STRETCHLEARN · WORKBOOK

Beat Making in FL Studio — Workbook

This workbook turns the course into reps. Each section maps to one module: you will program drums, chop a sample, write a melody and bassline, and arrange and mix a full beat. Work inside FL Studio with these pages open beside it, and finish by exporting one complete track.

The FL Studio Workspace and Drum Programming

Lock in your project settings and program a humanized drum pattern from scratch.

Worksheet: Project Setup Sheet

Before placing a single sound, decide and record your project's foundation. Fill this in for the beat you are about to build.

Genre / reference track

Tempo (BPM)

Feel (straight / half-time)

Key (e.g. C minor)

Drum kit / source

Target length (minutes)

Exercise: Four-Line Drum Pattern

In the Step Sequencer, build a complete one-bar beat using only the four placements from the lesson, then loop it.

- Place the kick on step 1 and step 9 — does the groove feel too empty or just right?
- Add snare/clap on steps 5 and 13, then loop. Where does your head start nodding?
- Drop every other hi-hat to 70-80 percent velocity and describe how the feel changes versus all-equal hits.
- Add one open hi-hat on step 16 and note whether the transition into the next bar improves.

Exercise: Swing A/B Test

Train your ear on what groove buys you by comparing the same drums with and without humanization.

- Duplicate your straight pattern and apply 25 percent swing to the copy. Which sounds more like a person?
- Nudge the snare 10 ms late in the graph editor's Shift strip. Does it feel relaxed or sloppy?

• At what swing percentage does the beat start to drag for your ear? Write the number.

Checklist: Drum Pattern Complete When...

[ ] Tempo and key are set and written down
[ ] Kick, snare, and hi-hat are each on their own Channel Rack row
[ ] Backbeat snare lands on steps 5 and 13
[ ] Hi-hat velocities vary instead of being identical
[ ] Swing is applied and A/B-tested against 0 percent
[ ] The one-bar loop sounds good repeated eight times

Sampling and Chopping

Bring audio in legally and flip it into a new loop with Slicex.

Worksheet: Sample Source & Clearance Log

For every sample you use, log where it came from and whether it is safe to release. This habit prevents copyright trouble later.

Sample name / description

Source (pack / own recording / commercial record)

License type

Cleared to release? (yes / no / learning only)

Original key (if known)

Original tempo (if known)

Exercise: Flip a Loop in Slicex

Take any 4-bar melodic loop and turn it into something that sounds original by rearranging its chops.

• Drag the loop into Slicex and let it auto-detect slices. Did it over-slice or under-slice? How did you fix it?

• Re-sequence at least four chops out of their original order in the Piano roll and describe the new phrase.

• Add a 2-5 ms fade to remove clicks at the cut points. Did any clicks remain?

• Layer your Module 1 drums under the flipped chops — does the new loop hold together?

Exercise: Fit a Sample to Key by Ear

Practice the semitone-nudge method so you can match any sample to your project without extra tools.

• Hold one sustained note in your project key and loop the sample against it.

• Pitch the sample up or down one semitone at a time. At which value do the clashing beats disappear?

• Note how many semitones you moved and whether artifacts appeared beyond +/-5.

Checklist: Sampling Done Right

[ ] Every sample is logged with its source and clearance status
[ ] Slices are clean with no audible clicks
[ ] Chops are rearranged, not just replayed in order
[ ] The sample sits in the project key
[ ] Stretching stayed within roughly +/-20 percent tempo to avoid artifacts

Melody and Bassline Construction

Write an in-key melody, a chord bed, and a bassline that locks to the kick.

Worksheet: Harmony Planner

Plan your harmony before drawing notes so the melody, chords, and bass all agree.

Key

Chord progression (4 chords, e.g. Cm - Ab - Eb - Bb)

Roman numeral pattern (e.g. i - VI - III - VII)

Lead instrument (stock plugin + preset)

Bass type (sub / 808 / synth)

Bass note per chord (the four roots)

Exercise: Three-Note Motif

Build a memorable melody from almost nothing by locking the Piano roll to your scale first.

• Lock the Piano roll to your key. Confirm out-of-scale rows are greyed out.

• Place root, third, and fifth on the downbeats, then add one passing note. Loop it.

• Change exactly one note and decide whether the motif got better or worse — keep the better version.

• Keep the motif to 1-2 bars. Does repeating it beat a longer wandering line?

Exercise: Lock the 808 to the Kick

Solve the most common low-end problem in modern beats: kick and 808 fighting.

• Place the 808 on the root of each chord and match its onsets to the kick pattern using ghost notes.

• Tune the kick to your key. Did the combined low end get fuller?

• Sidechain the 808 to the kick. Describe how the kick now cuts through.

• High-pass the melody and chords above 200 Hz — is the low end clearer?

Checklist: Harmony Locked In

[ ] Piano roll is scale-locked so every note is in key
[ ] Chord progression is voiced in the C3-C5 range
[ ] Bass plays the root of each chord

[ ] 808 note onsets line up with the kick
[ ] Kick is tuned to the key and the 808 is sidechained
[ ] Melody motif is short and repeats

Arrangement and Basic Mixing

Arrange the loop into a full track, balance it, add space, and export.

Worksheet: Arrangement Map

Sketch your full song structure before painting patterns in the Playlist, with the bar count and which elements play in each section.

Intro: bars + elements

Verse: bars + elements

Chorus / hook: bars + elements

Breakdown: bars + elements

Outro: bars + elements

Transition idea before each section change

Exercise: Mix From the Low End Up

Balance the beat in the order taught: foundation first, ear-candy last.

• Route every channel to its own Mixer track and set the master to peak around -6 dB. What did you have to pull down?

• High-pass every non-bass element above 200 Hz. Did the mix get cleaner or thinner?

• Find one frequency clash (e.g. snare vs lead at 2 kHz) and cut 2-4 dB. Did it help?

• Pan two supporting elements left and right. Does the mix feel wider without sounding lopsided?

Exercise: Add Space and Export

Use send effects and a light master chain, then render your finished beat in both formats.

• Set up one reverb send and feed snare and melody into it. Are they sitting in the same space now?

• Add a gentle 2:1 compressor and a limiter on the master. Does it sound glued or squashed? Adjust.

• Export a 16-bit 44.1 kHz WAV and a 320 kbps MP3. Confirm both cover the full song length.

• Listen on your phone the next morning. Write the one thing you will fix on the next beat.

Checklist: Beat Finished and Exported

[ ] Song has distinct intro, verse, chorus, and outro sections
[ ] At least one transition (fill or sweep) before each section change
[ ] Master bus peaks around -6 dB with no clipping
[ ] Non-bass elements are high-passed
[ ] Reverb/delay are on sends, not on the kick or 808

[ ] A WAV and an MP3 are exported and cover the full track

Your Action Plan

1. Set tempo and key, then program a four-line drum pattern in the Step Sequencer
2. Apply swing and velocity variation so the drums sound human
3. Bring in one sample, log its source and clearance, and chop it in Slicex
4. Re-pitch the sample to your project key using the semitone-nudge method
5. Scale-lock the Piano roll and write a short, repeating melody motif
6. Stamp a four-chord progression and voice it in the middle octaves
7. Add a bassline on the chord roots and lock the 808 to the kick with tuning and sidechain
8. Arrange the loop into intro, verse, chorus, and outro with transitions in the Playlist
9. Mix from the low end up: gain stage, high-pass, cut clashes, pan for width, add reverb sends
10. Apply a light master chain and export a 16-bit WAV plus a 320 kbps MP3