the example below there are 2 verses of the song (total 16 bars).

Each bar looks like a ruler. Where you can see smaller lines like the millimeters in a ruler.

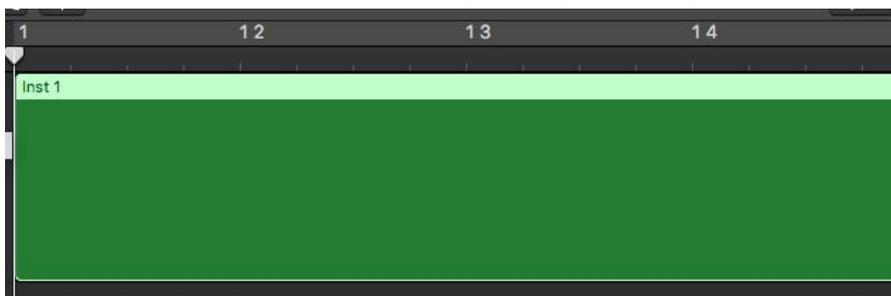
Bar 1: beats 1, 2, 3, 4.... Bar 2: beats 1, 2, 3, 4 and so on.



On the screen, it is possible to zoom in

(hold command  + the arrows  on your keyboard)

So the view of the numbers at the top changes when you stretch it out:

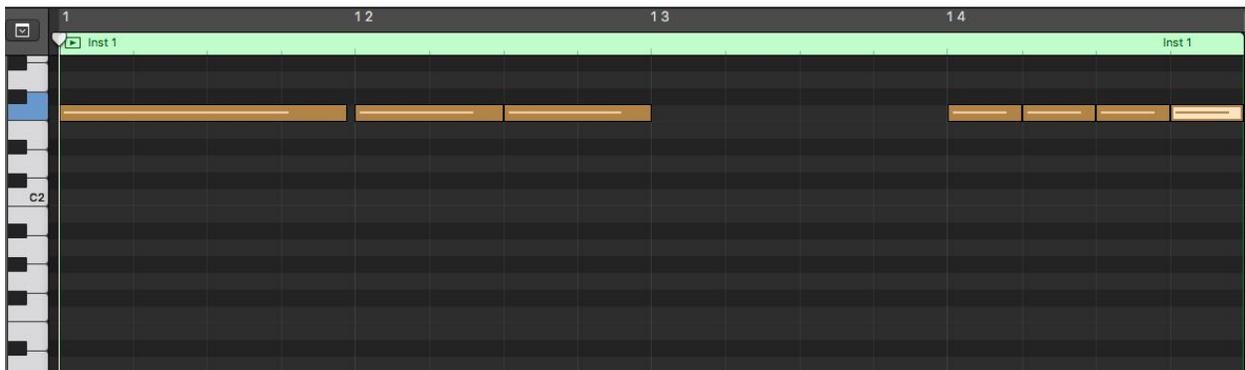


here the green box fits exactly 1 bar. The numbers at the top show 1 (bar, beat one), 1.2 (bar 1, beat two), 1.3 (bar one, beat 3) and 1.4 (bar one, beat 4). Note that there are small white lines that show further divisions of the beat 4 small lines on every beat.

## Divisions of the beat:

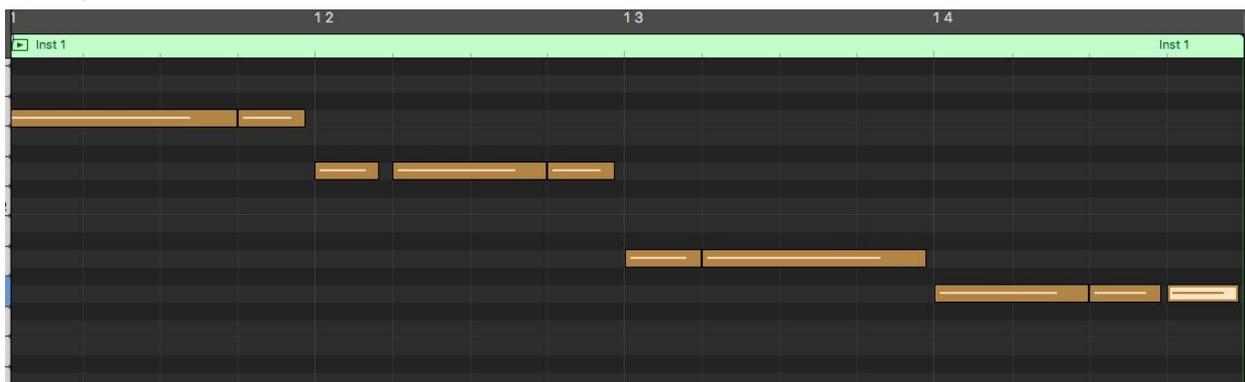
Whether you are working on Ultrabeat (drum machine) the piano roll or the arrange, it is important that you can still count to the beat and make sense of what you are seeing on screen.

It is common to subdivide the beat up to 4 subdivisions. The following examples, on the piano roll, show you notes of different lengths. Let's have a look at the lines and see how many different rhythms we can create.



This note is long, on Beat 2, we have on beat 3 there are on beat 4 there are 4  
It lasts for the whole 2 notes of equal length no sounds (silence) notes, one for each  
1st beat subdivision.

Below you have more rhythms this time, the durations are not different: we can make groups of long and short notes within every beat. Look at the orange notes and count how long they are looking at the 'ruler' white lines.



3+1 Long short      1+2+1 short, long, short      1+3 (short, Long)      2+1+1 long, short, short

Assignment: if you have access to the using logic, please try opening the piano roll, and experimenting with these rhythms. You can drag and drop green regions from the library (green loops, the midi ones). Put a metronome and listen to the loop, try editing the content changing the length. Make sure that the notes start exactly where the white lines are!

Here is a video on youtube, in case you need to refresh some piano roll skills. The more you can research, And practice the better you would become on editing midi in the piano roll.

[https://www.youtube.com/watch?v=NBT\\_beWBrBU](https://www.youtube.com/watch?v=NBT_beWBrBU)



Follow along this handout with the videos that I will be uploading to VIMEO. 'Counting to the beat'

Also, if you have some time and access to the internet, I do recommend you to find the following video in youtube. Click on the link below or type 'how music works rhythm in YOUTUBE.

This documentary is really well done and I am sure you are going to enjoy it. Don't worry if you do not understand EVERYTHING, you can always rewind and watch again if you get lost and I will be uploading more videos that expand on advanced concepts on the bbc documentary I am recommending you. Have fun!

<https://www.youtube.com/watch?v=ZZJPnAer7EM&t=19s>

