Project Defaults & Notes — He Is Coming Theory

Last updated: 2025-08-29 • Draft "magnum opus" v1

This is the central brain for our project: rules, mechanics, drafting heuristics, POIs, foods/cauldrons, item compendium notes, and build archetypes (with slot order). It's written for Kingmaker unless noted.

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0) Ground Rules

- **Mode scope:** Kingmaker.
- **Final board size: 12 items** (+ 1 **weapon** in its own slot). You **cannot** equip two weapons.
- **No "Mythics" in Kingmaker.**
- **Clarifications:** I will ask clarifying questions whenever ambiguity could change the outcome (preferred for this project). Use `@assistant: FYI/TODO/HOLD` notes as needed.
- **Rounding:** All calculations **round down** (floor). Example: under **Freeze**, Attack is halved **and rounded down** (1 Attack → 0). Apply floor rounding consistently to splits, doubles, conversions, and similar modifiers.
- **Edges & Oils:** 1 Edge on weapon; Oils are +1 stat modifiers. Apply oils early once a +1 won't disrupt your build: oil locations reset when you equip a new weapon (upgrading the same weapon doesn't). Edges also reset on weapon swap; you can re-edge at another anvil for 10 coins.
- Set logic: Some items form sets (e.g., Deadly Toxin, Marble Anvil). Set bonuses do not create a new timing tier or skip order; they trigger in the standard tiers (Battle Start, Turn Start, On-Hit, CDn) and respect item order. If a set bonus is tied to a specific item, it follows that item's position; otherwise it resolves with other effects of its stated tier.
- **Golem (Swampland):** combines **two identical Common/Golden** items. You cannot combine Heroic or Rare items.
- **Early boss fight:** You can choose to fight the boss before night; if you win, the next two inventory slots unlock immediately (you gain the day-end slot unlock early).
- **Map tiles (POIs):**
- **Treasure Chest:** pick 1 of 3 Common; rare Golden/Diamond chance.
- **Bargaining Tent:** 2 Rares for 5g; haggle 75%→4g / 25%→7g.
- **Blade Oils:** +1 Attack/Armor/Speed; reset on weapon change.
- **Campfire:** night heal 10.
- **Lookout Tower:** reveal radius 13.
- **Woodcutter:** combine 2 items → random Heroic.
- **Scrying Pool:** reveal a rare location.
- **Waypoint:** fast travel.
- **Horse Carriage:** choose a biome; reveal path.
- **Beehive:** Honeycomb (guarded).
- **Crone:** choose 1 of 2 cursed.
- **Junksmith:** copy an item.
- **Large Golem:** upgrade Common→Golden, Golden→Diamond.
- **Rune Stone:** choose Blood/Echo/Iron Rune.
- **Gem Stash:** Ruby/Sapphire/Citrine; needs Woodland Blue.

- **Fairy Queen:** transform all items to higher rarity.
- **Alchemist:** upgrade potion→elixir.
- **Rich Merchant:** 6 Heroic for 5g.
- **Beekeeper:** 2 honey items for 25g.
- **Biome-specific:**
  - **Home:** full heal at night.
  - **Forge:** weapon mod/replace for 10g.
  - **Weapon Pile:** pick 1 of 3 weapons.
  - **Large Bonfire:** full heal.
  - **Cauldron:** food fusion.
  - **Hero's Grave:** pick 1 of 3 Heroic.
  - **Ancient Tomes:** pick 1 of 3 tomes; needs Swampland Yellow.
  - **Farmer:** pick 1 of 3 foods.
  - **Fairy:** transform same rarity.
  - **Golem:** combine identical Common/Golden.
  - **Jewelry Box:** pick 1 of 3 Jewelry; needs Woodland Blue.
  - **Traveling Merchant:** 5 Rares + 1 Heroic.
- **Order matters:** put enablers/conditioners first, then the payoffs that depend on them (enablers higher in the list, payoffs below).

