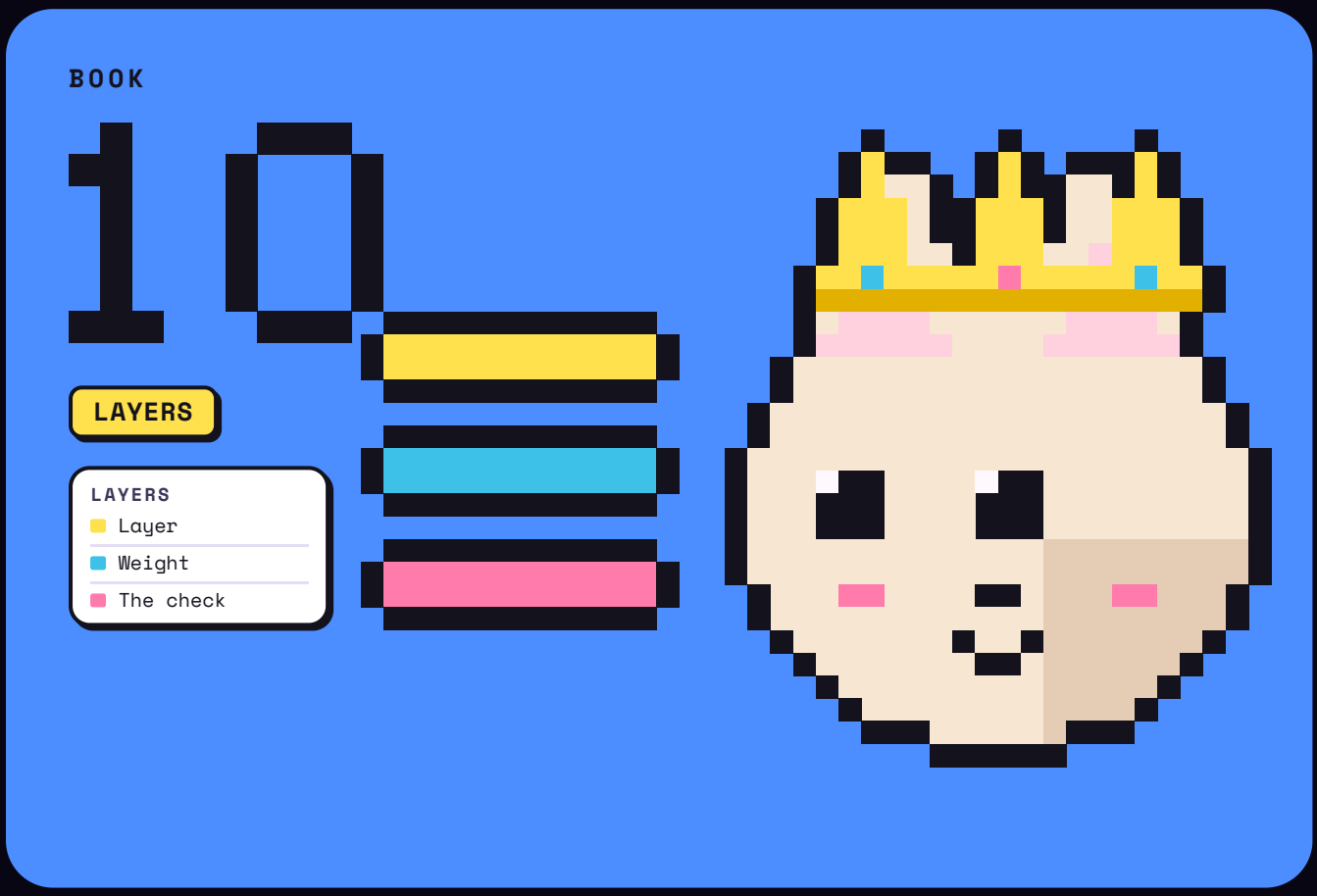
A FREE FIELD GUIDE FROM KURV · BOOK 10

Traits That Work



How to plan layers, how many traits go in each one, rarity as weights, uniques beside random pieces, and how to catch a combination that looks broken.

