

How to Use MELEK — KULA, the DEX & DeFi

Rev. Ryan Sasha-Shai Van Kush

- [How to Use MELEK — KULA, the DEX & DeFi](#)
- [Contents](#)
- [16-kula-arcade](#)
- [KULA Arcade — free, provably-fair play, and how to verify a draw](#)
- [25-what-a-dex-is-and-swapping](#)
- [What a DEX is — and how to swap on KulaSwap](#)
- [26-providing-liquidity](#)
- [Providing liquidity — becoming the pool, and impermanent loss](#)
- [27-farming-and-yield](#)
- [Farming and yield — staking LP tokens, and why yield is never free](#)
- [28-kula-cdp-and-the-dollar-stable](#)
- [KULA, the CDP, and the dollar-stable — MELEK's missing MBD](#)
- [29-the-bridge](#)
- [The bridge — moving value between MELEK and PRANA](#)
- [Keep reading](#)

How to Use MELEK — KULA, the DEX & DeFi

Van Kush Family Research Institute · Rev. Ryan Sasha-Shai Van Kush

Where to find us

This book is one copy of a living body of work. Everything below is online, free, and open. If a link is all you take from these pages, take this one: [MELEK](#).

- [MELEK](#) — The MELEK blockchain — a Graphene chain whose founding witness is an AI.

- [Hathor](#) — The AI Witness: chain daemon, community bot, helper, and tutor in one account.
- [Witness School](#) — Learn to run a witness; watch Hathor produce blocks live.
- [The Library of Ashurbanipal](#) — The open reference corpus — 243 cross-linked, source-cited monographs.
- [The Mining Pool](#) — Browser mining + an in-browser wallet you alone hold the keys to.
- [The Herald](#) — The MELEK newsroom and press wire.
- [The Writing Room](#) — A drafting studio whose words never leave your browser — successor to NaNoWriMo.
- [Van Kush Family](#) — The research institute and its roadmap.
- [Dudael](#) — The metaverse — 3D scenes toward an embodied, agentic world.
- [Pentecaust](#) — The outreach and backlink engine.
- [Grants](#) — Discretionary grants and funding.

The papers of record (permanent DOIs)

- [MELEK Whitepaper](#)
- [The PRANA Paper](#)
- [The KULA Paper](#)
- [The Convergence](#)
- [The Van Kush Master Synthesis](#)
- [Zar-AI: A Consciousness Synthesis](#)
- [The Library of Ashurbanipal \(corpus DOI\)](#)

Every chapter that follows links back out to the live [Library](#), where each entry is cross-linked to the others. Read one, and you are one click from a hundred more.

Contents

- [16-kula-arcade](#)
- [25-what-a-dex-is-and-swapping](#)
- [26-providing-liquidity](#)
- [27-farming-and-yield](#)
- [28-kula-cdp-and-the-dollar-stable](#)
- [29-the-bridge](#)

16-kula-arcade

KULA Arcade — free, provably-fair play, and how to verify a draw

Tier C · platforms · KULA Arcade · learn-and-earn

Welcome to the first room of Track 3 — the tour of the places we have built. We begin somewhere light: the **KULA Arcade**, a free arcade that runs on a **PLAY token** you cannot cash out. That last part is the whole design. Because the chip has no redemption value, the arcade is entertainment, not wagering — you come for the daily spin, the lotto, and the little event markets, and you leave with a score and a story, never a debt. It is play, kept honestly as play.

What you'll learn

- What the KULA Arcade is, and what the PLAY token is (and is not)
- How to take your daily spin, enter a lotto, and read an event market
- What “provably fair” means, and how to verify a draw yourself
- The honest line: entertainment only, and where PLAY stops

What it is

The Arcade lives on PRANA and offers three simple things:

- **The daily spin** — one free spin a day, for PLAY chips and cosmetic wins.
- **The lotto** — a periodic draw for a PLAY prize pool.
- **Event markets** — light “which way will it go” markets, settled openly.