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1) Timing & Ordering — The Backbone

Resolution rules

- **Interrupt priority: 0 HP → "when this happens" → Wounded**.
- **Battle Start order:** compute Speed **after all pre–Battle Start adjustments**; faster side resolves first; exact ties go to the **active/attacking** side (on defense you lose this tiebreak).
- **Turn flow:** after all Battle Start effects resolve, check current Speed to decide who acts first; that side takes **Turn Start → Attack → End**, then the other side's **Turn Start**; repeat.
- **Simultaneous 0 HP:** if both hit **0 HP** in the same window, the **attacking (active) side loses** in Kingmaker.
- **Fatigue:** applies at the **first player's Turn Start** in long fights.
- **Math model:** all combat math is **integer**; whenever a modifier would produce a fraction (halves, percentages, conversions), **round down** immediately before continuing resolution.

Known pre–Battle Start adjustments (as of current patch)

- **Energy Drain (Rare, Woodland):** *Before any other item triggers*, if you have less Speed than the enemy, **steal 5 Speed** from them. *(This is the only item with an explicit "before any other item" clause we've found in the wiki so far.)*

Moved-to–Battle Start modifiers (still Battle Start tier, not pre-start)

- **King's Blade:** Moves **Exposed** and **Wounded** triggers to **Battle Start**.
- **Marble Anvil: Battle Start — Trigger Exposed.**

Common Battle Start stat shifters (order-sensitive but not pre-start)

- **Lemon Syrup: Battle Start — Double your Speed.**
- **Featherweight Helmet: Battle Start — Spend 2 Armor → +3 Speed & +1 Attack.**
- **Granite Crown: Battle Start — Max HP += Base Armor.**
- **Emerald Gemstone: Battle Start — If your max HP < enemy's, set it equal.**
- **Iceblock Shield: Battle Start — Gain 2 Freeze.**
- **Ham Bat / Silverscale Swordfish / Swiftstrike items: Battle Start — Gain additional strikes** (with conditions).
- **Ore Heart / Horned Helmet / Bramble Belt / Thorn Ring: Battle Start — Armor/Thorns/HP shifts** that matter for sequencing.

Timing tiers

1. **Battle Start** — pre-turn effects; faster side first.
2. **Turn Start** — resolve top→bottom on the current player.
3. **Action window** — **On Hit / On Damage / First time X**; when multiple of the same tier occur, resolve in reading order (top→bottom).
4. **Countdown (CD n)** — fire when they tick to **0**; re-arm after.
5. **Symphony / trigger again** — re-fire listeners; respects the same order and conditions.

Placement rules (minimal)

- Put the **condition/enabler** above the **listener/payoff** it enables.
- Put **sustain/mitigation** above **conversion** (don't destroy the buffer you need to live).
- Put one-time **doublers/first-time modifiers** above the **first source** they affect.

1.a) Combat Resolution Flow (generalized)

Step	Window	Who resolves	Ordering inside step	What happens
0	Pre–Battle Start adjustments	Global	Explicit "before any other item" effects resolve (e.g., Energy Drain)	Update Speed/HP/status before anything else.
1	Battle Start	Faster side (after step 0)	Faster side resolves Battle Start, then the other side	Effects can change Speed, Armor, statuses, strikes, etc.
2	First Turn Start	Faster side (after step 1)	Resolve top→bottom	Turn-Start effects (armor/heal/convert/etc.). Late-fight fatigue applies at the first player's Turn Start.
3	Action (active side)	Active fighter	Within the action window: On-Attack → On-Hit → On-Damage → "First time X"; reading order inside each	Apply damage/heal/status; reduce CDs accordingly.

Step	Window	Who resolves	Ordering inside step	What happens
4	Countdown	Global	Any CD that reached 0 fires now; re-arm after	Fires before End of Turn.
5	End of Turn	Active fighter	Resolve end-step effects	Cleanups and end-step triggers.
6	Next Turn Start	Other side	Resolve top→bottom	Then repeat steps 3→6, alternating sides, until combat ends.