14 MIN Layers, weights, uniques, and a check. Written for testnet, where coins have no value.

Apply at kurv.fun/apply

KURV runs on testnet, on Base Sepolia and Solana Devnet. Testnet pieces and coins have no value.

CHAPTER 00 · LAYERS

Before we start



Most collections with many different pieces are not drawn one by one. They are layers, stacked. This book is the plan: how many traits, the weights, the uniques, and the rules that stop a broken combination.

Try the Studio on testnet, at testnet.kurv.fun. Coins are free and nothing has value. Rarity is not a price.

What's inside

01 Layers, traits, pieces

02 How many traits in a layer

03 Weights that you can read

04 Uniques and random pieces

05 Rules for broken combinations

06 Same canvas, drawn in place

07 Look at the grid

08 Run the check

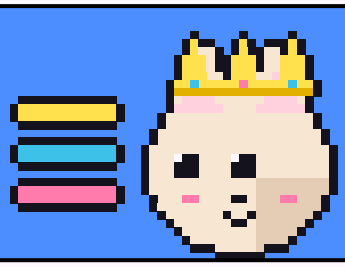
09 A small plan

10 Cheat sheet

CHAPTER 01 · THE STACK

Layers, traits, pieces

THE STACK



Three words

01 A **layer** is one part of the picture: background, body, eyes, hat.

02 A **trait** is one option on that layer.

03 One trait from each layer, back to front, is a **piece**.

How KURV reads the folder

01 One folder per layer.

02 The number in front of the folder name is the paint order, bottom to top.

03 The file name before # is the trait name collectors see.

Or skip layers

01 If you drew every piece yourself, bring an art folder and a metadata.json.

02 KURV scores rarity the same way.

03 This book follows the layer path.

CHAPTER 02 · HOW MANY

How many traits in a layer



Enough for the supply

01 More pieces need more traits if you want the grid to stay varied.

02 A short supply does not need a huge trait list.

03 Fewer, better traits beat many weak ones.

Loud and quiet

01 A bright, big, or face-close trait draws the eye.

02 Keep that end rare, and the quiet end common.

03 If every hat is huge, the hats become the collection.

None is a trait

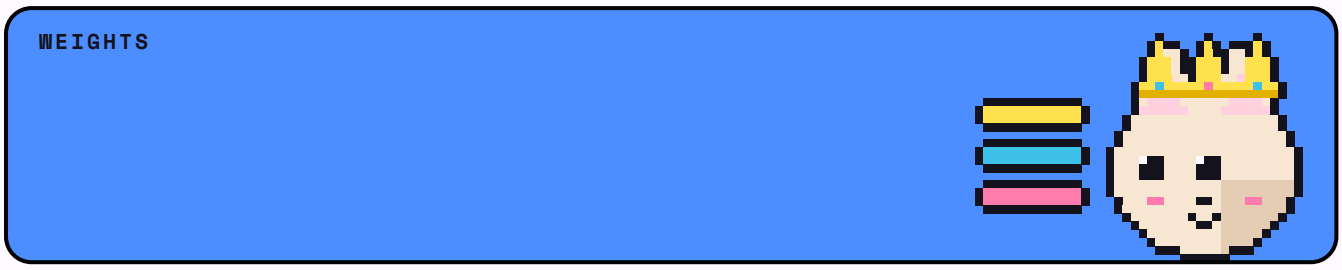
01 An optional layer needs one blank file named **None**, with a weight, so some pieces skip it.

02 Blank, Empty, or No Hat do not work as that blank.

03 The bottom layer never has None.

CHAPTER 03 · WEIGHTS

Weights that you can read



Inside one folder

01 Crown#5 shows up less often than Cap#30, and only against other files in that same folder.

02 A file with no number counts as 1.

03 Collectors never see the number.

Add up to 100

01 Make each layer add up to 100 so anyone can read it.

02 In the **Studio**, each trait shows its share, and you can set **Exactly**, **At least**, or **At most**.

Not a price

01 KURV scores a piece from how uncommon its traits are, and rank 1 is the rarest.

02 That score is not a price, and it promises nothing about what anyone will pay.

On one card

01 **Weights to 100.**
Inside one folder. #0 is never picked at random.