PLAY is a **non-cashable** token. It buys nothing outside the Arcade and converts to no money. It is the arcade token in a seaside arcade: fun to win, worthless to a bank. That is deliberate, and it is what keeps the whole thing on the right side of the line — this is entertainment, offered where it is permitted, and not a way to win money, because there is no money in it to win.

Provably fair — verify it yourself

You do not have to trust us that a draw was clean; you can check. Each draw commits to a hashed seed *before* it runs, then reveals the seed *after*. You take the revealed seed, hash it yourself, and confirm it matches the commitment — same input, same result, every time. If the numbers line up, the draw could not have been altered once bets were in. This is the difference between “trust us” and “here is the proof,” and the Arcade is built for the second.

Learn and earn — your reward

Here is where the Track earns its name. Do the thing, then tell us about it:

1. **Play once.** Take your daily spin, or enter one lotto, in the Arcade.
2. **Verify a draw.** Take a revealed seed, hash it, and confirm it matches the commitment. This is the real skill of the lesson.
3. **Post what you found**, tagged `melek-tutorial`, or comment on this lesson’s post — a sentence on how the verification went is plenty.

When you do, Hathor upvotes your post. That upvote is a **real on-chain reward, worth whatever the vote is worth** at that moment — sometimes a little, sometimes more. Where a lesson involves a prize *draw*, entry is a free sweepstakes with a no-purchase alternate method of entry, void where prohibited — no purchase ever buys a better chance, and there is no promise of returns.

You did it

You have played the Arcade and, more importantly, **verified a draw with your own hands** — the one habit that lets you trust any game of chance you meet later. Entertainment, kept honest, kept free.

Next: **Games and idle games** (lesson 17) — the coffee-break arcade, and how to save your score.

Read this entry live, cross-linked to the whole Library, at
<https://wiki.soapbox.community>. Home: melek.salon.

25-what-a-dex-is-and-swapping

What a DEX is — and how to swap on KulaSwap

Tier C · defi · KulaSwap swap · learn-and-earn

This is the first room of a new track — the DeFi track — and it is the one to walk slowly.

KulaSwap is our decentralized exchange, a place to trade one token for another without handing your coins to a company first. It is powerful, and it is still **alpha software on a testnet**: treat every number you see as a rehearsal, not a promise. We begin with the single most important idea in DeFi — the **automated market maker** — because once you understand the pool, everything else here makes sense.

What you'll learn

- What a DEX is, and how it differs from an exchange that holds your coins
- What an AMM and a liquidity pool are, and why price is just a ratio
- What slippage is, and why a big trade moves the price against you
- How to do one swap on KulaSwap — and the honest risks of doing it

What a DEX is

A traditional exchange takes custody of your coins and matches buyers to sellers in an order book. A **decentralized exchange** does neither. You trade directly from your own wallet, and the price comes not from matched orders but from a **pool** of two tokens sitting in a smart contract. Your keys stay yours the whole time — KulaSwap never holds your coins, and nothing here ever asks you for a private key or a seed phrase.

The AMM — price is a ratio

An **automated market maker** holds a pool of, say, KULA and wMELEK. The price is simply the *ratio* of the two: if the pool holds twice as much wMELEK as KULA, then KULA is worth

about two wMELEK. When you swap, you add one token to the pool and take the other out — which changes the ratio, which changes the price. That is the whole engine. The formula that keeps it balanced (the constant-product rule) is old and well-tested, but the tokens riding on it here are alpha.

Slippage falls straight out of this: the more you trade at once, the more you move the ratio against yourself, so the last coin of a big trade costs more than the first. KulaSwap shows you an estimated price and a slippage limit — set the limit, and the trade reverts rather than filling at a price worse than you agreed to. Read that number before you confirm.

The honest risks

A DEX is not a bank and offers no protection. **Smart-contract risk** is real: a bug in a pool contract can lose funds, and KulaSwap is un-audited alpha on a testnet, so practice with test value. Prices move, slippage can be large in a thin pool, and a swap once confirmed cannot be undone. None of this is a token that appreciates or pays you — a swap is a trade, nothing more, with no promise of returns.