Global interrupts & priorities - **Interrupt priority: 0 HP → "when this happens" → Wounded**. A 0-HP event stops further effects in that window. - **Simultaneous 0 HP:** if both hit **0 HP** in the same window, the **attacking (active) side loses** in Kingmaker. - **Symphony / "trigger again":** Re-fires eligible listeners within the current tier in board order (top→bottom); does not skip conditions. - **Reading order inside a tier:** When multiple same-tier effects trigger together, resolve them top→bottom by slot.

2) Status & Trigger Lexicon — Deep Dive

This section explains **what** each status/trigger does, **when** it checks, **how** it ends/clears, and **what interacts** with it. Values and examples reflect the current wiki; treat numbers as patch-sensitive.

2.1 Status effects (persistent modifiers)

Armor

- **What:** A buffer that absorbs damage before HP. Many effects key on "gain Armor", "if you have Armor", or **convert Armor** into other resources (e.g., Thorns).
- **When it matters:** Checked at damage calculation; several Turn-Start/Exposed/Wounded items also check whether you **have** Armor or **gained** Armor this window.
- **Ends/clears:** Reduced by incoming damage and some statuses (e.g., **Acid**). Some items set/scale Armor at Battle Start or Turn Start.
- **Interactions:** Doublers like "first time you gain Armor, double it"; converters like **Bramble Buckler** (convert Armor→Thorns); heal→Armor lines (e.g., **Iron Rose**). **Conversions use floor** when a fraction would result (e.g., 50% HP→Armor from Lifeblood Armor).

Thorns

- **What:** Retaliatory damage when you are **hit**. Multiple hits in a single enemy action will trigger Thorns each time.
- **When it matters:** During the **On-Hit/On-Damage** window after you take a hit.
- **Ends/clears:** Normally persists; some effects convert or increase it; cleanse effects can remove if classified as a removable status in that context.
- **Interactions:** Armor→Thorns converters; Riptide/thorns hybrid lines; multi-hit enemies multiply value.

Poison

- **What:** Damage-over-time that only applies if the afflicted has **0 Armor** at their **Turn Start**.
- **When it matters: Start of the afflicted unit's turn** → if Armor = 0, take damage equal to Poison stacks **then remove 1 Poison**.
- **Ends/clears:** Removes 1 per afflicted Turn Start; cleanse/transfer can remove/move it.
- **Interactions: Acid** and armor-break tools ensure Armor = 0 so Poison can tick; "on heal" loops can add Poison if you're running **Rose**-style payoffs. **No rounding needed** (Poison is an integer stack count).

Acid

- **What:** Corrodes **Armor** at the **Start of your turn**.
- **When it matters:** At your Turn Start, **lose Armor equal to Acid**; if your Armor is **less than** Acid, it is set to **0**.
- **Ends/clears:** Persists until cleansed/removed; does not auto-decay by itself.
- **Interactions:** Enables Poison ticks by forcing Armor to 0; several items trigger additional effects "if enemy Armor = 0". **No rounding needed** (integer subtraction + min-to-zero rule).

Freeze

- **What:** While you have Freeze, **your Attack is halved (round down)**. At **Turn End**, remove **1 Freeze**.
- **When it matters:** Affects all damage calculations while stacks remain; many "If you have Freeze" payoffs check at **Turn Start**.
- **Ends/clears:** Auto-removes 1 at your Turn End; cleanse/transfer can remove more.
- **Rounding example:** 1 Attack under Freeze becomes **0**; 5 becomes **2**.
- **Interactions: Ice Spikes** grants Thorns if you **have Freeze**; self-Freeze seeds (e.g., Curse/Tomb) are placed **above** Spikes to satisfy the check.

