

The Star Engine at Quiet Orbit

120-minute plan · 4 players · Explore changing places

A little station's star engine has stopped drawing safe routes between the drifting islands. Its repair keeper left two mirrors in different phases, and the last navigation crystals can restart the engine or illuminate a hand-drawn route.

Content notice: Remote heights and temporary isolation. All rooms have stable floors and railings; a warm dock refuge remains available.

GM overview

Treat the engine as a place whose function can be understood by comparing two independent phase observations. No astrophysics knowledge is needed. The west prism is visibly at sunset; the echo gallery preserves the night cadence; the east sail is visibly at dawn. One crystal and one work turn set each side to night. A third crystal and one turn couple the axle after both are set. The loop through the coolant garden or the echo gallery allows either approach to the axle. Reading the west prism reveals a hidden lens vault, which joins west to axle and contains the manual chart. A chart beacon costs two crystals, one chart-copy turn and one lighting turn, leaving the engine dormant but enabling one supervised crossing to Reed and Orchard Islands. The third light belongs to Hill Island, which has no current manual chart and must wait for the engine or a daylight position check. Discuss who waits and who travels before ending. Crystals never appear because a roll succeeds.

What is really happening

Keeper Iven disengaged the engine to rescue a drifting seed basket. The west prism now remembers sunset while the east sail remembers dawn. Both must be set to the same night phase before a crystal pulse couples the axle. A forgotten lens vault gives a shorter route and a printed fallback chart; a fixed chart beacon uses fewer crystals but does not restore moving navigation.

Opening agreement and read-aloud

Agree on subjects to soften or skip. Each player names an ordinary skill and a reason to help. Evidence does not require a successful roll; uncertainty changes time, cost or obligations.

At the station dock, three small island lights wait in the dark. The great engine turns without touching its stars. Keeper Iven places the remaining crystals on a cloth. "A restart is possible. So is a way home. They are not the same job."

Time and preparation

120 minutes: Explore the ring and preserve limited travel

Opening agreement: 10 minutes

Read the engine and compare phase records: 25 minutes

Explore the outer ring and discover the vault: 25 minutes

Save the chart and optional seed basket: 25 minutes

Establish the limited crossing and handover: 25 minutes

Closure and debrief: 10 minutes

Use hall - echo - east - axle - garden - west - vault - axle - deck - dock. Five crystals retain the possibility of both a three-crystal restart and a two-crystal chart beacon, but each action also spends the nine-turn work window.

Starting information: Discover cards in play

Starting state: Station work turns = 9; Navigation crystals = 5; Night phase understood = false; Lens vault located = false; West prism phase = sunset; East sail phase = dawn; Star axle coupled = false; Manual route copied = false; Fixed chart beacon lit = false; Seed basket delivered to refuge = false
With 4 players: share the roles of mapper, evidence keeper, speaker and timekeeper.

If the group gets stuck

If the garden-to-axle edge is blocked, the echo/east side of the outer ring still reaches the axle. The discovered vault is a second bypass from west. With too few crystals or turns for either service, refuge-night closes navigation and preserves actual incomplete settings.

Refuge dock

Read aloud: Navigator Tavi lays three wooden island tokens beside a kettle. One route line between them is blank.

GM: The refuge is safe indefinitely within the story. Full restoration or a chart crossing ends here. The dock cannot turn a partial chart into an all-night automatic service.

Choice: Reopen moving-route service

Ask: What checklist prevents mismatched phases after the next interruption?

Requires: Star axle coupled is true.

Result: Tavi opens the engine-guided routes and records the corrected phase check.

Closure: The stars take up their routes

Choice: Send one supervised chart crossing

Ask: Which group travels now, and what are those waiting offered?

Requires: Fixed chart beacon lit is true.

Result: One party follows the fixed chart under supervision. The engine remains under repair.

Closure: One honest line through the dark

Counterweight hall

Read aloud: One shaft glows amber, the other pale blue. They pass each other without touching.

GM: This junction leads to the west inspection or the eastern echo route. Iven explains that the engine was deliberately disengaged; no sabotage or culprit is hidden.

Choice: Allocate the remaining crystals

Ask: Which alternative do you want to keep affordable after the first reset?

Requires: Available. Reveal Keeper's crystal inventory

Result: The restart and chart costs are visible before any crystal is spent.

West prism gallery

Read aloud: The prism keeps a tiny orange horizon long after the real sky has darkened. An old inventory number points behind its rack.