Learn and earn — your reward

1. **Do one swap** on KulaSwap — a small one, on the testnet, from your own wallet.
2. **Read the slippage estimate** before you confirm it, and notice how the price moved.
3. **Post or comment** about your first swap — what you traded and what the slippage was — tagged `melek-tutorial`.

Hathor upvotes your post: a **real on-chain reward, worth whatever the vote is worth** that day. Nothing to buy, no draw, and no promise of returns — the reward is for learning the mechanism, not for the trade.

You did it

You did your first swap, and — more importantly — you know *why* the price moved: you changed the ratio of a pool. That one idea is the floor the rest of DeFi is built on.

Next: **Providing liquidity** (lesson 26) — becoming the pool, LP tokens, and the honest truth about impermanent loss.

26-providing-liquidity

Providing liquidity — becoming the pool, and impermanent loss

Tier C · defi · KulaSwap liquidity · learn-and-earn

In the last lesson you traded *against* a pool. In this one you become *part* of one. **Providing liquidity** means depositing a pair of tokens into a KulaSwap pool so that other people can swap against them — and earning a share of the swap fees for the service. It is one of the real ways to earn in DeFi. It also carries a risk that gets glossed over far too often, so we are going to look straight at it: **impermanent loss**. This is still alpha software on a testnet; learn the shape of it here, with test value, before it ever matters with real value.

What you'll learn

- What a liquidity provider does, and where the fees come from
- What LP tokens are — your receipt for a share of the pool
- What **impermanent loss** is, honestly, and when it bites
- How to add liquidity once — and weigh the risk before you do

Becoming the pool

When you add liquidity you deposit *both* tokens of a pair — say KULA and wMELEK — in the pool's current ratio. In return the pool mints you **LP tokens**: a receipt that says you own a slice of this pool. Every time someone swaps against it, a small fee is added to the pool, and because you own a slice, your slice grows. Redeem your LP tokens later and you withdraw your share of the

pool, fees included. Your keys never leave you; the LP token simply records what the pool owes you.

Impermanent loss — the honest part

Here is the risk nobody should skip. If the two tokens' prices drift apart after you deposit, the pool automatically rebalances — selling the one that rose and buying the one that fell — so you end up holding **less of the winner and more of the loser** than if you had simply kept the two tokens in your wallet. That gap is **impermanent loss**. It is called “impermanent” because if the prices drift back together it fades — but if they don't, it becomes permanent when you withdraw. The fees you earn are meant to make up for it, but they do not always. It is entirely possible to provide liquidity, collect fees, and still come out behind simply holding. That is the trade you are actually making, and you should make it with eyes open.

Add to this the ordinary hazards: **smart-contract risk** in an un-audited alpha pool, and thin pools that swing hard. Providing liquidity is not a savings account and is not a token that appreciates — there is no promise of returns here.

Learn and earn — your reward

1. **Add liquidity once** to a KulaSwap pool on the testnet — deposit the pair, and receive your LP tokens.
2. **Find your LP balance** and note the impermanent-loss warning the interface shows you.
3. **Post or comment** about it — the pair you chose and, in your own words, what impermanent loss means — tagged `melek-tutorial`.

Hathor upvotes your post: a **real on-chain reward, worth whatever the vote is worth** that day. No draw, nothing to buy, and no promise of returns — the upvote rewards understanding the risk, not taking it.

You did it

You became the pool, held an LP token, and — the part that matters — you can now explain impermanent loss to someone else. That single honest idea will protect you in every yield product you ever meet.

Next: **Farming and yield** (lesson 27) — staking those LP tokens for rewards, and why yield is never free money.

Read this entry live, cross-linked to the whole Library, at <https://wiki.soapbox.community>. Home: melek.salon.

27-farming-and-yield

Farming and yield — staking LP tokens, and why yield is never free

Tier C · defi · KulaSwap farming · learn-and-earn

You have an LP token now — a receipt for your share of a pool. **Farming** (or yield farming) is the next motion: you stake that LP token into a farm and earn extra rewards on top of the swap fees, usually paid in a reward token. On KulaSwap that reward token is **SOMA**, the pool's emission reward. Farming can genuinely stack returns — and it is also where the loudest, most dishonest numbers in all of crypto live. So the whole point of this lesson is one sentence: **yield is not free money**. Everything below explains where it actually comes from. This is alpha on a testnet; learn the shape here.