Riptide

- **What:** A delayed burst that **triggers once at the End of the afflicted unit's turn** for **fixed damage per stack** (then removes **1** stack).
- **When it matters: Turn End** of the afflicted side (not yours vs theirs unless you are afflicted). Multiple stacks keep triggering on subsequent afflicted turns.
- **Ends/clears:** Removes 1 per afflicted Turn End; cleanse/transfer can remove/move it.
- **Interactions:** Items can change the **number of triggers per turn** or convert **Exposed**/other events into Riptide application.

  Note: Some pages classify **Exposed** and **Wounded** under *Trigger tags* rather than statuses; they're listed below in the trigger section.

2.2 Trigger tags (event windows & conditions)

Battle Start

- **When:** After **pre–Battle Start adjustments** resolve (e.g., effects explicitly marked "before any other item").
- **Order:** Faster side's Battle Start first; ties go to the **active/attacking** side; then the other side.
- **Common uses:** Set/scale stats (Armor/HP/Speed), apply statuses, grant **additional strikes**, move other triggers into Battle Start.

Turn Start

- **When:** At the start of a side's turn; resolve top→bottom.
- **Common uses:** Sustain (+Armor, +HP), **Acid**/Poison checks, converters (Armor→Thorns), self-freeze seeds, passive armor pads.

First Turn

- **When:** A one-time window during your very first active turn. Typically modifies **On-Hit** effects or grants extra strikes.

Exposed

- **What: Triggers when Exposed is applied** (commonly the first time your Armor hits 0 in a fight, unless otherwise specified).
- **Order shifters:** Some items move Exposed listeners to **Battle Start** or make Exposed **trigger additional times**.
- **Uses:** Armor spikes, Symphonies, stun/utility riders, conversions (e.g., Speed→Armor during Exposed).

Wounded

- **What: Triggers when Wounded is applied** (commonly the first time you lose half your max HP in a fight, unless otherwise specified).
- **Uses:** Burst sustain, damage spikes, economy riders; some items fan-out to "trigger all Wounded items".

On Hit / On Damage / First time X

- **On Hit:** When **your attack connects**. Reduces CDs and fires "on hit" riders.
- **On Damage:** When **you take damage**.
- **First time X:** A per-fight one-time gate (e.g., first time you gain Armor, first time enemy is Wounded). Doublers need to be **above** the first source they affect.

Countdown (CD n)

- **What:** A timer that decrements during action/turn flow. When it hits **0**, the item fires, then usually **re-arms**.

- **Rounding:** Countdown values are integers. When **halved** by effects (e.g., Arcane Gauntlet), use **floor** (CD5 → 2; CD3 → 1).
- **Nuances:** Some items trigger **when any countdown fires**; others trigger **after countdowns** and **reset** them.

Symphony

- **What: Trigger the effect of another random Instrument**.
- **How it resolves:** Re-fires eligible instrument listeners within the current tier; respects order/ conditions; multi-trigger items can call Symphony multiple times.

Turn End

- **What:** End-step window; many statuses resolve here (**Riptide**, Freeze decay, some cleanses/decays).

Next Boss / Every other turn / Additional strikes / Convert / Double / Each / Equal / If / While / Whenever

- **Next Boss:** Triggers at the next boss encounter; often economy or spike effects.
- **Every other turn:** Alternates per active turns; ensure parity is correct at pick time.
- **Additional strikes:** Grants extra hits in your action; interacts strongly with "every N strikes" weapons.
- **Convert:** Deterministically transforms one resource into another (e.g., **Armor→Thorns**, **Speed→Armor**). Place **after** sustain but **before** payoffs that need the result.
- **Double / Each / Equal / If / While / Whenever:** Keyword modifiers. "Double" multiplies a specific outcome; **apply rounding down** if the result is fractional. "Each" iterates across a counted set (e.g., each Wood item). "Equal" sets a stat to a reference (no rounding needed). "If/While" gate effects; "Whenever" denotes repeating listeners. "Double" multiplies a specific outcome; "Each" iterates across a counted set (e.g., each Wood item); "Equal" sets a stat to a reference; "If/While" gate effects; "Whenever" denotes repeating listeners.