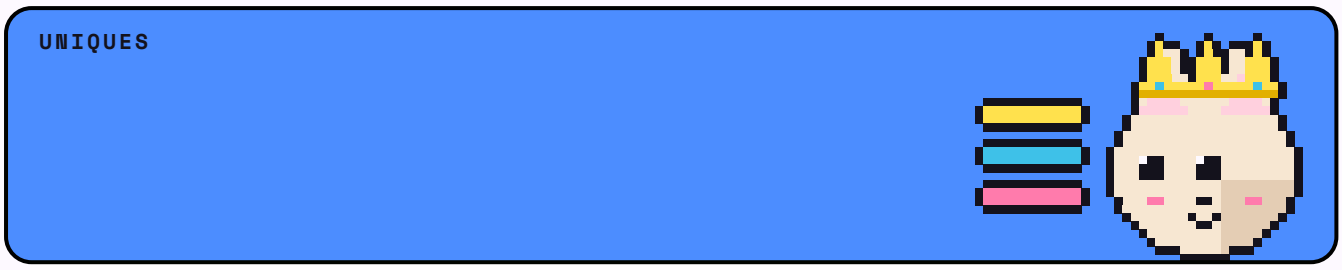
02 **None.**
One blank file, on an optional layer only. Never on the bottom layer.

03 **Run the check.**
It names a combination that cannot be built.

04 **Rarity is not a price.**
Test the grid on testnet. Coins there have no value.

CHAPTER 04 · UNIQUES

Uniques and random pieces



Random

01 The weights build the random pieces.

02 #0 means the trait is never picked at random.

03 Use that for a trait only a hand-made piece should wear.

Pinned

01 A unique is a piece you design yourself.

02 Pin it, give it a name, and an optional piece number.

03 Pinned pieces count toward supply.

Both in one collection

01 You can mix them.

02 The random grid carries the collection.

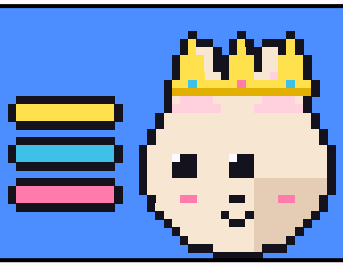
03 The pinned pieces are the ones you refuse to leave to the weights.

04 A trait at #0 stays off the random pieces, so only a pinned piece wears it.

CHAPTER 05 · RULES

Rules for broken combinations

RULES



What breaks

01 A hat that covers the hair, a mouth hidden by a mask, two patterns that fight, a body color that vanishes on a background.

02 The piece looks unfinished.

A rule

01 Write it in the Studio.

02 Never combine Body: Triangle with Hat: Crown.

03 Or: if Eyes is Laser, Background must be Gold or Pink.

04 KURV can suggest a rule when one trait hides another, from the pixels.

Then the check

01 Run the check before you generate.

02 It refuses a setup that cannot be built, and it names what is impossible.

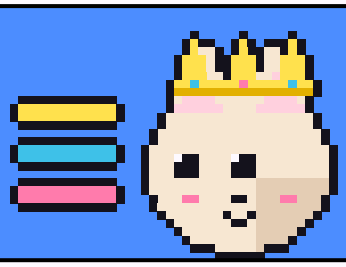
03 Fix the rule or the art.