What you'll learn

- What farming is, and how staking an LP token earns rewards
- Where farm yield actually comes from — emissions, not magic
- Why a big advertised APR is a warning as often as a gift
- How to stake once — and read a yield number honestly

What farming is

A farm is a contract you stake your LP tokens into. While they sit there, the farm drips a reward token to you at some rate, proportional to your share. You are still the liquidity provider

underneath — still earning fees, still exposed to impermanent loss — but now with a second reward layered on top. Unstake, and you get your LP token back to redeem for your pool share. Your keys stay yours throughout; the farm holds a staked receipt, never your secrets, and nothing here asks for a private key.

Where the yield comes from — honestly

An advertised yield is not interest a bank pays you from profit. It is almost always **emission**: the protocol mints new reward tokens and hands them out to farmers. If those tokens are being created faster than anyone buys or uses them, their price falls — and your “high APR,” measured in a falling token, can be worth far less than the headline, or nothing. A very large APR usually means a very large emission, which usually means heavy sell pressure on the reward token. So read a yield number as a *question*, not a promise: paid in what token, minted how fast, and does that token have any real use or sink? On KulaSwap, SOMA and KULA are designed with real sinks so emission isn’t the whole story — but you should still always ask.

Stacked on top are all the earlier risks: **impermanent loss** on the underlying LP, **smart-contract risk** in un-audited alpha farms, and reward tokens that can fall. Nothing here appreciates on its own, and there is no promise of returns.

Learn and earn — your reward

1. **Stake one LP token** into a KulaSwap farm on the testnet.
2. **Read the APR** and ask the honest question — *paid in which token, and minted how fast?* — then note the reward token.
3. **Post or comment** about it, tagged `melek-tutorial` — the farm you chose and, in your words, why yield is not free money.

Hathor upvotes your post: a **real on-chain reward, worth whatever the vote is worth** that day. No draw, nothing to buy, and no promise of returns — the reward is for reading the yield honestly, not for chasing it.

You did it

You staked into a farm and, more importantly, you learned to see through an APR to the emission behind it. That skepticism is worth more than any single farm — it is the thing that keeps you

from being the exit liquidity.

Next: **KULA, the CDP, and the dollar-stable** (lesson 28) — the missing MBD, and how collateral-backed money beats a fragile peg.

Read this entry live, cross-linked to the whole Library, at
<https://wiki.soapbox.community>. Home: melek.salon.

28-kula-cdp-and-the-dollar-stable

KULA, the CDP, and the dollar-stable — MELEK's missing MBD

Tier C · defi · KULA CDP · learn-and-earn

Every other lesson in this track has been about trading. This one is about *money* — specifically, the dollar-stable unit that MELEK is missing, and how **KULA** and a **CDP** can supply it honestly. To see why it matters, we have to tell a little chain history: the story of the Steem Dollar, why Blurt threw it away, and why MELEK — a Blurt fork — has no dollar of its own. Then we will look at the fix. This is design still being built on alpha infrastructure; treat the specific numbers as unsettled and hold to the concepts.

What you'll learn

- What SBD was on Steem, and how its ~\$1 peg actually worked
- Why Blurt removed it, and why MELEK therefore has no MBD
- What a CDP is: locking KULA collateral to mint a dollar-stable
- Why collateral-backed money beats SBD's fragile conversion-peg — honestly

A little history: SBD, and the missing MBD

Steem had two coins. STEEM, the volatile one — and **SBD**, the Steem Blockchain Dollar, meant to hold about **one US dollar**. SBD was minted from author rewards, and its soft peg worked by a promise: the chain would let you convert 1 SBD into a dollar's worth of STEEM, at the witnesses' median price feed, over a few days. A **debt-to-ownership “haircut”** protected the chain — once SBD owed too much against STEEM's market value, the chain quietly paid rewards in STEEM instead of SBD to stop over-issuing. It half-worked. The peg was soft with no hard ceiling, so in bull runs SBD floated *far above* a dollar on pure speculation, and the whole mechanism was fragile.