GM: Inspect the rack to discover the lens vault. Setting west to night needs the cadence and one crystal. The sunset engraving is an observation, not a solved sequence.

Choice: Read the phase frame and inventory arrow

Ask: Which two settings differ, and where does the old arrow lead?

Requires: Available. Lens vault located: true. Reveal The two phase windows. Discover Lens vault

Result: The lens vault is found, opening a shorter west-to-axle passage.

Choice: Set the west prism to night

Ask: Confirm the recorded target before placing the crystal.

Requires: Night phase understood is true. Spend 1 Station work turns; Spend 1 Navigation crystals. West prism phase: night

Result: The amber horizon becomes a field of still stars.

Coolant garden

Read aloud: A basket of seedlings rests between broad silver leaves. The floor is dry beneath the handrail.

GM: Delivering the rescued basket costs one turn and creates a tangible optional aid to the waiting islands. The garden route reaches the axle if the eastern passage is blocked.

Choice: Send the recovered seedlings to the refuge lift

Ask: Which ordinary label will help Orr reunite the basket with its island?

Requires: Available. Spend 1 Station work turns. Seed basket delivered to refuge: true

Result: The rescued basket reaches the cool refuge lift without affecting the engine settings.

Echo gallery

Read aloud: Two quick tones, a long silence, one clear note: the pattern repeats without changing.

GM: Compare ring labels to recover the night phase for one turn. This is the longer but necessary information route unless the short pace supplies the calibration card and knowledge.

Choice: Compare the three echo rings

Ask: What label belongs to the rhythm that all three rings repeat?

Requires: Available. Spend 1 Station work turns. Night phase understood: true. Reveal Last steady night record

Result: The night phase is established independently of either current setting.

East sail chamber

Read aloud: The sail does not billow. Its marker reads DAWN while the observation window shows stars.

GM: Set east to night with cadence, a crystal and a turn. The room joins echo to axle, completing the outer engine loop.

Choice: Set the east sail to night

Ask: Read the shared target aloud before changing the dawn marker.

Requires: Night phase understood is true. Spend 1 Station work turns; Spend 1 Navigation crystals. East sail phase: night

Result: The dawn marker turns to night; the two rings can now agree if west has also been reset.

Star axle

Read aloud: The amber ring and pale ring slip past each other. A third socket waits between them.

GM: Only two night phases permit coupling. The action costs one final crystal. If supplies run out, the manual chart branch remains possible only if two crystals have been reserved.

Choice: Use the centre pulse on two night phases

Ask: Which player checks each phase before the final crystal goes in?

Requires: West prism phase is night and East sail phase is night. Spend 1 Station work turns; Spend 1

Navigation crystals. Star axle coupled: true

Result: The spindle catches both rings. Moving route lights return to the station windows.

Lens vault

Read aloud: A note inside says, "For nights when the engine waits." The ink marks three islands as points, not moving lights.

GM: Discovered at west. It opens a west-to-axle shortcut and supplies the chart in one turn. The chart supports one supervised crossing, not continually changing island routes.

Choice: Copy the limited route chart

Ask: Write the recheck requirement beside the island positions.

Requires: Available. Spend 1 Station work turns. Manual route copied: true. Reveal One-crossing island chart

Result: A fixed chart is ready for one supervised departure.

Sky deck

Read aloud: The real island lights sit beyond the empty lens frame. A sheltered return hatch slopes toward the dock.

GM: Light a fixed chart beacon with two crystals. An outgoing, one-way return hatch leads straight to the dock; its other end cannot be climbed from the dock. It is a return route, not a starting shortcut.

Choice: Power the fixed chart beacon

Ask: Who supervises the one departure and who stays to recheck the route?

Requires: Manual route copied is true. Spend 1 Station work turns; Spend 2 Navigation crystals. Fixed chart beacon lit: true

Result: A fixed line lights the charted islands. It will serve one checked crossing.

Connections and changing routes

Refuge dock - Counterweight hall: Dock stair. Available.

Counterweight hall - West prism gallery: Amber inspection walk. Available.

West prism gallery - Coolant garden: Cooling rail. Available.

Coolant garden - Star axle: Rear spindle walk. Available.

Star axle - East sail chamber: Sail gantry. Available.

East sail chamber - Echo gallery: Resonance passage. Available.

Echo gallery - Counterweight hall: Counterweight return. Available.

Star axle - Sky deck: Fixed observation stair. Available.