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3) Instruments, Tomes & Engines (core patterns)

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Instruments (Exposed listeners):

- *Marshlight Lantern* (Exposed: +Armor, lose HP), *Riverflow Violin* (Exposed: +Armor), others.
- Pair with **doublers** (e.g., "Exposed triggers twice", "First Armor doubled") and **sustain** (Helmet/Cloak) so the HP chip doesn't matter.

Tomes (Countdown engines):

- *Arcane Gauntlet* (Battle Start: halve countdowns), *Tome of the Hero* (CD8: +4/+4/+4), *Sheet Music* (CD6: Symphony ×3).
- **Glasses of the Hero** (Crossguard + Tome): On Hit, reduce **all** countdowns by 1.

Poison/Acid shells:

   • Poison needs enemy Armor = 0. Acid + siphons create loops with healing → more poison.

Freeze→Thorns converters:

   • *Ice Spikes* payoff; keep self-Freeze reliable via *Frostbite Curse* or *Ice Tomb*.

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4) Foods, Cauldrons & Honeycomb (combat routing)

Two-item rule: Cauldron fuses exactly 2 foods into a fixed output; fusion is permanent. **Honeycomb** is a separate upgrade applied to a **single** target (not a third ingredient).

High-impact fusions (concise table)

Fusion	What it does (short)	Why it matters
Spiny Chestnut + Silverscale Fish → **Spiny Snapper**	Start with Riptide; Thorns on Riptide trigger	Early thorns engine with reactive bursts
Spiny Chestnut + Stone Steak → **Petrified Chestnut**	Full-HP: Thorns + Armor spike	Enables "enter full HP" gates
Spiny Chestnut + Vampiric Wine → **Spiked Wine**	On Wound: heal + Thorns	Stabilizes offensive lines
Sour Lemon + Silverscale Fish → **Lemon Shark**	Start with Acid; Exposed turns Riptide into Acid	Acid/Riptide cross-fuel
Poisonous Mushroom + Grilling Skewer → **Deathcap Bow**	Start Poison; if poisoned → +extra strike each turn	Tempo + damage over time
Redwood Roast + Grilling Skewer → **Ham Bat**	Start extra strikes + HP	Snowballs strike engines
Watermelon + Lemon → **Melon Lemonade**	Cleanse Acid; Gain Speed	Purge to tempo
Watermelon + Silverscale → **Underwater Watermelon**	Reduce random status; apply Riptide	Stabilize against status spam
Watermelon + Honeycomb → **Honeydew Melon**	Start: transfer your statuses to enemy	Massive swing when you're stacked
Stone Steak + Honeycomb → **Rock Candy**	Big starting Armor; bonus if full HP	Easiest early Armor pad

Honeycomb priorities

1. Stone Steak path (Rock Candy); 2) Spiny Chestnut path; 3) Vampiric Wine; 4) Redwood Roast.

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5) Drafting & Map — Practical Heuristics

- **Bundles:** Choose 3 to unlock pools. Pick for **engine pieces** first, then defenses.
- **Day 1–2:** Get your engine online (one reliable **trigger** + one **payoff**). Avoid expensive refresh spam.
- **POIs to favor:** Ancient Tomes (for Arcane/Tomes), Bargaining Tents (2 rares cheap), Large Golem (for **Common/Golden** dupes), Forge (add Edge late).
- **Blade Oils:** +1 Speed first for tempo engines; +1 Armor for sustain lines; +1 Attack sparingly (don't undercut specific gem plans).
- **Rest:** Camp the night before bosses. Treat Fireplaces as tempo resets if your engine uses chip (e.g., Lantern).