04 Do not hope the clash stays rare.

CHAPTER 06 · THE FILE

Same canvas, drawn in place

THE FILE



One square

01 KURV recommends 1000 by 1000, set in layers.json, anywhere from 1000 to 4096.

02 Every file matches it.

03 A different size lands small or cropped on every piece that wears it.

Drawn in its final spot

01 An eyes file is the full canvas, with eyes where the eyes go, and the rest transparent.

02 It is not a tiny picture of eyes.

03 Only the background fills the frame.

Names

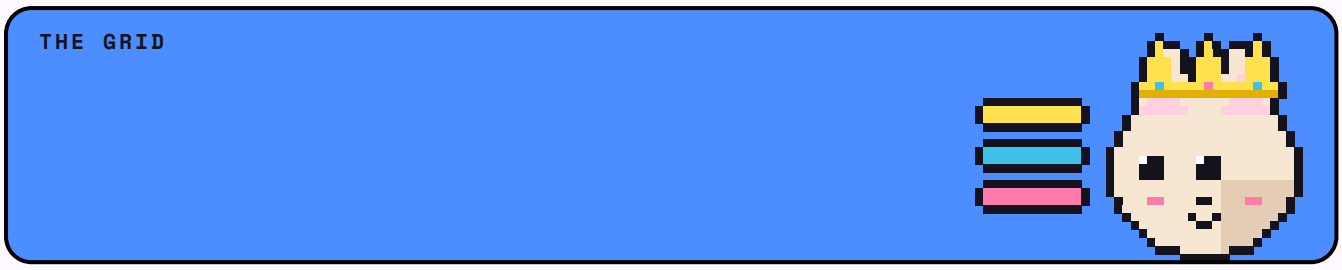
01 layer_trait.png, lowercase, no spaces.

02 One folder per layer.

03 The folder number is the paint order.

CHAPTER 07 · THE GRID

Look at the grid



Zoom out

01 Does one trait shout over the grid? A busy background can hide the character.

02 Soften it, or make it rare.

Zoom in

Does any combination look broken, cut off, or at another scale? Fix the art, or add a rule, then look again.

Common pieces too

01 If only the rare piece looks finished, the collection feels unfair.

02 A quiet piece still needs a face that reads at thumbnail size.

On one card

01 **Weights to 100.**
Inside one folder. #0 is never picked at random.

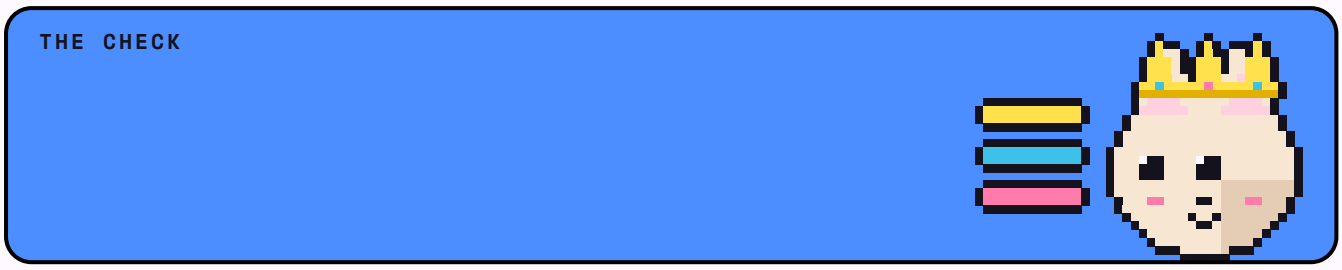
02 **None.**
One blank file, on an optional layer only. Never on the bottom layer.

03 **Run the check.**
It names a combination that cannot be built.

04 **Rarity is not a price.**
Test the grid on testnet. Coins there have no value.