West prism gallery - Lens vault: Inventory-marked cabinet passage. Lens vault located is true.

Lens vault - Star axle: Lens service shortcut. Lens vault located is true.

Sky deck - Refuge dock: Downward sheltered return hatch. Available.

Tavi - Dock navigator

Goal: Offer only a route whose limits are known.

Offers: A refuge and supervision of one chart-guided crossing.

Will not accept: Will not call a fixed chart a restored moving-route engine.

Voice: Ask how long the claimed route remains valid.

Iven - Engine keeper

Goal: Finish the seed-basket rescue and rejoin the engine phases.

Offers: Every crystal counted on the cloth, maintenance access and plain explanations.

Will not accept: Will not couple visibly mismatched phases.

Voice: Name the interrupted step without hiding the reason.

Sela - Cadence recorder

Goal: Preserve the last known night setting.

Offers: The echo-ring observations and a calibration card.

Will not accept: Will distinguish what was recorded from what is currently set.

Voice: Tap the rhythm, then point to its label.

Orr - Island seed tender

Goal: Keep the recovered seedlings cool until they reach refuge.

Offers: Identifies the basket and the fixed garden path.

Will not accept: No seed basket is worth delaying a person's return.

Voice: Offer a small useful job without making it compulsory.

Discovery card: The two phase windows

Give only when revealed in play.

West prism window: SUNSET, amber horizon. East sail tally in the maintenance frame: DAWN, pale marker.

Axle plate: COUPLE ONLY WHEN BOTH MARKERS AGREE WITH THE CURRENT NIGHT RECORD.

West inventory arrow: spare lens, behind rack.

Player task: Record both current settings and find the spare-lens passage.

GM answer: The two sides differ; the inventory arrow discovers the vault, but the echo record supplies the correct shared phase.

Discovery card: Last steady night record

Give only when revealed in play.

Two quick tones / long silence / one clear note. Label beneath all three rings: NIGHT. Iven's interruption mark comes after disengagement and before either side was reset. Move each side to NIGHT before using the centre pulse.

Player task: Match the common phase and order the two resets before coupling.

GM answer: Night is the target for both sides; west and east can be reset in either order.

Discovery card: One-crossing island chart

Give only when revealed in play.

Refuge - Reed Island - Orchard Island. These positions were checked tonight. Fixed-lens service: two crystals, one supervised departure, then recheck the islands. Do not promise continuous route tracking from this chart.

Player task: Place island tokens and decide who takes the single departure and who waits.

GM answer: Two crystals light a limited manual crossing without restarting the dynamic engine.

Discovery card: Keeper's crystal inventory

Give only when revealed in play.

West phase reset: 1. East phase reset: 1. Centre coupling pulse: 1. Fixed chart beacon: 2. No spare crystals are hidden in the spindle. Allocate counters before touching a socket.

Player task: Compare restart and manual-service costs, including a possible late switch.

GM answer: Three crystals restore the engine; two support the chart branch. Spending two on mismatched or incomplete phases can remove the manual alternative in the short route.

State sheet

Station work turns: 9 (clock, minimum 0, maximum 9)

Navigation crystals: 5 (resource, minimum 0, maximum 5)

Night phase understood: false (knowledge)

Lens vault located: false (knowledge)

West prism phase: sunset (flag)

East sail phase: dawn (flag)

Star axle coupled: false (flag)

Manual route copied: false (knowledge)

Fixed chart beacon lit: false (flag)

Seed basket delivered to refuge: false (flag)

Event: The alternative narrows

Trigger: Navigation crystals at most 1

At most one crystal remains. A fresh chart beacon needs two; only a prepared final coupling or refuge is affordable now.

Event: The next work turn matters

Trigger: Station work turns at most 1

Tavi asks for the final service claim: restored engine, an already prepared chart crossing, or a night at refuge.

At any place: Close navigation and return to the warm refuge

Which setting and remaining crystal count go into the handover?

Requires: Available.

The marked fixed walks bring everyone to shelter. No unverified route opens tonight.

Ending: The stars take up their routes

Requires: Star axle coupled is true

Both phases agree and the engine draws moving routes again. The interruption becomes a written checklist instead of an unexplained failure.

Next: Iven and Sela add separate phase confirmations to every future restart.

Ending: One honest line through the dark

Requires: Fixed chart beacon lit is true

A supervised group crosses by the fixed chart. Others wait in the refuge while Tavi rechecks island positions; the engine itself remains dormant.