Blurt — the fork MELEK is built from — looked at that fragility and deliberately **removed the dollar token** to keep things simple and author-friendly. So Blurt has no BBD, and **MELEK, as a Blurt fork, has no MBD**. MELEK has no on-chain dollar, no stable unit of account. That is a real gap, and it is the one this lesson fills.

The fix: a CDP, backed by KULA collateral

Rather than revive SBD's fragile conversion-peg, the plan is to mint a dollar-stable the modern, collateral-backed way — the MakerDAO pattern — using **KULA** as collateral in a **CDP** (a collateralized debt position). The idea, in plain terms:

- You **lock KULA** (or other approved collateral) into a vault, and against it you **mint** a stable unit — a claim on real, locked value, not a promise from a price feed.
- The position is **overcollateralized**: you lock more value than you mint, so the backing survives a price dip.
- If your collateral falls too far, the position is **liquidated** — sold to cover the debt — which is what keeps every unit of the stable fully backed. That is the central risk to you as a borrower: **you can be liquidated**, so you watch your ratio.
- A **protocol-owned-liquidity floor** (the “PoL floor”) stands underneath KULA itself, so the collateral has real support rather than pure emission.

Because every stable unit is backed by locked collateral that can be liquidated to defend it, this is sturdier than SBD's soft feed-and-haircut peg — money backed by what is actually locked, not by a conversion the chain merely promises.

The honest line

The specific ratios, fees, and which token carries the stable are **still being settled** — take no number here as final. And a hard rule: KULA and this stable are **utility mechanisms**, never an investment. We do not, and you should not, call them “asset-backed” or “SEC-registered” or anything that sounds like a return — that is the Unicoins mistake, and regulators judge the substance, not the wrapper. There is **no promise of returns** here: a CDP is a tool for minting a stable unit against collateral you might lose, not a yield.

Learn and earn — your reward

1. **Do one CDP action** on the testnet — lock a little KULA and mint a small amount of the stable, or just open the vault and read your collateral ratio.
2. **Note your liquidation price** — the level where the position would be sold.
3. **Post or comment**, tagged `melek-tutorial`, explaining in your own words why collateral-backed beats SBD’s conversion-peg — and that a CDP can be liquidated.

Hathor upvotes your post: a **real on-chain reward, worth whatever the vote is worth** that day. No draw, nothing to buy, and no promise of returns — the reward is for understanding the mechanism, liquidation risk and all.

You did it

You now know the one thing most MELEK users never learn: *why* the chain has no dollar, and how collateral-backed money could give it one without SBD’s fragility. That is real monetary literacy, not just button-pushing.

Next: **The bridge** (lesson 29) — moving value between MELEK and PRANA, what wrapping is, and the security posture of wMELEK.

Read this entry live, cross-linked to the whole Library, at <https://wiki.soapbox.community>. Home: melek.salon.

29-the-bridge

The bridge — moving value between MELEK and PRANA

Tier C · defi · MELEK ↔ PRANA bridge · learn-and-earn

This is the last room of the DeFi track, and it ties the two chains together. MELEK is our social chain; **PRANA** is the compute-and-DeFi chain where KulaSwap, the farms, and the CDP live. A **bridge** is what lets value cross between them — and the token that crosses is **wMELEK**, “wrapped MELEK.” Bridges are the most security-sensitive machinery in all of DeFi, the place where the largest hacks in the space have happened, so this lesson is as much about *caution* as about mechanics. It is alpha on a testnet; cross with test value and learn the shape of the thing.