CHAPTER 08 · THE CHECK

Run the check



What it catches

01 Rules that leave no legal piece, a missing None, mixed sizes, a trait that can never be reached.

02 Read every line.

03 A warning you skip becomes a piece you cannot fix after launch.

On testnet

01 Preview the collection at testnet.kurv.fun.

02 The Studio runs in the browser.

03 Coins there have no value, so rebuilding costs nothing of value.

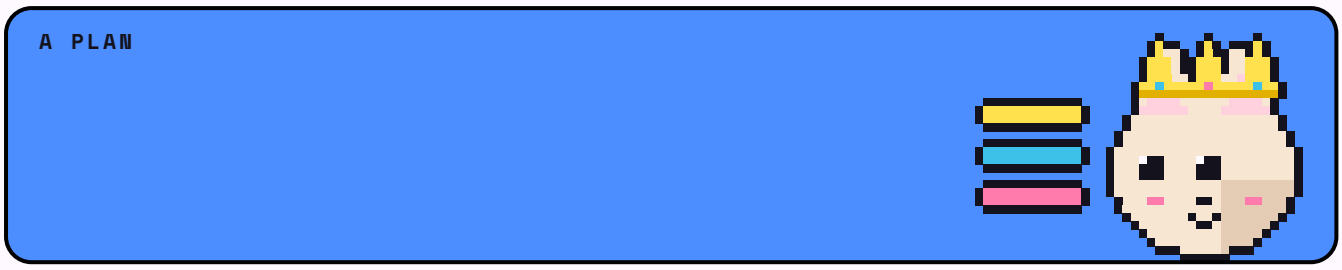
Three, then the rest

01 Draw three traits per layer, export, and stack a few samples before you draw the full set.

02 If the stack looks finished and lined up, continue.

CHAPTER 09 · A PLAN

A small plan



Seven is plenty to start

01 Max Cat uses seven, back to front: background, fur, head, eyes, nose, whiskers, frame.

02 You do not need more on a first collection.

One page

01 Layer name, trait names, weights that add to 100, and any never-with rule.

02 Draw from that page so the names do not drift.

Then the other books

01 Draw your traits is the file method.

02 Name it, tell it is the words.

03 Launch on KURV is the ZIP and the signature.

On one card

01 **Weights to 100.**
Inside one folder. #0 is never picked at random.

02 **None.**
One blank file, on an optional layer only. Never on the bottom layer.

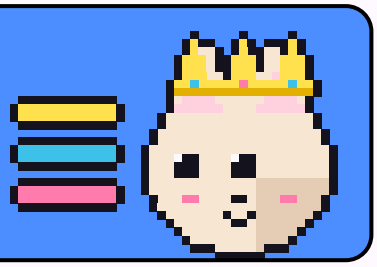
03 **Run the check.**
It names a combination that cannot be built.

04 **Rarity is not a price.**
Test the grid on testnet. Coins there have no value.

CHAPTER 11 · WORKSHEET

Worksheets

WORKSHEET



Copy these and fill them in before you draw the full set.

One layer

```
Layer name:          _________________
Paint order:         ____
Traits and weights (add to 100):
  ________ #____     ________ #____
  ________ #____     None #____
Loud trait, kept rare: __________
```

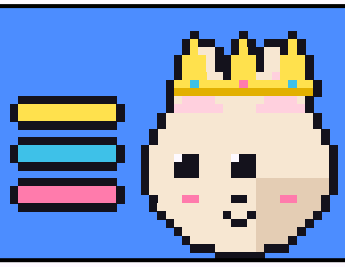
Rules

```
Never combine:       ________ + ________
Always with:         ________ -> ________
Pinned unique:       #____  name ________
Check run?           Y / N
```

CHAPTER 10 · ONE PAGE

Cheat sheet

ONE PAGE



01 Layer.
One part of the picture. Folder number is paint order.

02 Trait.
One option. File name before #. Weight after #.

03 Weights.
Add to 100 inside the folder. #0 is never random.

04 None.
One blank, on optional layers only. Not on the bottom layer.

05 Unique.
Pin it. It counts toward supply.

06 Rules.
Never-with, or always-with. Then run the check.

07 Canvas.
Same square, trait drawn in place, transparent except the background.

08 Rarity.
A score, not a price. Testnet coins have no value.



THE LAST PAGE

Stack three traits before you draw the rest.

A small stack that looks finished is the test. Run it in the Studio on testnet. Testnet pieces and coins have no value.

Apply at kurv.fun/apply

NEXT READ · BOOK 11

Price Your Drop

Free or paid, on testnet. What KURV charges, a limit per wallet, how to choose a supply, and the 5% royalty split. Testnet coins have no value.

Made by KURV. Free to read and share. Book 10. Pass it to one creator before they draw the full set.