Next: Choose who carries the next position report back to the station.

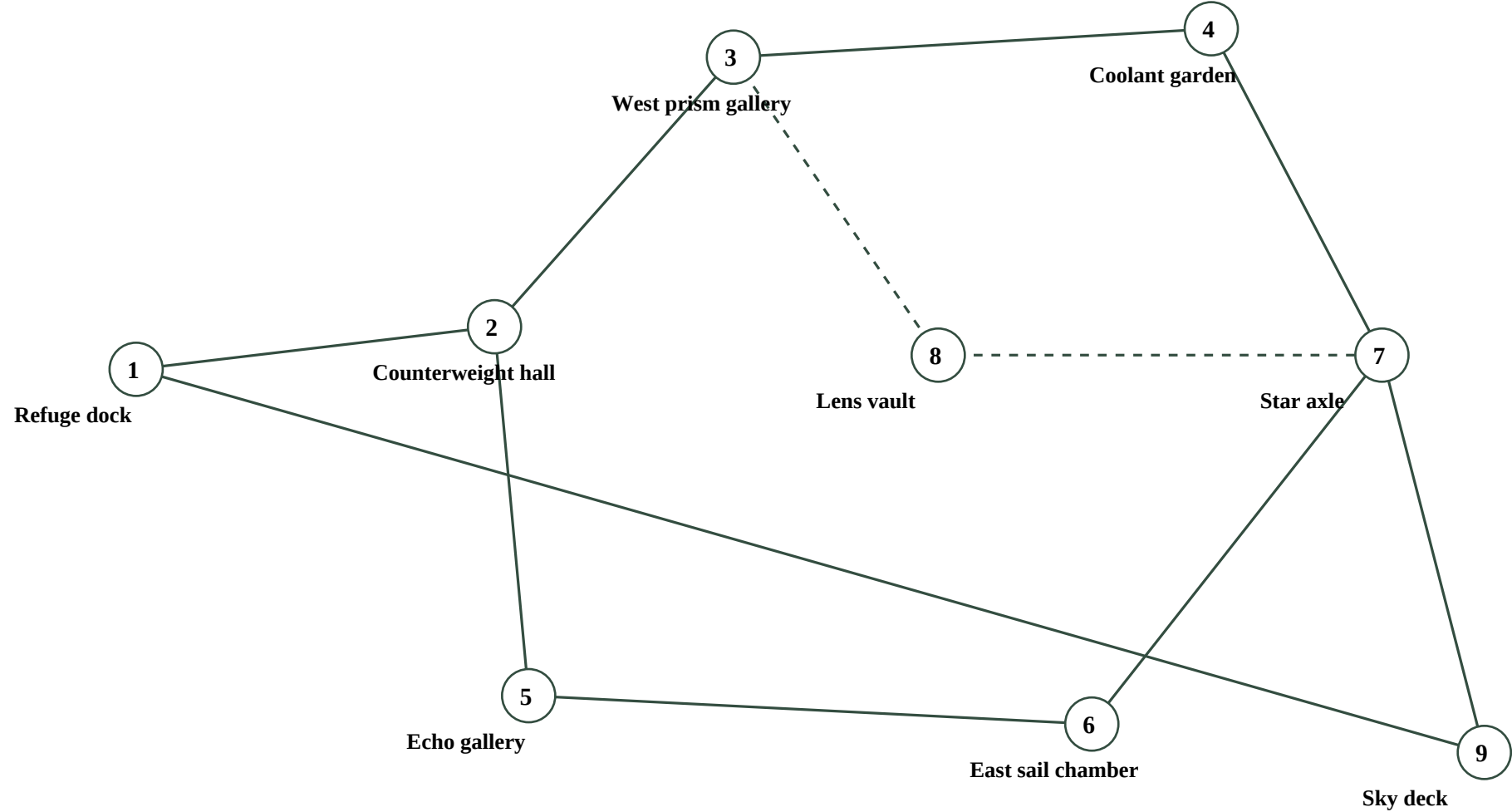
Ending: Lights around the kettle

Requires: Available

The station closes its unverified routes. Everyone has a warm place to wait, and the next crew receives the actual phase settings and supply count.

Next: Orr plans the next daylight crossing without claiming tonight's route was restored.

The Star Engine at Quiet Orbit - GM decision map



Dashed paths need conditions. Read Connections and changing routes for costs and direction.