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6) Build Library (Kingmaker-legal) — Slot Orders

A) Frosthedge Reactor — Freeze → Thorns (no Marble)

Bundles: Woodland Blue + Woodland Red + Swampland Yellow
Weapon: Any (e.g., Icicle Spear); **Edge:** optional Blunt Edge
12 slots (top→bottom): 1 Frostbite Curse → 2 Ice Tomb → 3 Ice Spikes → 4 Ice Spikes → 5 Iron Transfusion → 6 Fortified Gauntlet → 7 Chainmail Cloak → 8 Iron Rose → 9 Bramble Buckler → 10 Bramble Buckler → 11 Double-plated Vest → 12 Frostbite Greaves.
Notes: Battle Start self-Freeze ensures Spikes turn-1 payout; Tomb re-seeds Freeze on low-Armor turns; Cloak→Rose turns sustain into more Armor; Bucklers convert surplus into Thorns. Move Vest up vs alpha.

B) Strike Battery Poison — Speed/Strikes → Poison (no Marble)

Bundles: Swampland Yellow + Swampland Red + Woodland Blue
Weapon: Serpent Dagger (every 3 strikes → +4 Poison)
Edge: Bleeding Edge (On hit: heal 1)
12 slots: 1 Nerve Poison → 2 Viper Extract → 3 Serpent Mask → 4 Acidic Witherleaf → 5 Caustic Tome → 6 Rusted Plate → 7 Chainmail Cloak → 8 Toxic Rose → 9 Crimson Fang → 10 Tome of the Hero → 11 Venomous Fang → 12 Iron Transfusion.
Plan: Mask triggers Nerve+Viper opener (stun + poison), Witherleaf/Tome drive Armor to 0, Rusted Plate siphons Armor, Cloak+Rose loop adds more Poison via heals, Dagger procs via strikes from Fang/Stats.

C) Acid Siphon Wall — Zero-Armor lock with sustain (no Marble)

Bundles: Swampland Yellow + Woodland Blue + Woodland Red
Weapon: Any reliable on-hit; **Edge:** Blunt Edge
12 slots: 1 Acidic Witherleaf → 2 Caustic Tome → 3 Rusted Plate → 4 Shield Talisman → 5 Chainmail Cloak → 6 Iron Rose → 7 Fortified Gauntlet → 8 Iron Transfusion → 9 Double-plated Vest → 10 Mushroom Buckler →

11 Tome of the Hero → 12 Arcane Gauntlet.
Plan: Witherleaf+Tome maintains enemy at 0 Armor; Plate+Rose+Cloak grow Armor; Buckler gives passive DR; stats ramp through Tome; Gauntlet halves CDs early.

D) Tome Engine — Symphony Battery (minimal Exposed; no Marble)

Bundles: Swampland Yellow + Woodland Red + Woodland Blue
Weapon: Flexible
12 slots: 1 Arcane Gauntlet → 2 Tome of the Hero → 3 Sheet Music → 4 Fortified Gauntlet → 5 Chainmail Cloak → 6 Iron Rose → 7 Double-plated Vest → 8 Nerve Poison → 9 Viper Extract → 10 Caustic Tome → 11 Mushroom Buckler → 12 Stormcloud Tome.
Plan: Arcane halves CDs; Glasses of the Hero is strong if found (Tome + Crossguard), but this list doesn't assume it. Sheet Music triple-fires your current listeners (even without Exposed chains). Stormcloud provides tempo control.

E) Appendix — Aria Armor Spike (Exposed engine)

Bundles: Swampland Yellow + Swampland Red + Woodland Blue
Weapon: Marble Sword; **Edge:** Blunt Edge
12 slots: 1 Blacksmith Bond → 2 Plated Shield → 3 Shield Talisman → 4 Marshlight Lantern → 5 Riverflow Violin → 6 Redwood Helmet → 7 Serpent Lyre → 8 Arcane Gauntlet → 9 Tome of the Hero → 10 Hero's Crossguard → 11 Sheet Music → 12 Fortified Gauntlet.
Note: Included for completeness; prefer non-Marble plans by default.