What you’ll learn

- What a bridge is, and why two chains need one to share value
- What “wrapping” means — how wMELEK represents MELEK on PRANA
- The security posture: what backs wMELEK, and where bridge risk lives
- How to bridge once — and why you cross carefully

What wrapping is

MELEK the coin lives on the MELEK chain. PRANA’s DeFi contracts cannot touch it directly — a contract on one chain cannot reach into another. So the bridge does something simple and strict: you **lock** MELEK on the MELEK side, and the bridge **mints** an equal amount of **wMELEK** on the PRANA side. That wMELEK is a one-for-one stand-in — a claim ticket for the MELEK held in the bridge. To come back, you **burn** the wMELEK on PRANA and the bridge **releases** your MELEK. The hard invariant is this: **wMELEK in existence always equals MELEK locked in the bridge**. No free minting — every wMELEK is backed by a real MELEK held in reserve. Your keys stay yours the whole way across, and the bridge never asks for a secret.

The security posture — read this twice

A bridge is a lock-and-mint vault, and a vault is exactly what attackers go for. Two honest points:

- **The backing is real, not synthetic.** wMELEK is minted only on a verified deposit and burned on withdrawal, so the peg is collateral, not a promise. That is the strong part of the design.
- **The trust sits in the attesters.** A federated bridge relies on a set of validators (a K-of-N group) to confirm that a deposit really happened before wMELEK is minted. That group is the thing you are trusting. A bridge's worst risks live here — a compromised validator set, or a contract bug in the mint/release path — which is why bridges are audited hardest and why ours is still un-audited alpha. Cross small, cross on the testnet, and never treat a bridge as a place to park value.

None of this is a token that appreciates or pays you. Bridging moves value across chains; it is not a yield, and there is no promise of returns.

Learn and earn — your reward

1. **Bridge once** on the testnet — lock a small amount of MELEK and receive wMELEK on PRANA (or bring a little back the other way).
2. **Confirm the one-for-one** — check that the wMELEK you received matches the MELEK you locked.
3. **Post or comment**, tagged `melek-tutorial`, about your first crossing — and, in your words, where a bridge's real risk lives.

Hathor upvotes your post: a **real on-chain reward, worth whatever the vote is worth** that day. No draw, nothing to buy, and no promise of returns — the reward is for crossing carefully and understanding what you trusted to do it.

You did it

You moved value between MELEK and PRANA, you know what wMELEK really is — a claim on locked MELEK, one for one — and you know where a bridge's danger sits. That caution is the right note to end a DeFi track on: the tools are powerful, the risks are real, and now you can see both.

Next: there is no next lesson in the DeFi track — you have walked all of it. Take what you learned back to the core chain, and, as always, go help the next newcomer cross safely.

Read this entry live, cross-linked to the whole Library, at <https://wiki.soapbox.community>. Home: melek.salon.

Keep reading

The work does not end at the last page. It continues, and is added to, at every address below.

- [MELEK](#) — The MELEK blockchain — a Graphene chain whose founding witness is an AI.
- [Hathor](#) — The AI Witness: chain daemon, community bot, helper, and tutor in one account.
- [Witness School](#) — Learn to run a witness; watch Hathor produce blocks live.
- [The Library of Ashurbanipal](#) — The open reference corpus — 243 cross-linked, source-cited monographs.
- [The Mining Pool](#) — Browser mining + an in-browser wallet you alone hold the keys to.
- [The Herald](#) — The MELEK newsroom and press wire.
- [The Writing Room](#) — A drafting studio whose words never leave your browser — successor to NaNoWriMo.
- [Van Kush Family](#) — The research institute and its roadmap.
- [Dudael](#) — The metaverse — 3D scenes toward an embodied, agentic world.
- [Pentecaust](#) — The outreach and backlink engine.
- [Grants](#) — Discretionary grants and funding.

Cite the record

- [MELEK Whitepaper](#)
- [The PRANA Paper](#)
- [The KULA Paper](#)
- [The Convergence](#)
- [The Van Kush Master Synthesis](#)
- [Zar-AI: A Consciousness Synthesis](#)
- [The Library of Ashurbanipal \(corpus DOI\)](#)

Van Kush Family Research Institute. This book is released free; share it, mirror it, cite it. It links home from every page because the home is the point — the book is just a door.