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7) Counter-Play Cookbook

- **Vs bomb/alpha:** Move survivability earlier (Vest above Cloak). Consider Mushroom Buckler/extra Armor starts (Rock Candy) when available.
- **Vs cleanse/riptide loops:** Lean on engines that don't need status to stick (Bucklers convert Armor, Tomes loop regardless). Add redundant Acid sources to keep Armor at 0.
- **Vs stun:** Stormcloud Tome; prioritize Battle Start/Turn Start effects that still fire through stun.
- **Vs speed rush:** Speed oils; early Tome of the Hero; Crimson Fang + Dagger lines.

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8) Common Pitfalls to Avoid

- Putting payoff below the condition (e.g., Lantern above Plated Shield wastes the doubling window).
- Forgetting the weapon has a **separate** slot; you can't place it in item slots.
- Trying to equip **two** weapons.
- Expecting Golem to combine non-eligible items (only identical **Common/Golden**).
- Over-refreshing shops early; buy engine pieces first.
- Converting Armor to Thorns **before** healing/rose; you'll lose sustain.

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9) Test Plans (quick sanity scripts in your head)

- **Freeze→Thorns:** If you start at 0 Armor, do you still freeze before Spikes? Yes → Tomb above Spikes.
- **Poison shell:** Is enemy Armor hitting 0 each turn? If not, add/raise Acid source.
- **Tome timing:** Are CDs reaching 0 before you act? If not, push Arcane up; seek Glasses of the Hero.
- **Rock Candy path:** Are you entering boss fights at full HP to get the bonus? Add a rest/cleanse before.

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10) Patch Delta Log (scaffold)

Keep numeric changes, renamed items, and bug-fix behaviors per patch. Record exact dates and verify all combo values on patch day.

- 0.8.19 — Initial baselines captured; verify Chestnut/Snapper/Lemon Shark values; confirm Iron Transfusion lethality and Cloak interaction.
- 2024-10-02 (Steam discussion, player-reported): fatigue-style skull damage begins \~Turn 40 and increases by +1 per turn. Marked to-verify for current patch.

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11) Backlog

- Expand full item atlas with sprites in a sortable table (cross-link to PWA).
- Boss-by-boss micro-plans.
- Gold routing heuristics (when to buy edges/oils; when to refresh merchants).
- Cauldron master table with exact numbers per patch.

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12) Session Header (paste in new chats)

Project: He is coming Theory
Defaults: "study up" = research quietly; "impression" = code/implementation only.
Build policy: Avoid Marble by default; always offer at least one non-Marble meta alternative.
Focus now: Food/cauldron meta, engines without Exposed reliance, offline PWA upkeep.

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13) "ALL THE VAST" Addendum — Everything we've locked in

A. Merchant, Coins & Fireplaces — Practical Use

- **Traveling Merchant:** Use when you need a **specific** piece to come online. Refresh **only** with spare gold or when 1 piece from online. Favor **engine > payoff > win-more**.
- **Bargaining Tent:** Best **gold efficiency** for early rares (2 items for \~4–7g). Prioritize engine parts and sustain.

- **Fireplaces:** Treat as tempo resets. Enter bosses **full HP** when a build requires a **full-HP gate** or Rock Candy bonus. Camp the night **before** boss if possible.
- **Shop order:** Buy **enablement** (doublers/conditioners), then **sources**, then **converters**, then **luxury** (e.g., extra CD pieces).

B. Weapon Oils & Edges — Decision Tree

- **Oils**
- +1 **Speed**: First pick for **strike/tome** engines (more turns, faster CDs, more dagger procs).
- +1 **Armor**: For **sustain/convert** lines (Bucklers, Talisman-style, Vest lines).
- +1 **Attack**: For strike pressure; skip only if a specific gem plan conflicts.
- **Edges**
- **Blunt Edge**: On-hit **+1 Armor**; best generic sustain/conversion enabler.
- **Bleeding Edge**: On-hit **restore 1 HP**; pairs with **Rose** to add extra triggers.
- Apply **late**, once weapon is locked and board space/order are stable.

C. Golem (Swampland) — Do / Don't

- **Do:** Combine **two identical Common/Golden** items to upgrade once. Snap upgrades for **engine pieces** that scale linearly (e.g., repeatable turn-start payoffs).
- **Don't:** Expect it to work on **Heroic** or non-eligible tiers. Don't plan routes that require two potion upgrades.

D. Challenge Routes (locked)

- **100 Armor (Kingmaker)**
- **Bundles:** Swamp **Yellow** + Swamp **Red** + Woodland **Blue**.
- **Core:** Plated-style doubling → Instruments → Sustain → Tomes. Use **Battle Start** Exposed to open at \~30–40 Armor; **Sheet Music** + CD support pushes over **100** mid-fight.
- **Order skeleton (12):** Doublers → Instruments → Sustain (Helmet/Cloak) → Set trigger → CD control (Arcane) → CD stats (Hero) → Multi-trigger (Sheet Music) → Passive pad (Fortified).
- **60 Thorns (Kingmaker)**
- **Bundles:** Woodland **Blue/Red** + Swamp **Yellow**.
- **Core:** Reliable **self-Freeze** → **Ice Spikes ×2** (10/turn) → **Armor→Thorns** converters (**Bramble Bucklers**) → Sustain loop (**Transfusion → Cloak → Rose**) to feed more conversion.
- **Order skeleton (12):** Self-Freeze at Battle/Turn Start → Spikes ×2 → Transfusion → Fortified → Cloak → Rose → Buckler ×2 → Anti-burst (Vest) → Utility (Greaves).

E. Boss/Enemy Micro-Plans — Pattern Play

- **Single-hit alpha:** Raise **Vest** above Cloak; ensure Armor exists **before** conversion. Consider Rock Candy on entry.
- **Multi-hit swarm:** Prioritize **Thorns** engines; keep **Vest** in mid-stack to refuel Armor. Avoid converting down to 0 if hits are still incoming.
- **Stun loops:** Favor Battle/Turn Start engines (they still fire); add **Stormcloud-type** control on a short CD.
- **Cleanse/reset:** Redundant **Acid** sources to keep Armor at 0; engines like **Bucklers/Tomes** that don't need sticky statuses.

F. Bundle Selection Heuristics

1. Pick for **enablement** first (e.g., Ancient Tomes pool if you rely on CDs; Woodland Blue if you need Freeze/Thorns).
2. Avoid three pools that chase the **same payoff**; prefer **two engine pools + one sustain/defense**.
3. If two bundles clash, pick the one that unlocks **more replacements** for your missing piece.

G. Pitfalls We've Corrected

- Weapon has its **own slot**; do not count it toward 12.
- Do **not** place weapons in item slots; do **not** plan for **two weapons**.
- Shield Talisman is **Heroic**; cannot be used on **Golem**.
- Don't assume two potion upgrades in one run.

H. Ready-to-Run Build Cards (recap)

- **Frosthedge Reactor** (Freeze→Thorns) — 12-slot order, sustain loop, converters.
- **Strike Battery Poison** (Speed/Strikes→Poison) — 12-slot order, dagger procs, acid lock.
- **Acid Siphon Wall** (Zero-Armor lock) — 12-slot order, siphon + sustain.
- **Tome Engine** (Symphony battery) — 12-slot order, CD control.
- **Aria Armor Spike** (Exposed engine; appendix only).

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14) What to add next (if desired)

- Full **item atlas** table inline (sprites, tags, triggers) synced from the PWA.
- Boss-by-boss specifics once we lock guaranteed names/behaviors from patch notes.
- Numeric validation table for all foods/cauldrons per current patch.