

A voyage across the wine-dark sea — for 2–4 players, ages 12+



Parts List

Identify each printed part before you begin assembling

Ship



Amphora



Ship Front



Ship Middle Sail



Ship Back



5

Ship Middle



Ship Sail

Hardware & tools



42

Foot



42

Foot Rubber Dome



Snap Pins



Snap Pins 7

Dice & pawns



Dice Day Sail



Dice Night Sail



Dice Day Explore



Dice Night Explore



Dice Day Gather



Dice Night Gather



Game pawn



Parts List

Helios & Chronos



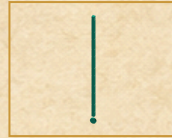
Chronos



Time Mount



Helios



Sun Axle



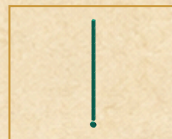
Sun Gear



Sun Gear Spur



Sun Mount



Time Axle



Time Gear



Time Gear Spur



Sun Plate Day



Sun Plate Night



Sun Ring Caps 1



Sun Ring Caps 2



Parts List

Dial



Dial Clutch



Dial Outer Lock Ring



Dial Outer Ring



Dial Outer Ring Plate



Dial Sun Drive Axle



Dial Sun Gear Layer



Dial Sun Gears



Dial Sun Main Gear



Dial Top



Dial Wind Drive Axle



Dial Wind Gear Layer



Dial Wind Gears



Parts List

Gearbox

	Gearbox Axles		Gearbox Ceiling
	Gearbox Column		Gearbox Couplers
	Gearbox Couplers Mate		Gearbox Floor
	Gearbox Gear Inner Wind Final		Gearbox Gear Inner Wind Input
	Gearbox Gear Inner Wind Output		Gearbox Gear Inner Wind Transfer 1
	Gearbox Gear Inner Wind Transfer 2		Gearbox Gear Outer Wind Final
	Gearbox Gear Outer Wind Input		Gearbox Gear Outer Wind Output
	Gearbox Gear Outer Wind Transfer 1		Gearbox Gear Outer Wind Transfer 2
	Gearbox Gear Sun Input		Gearbox Gear Sun Output
	Gearbox Gear Time Input		Gearbox Gear Time Output



Parts List

Framing



Framing



Sun Ring

Ring Base Elements



Tile Cup



Inner Sea Ring Base



Middle Sea Ring Base



Outer Sea Ring Base



Sea Ring Connector



Sea Ring Connector Middle



Sea Ring Connector Middle Flip



Inner Route Ring Base



Inner Route Ring Bearing Base



Outer Route Ring Base



Outer Route Ring Bearing Base



Outer Route Ring Bearing Base Geared



Inner Route Ring Top



Outer Route Ring Top



Parts List

Seas



Inner Sea Ring Sea



Middle Sea Ring Sea 1



Middle Sea Ring Sea 2



Middle Sea Ring Sea 3



Outer Sea Ring Sea 1



Outer Sea Ring Sea 2



Outer Sea Ring Sea 3



Outer Sea Ring Sea 4



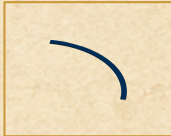
Outer Sea Ring Sea 5



Outer Sea Ring Sea 6



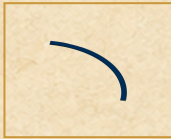
Inner Route Ring Sea



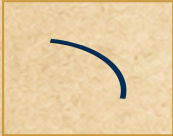
Outer Route Ring Sea 1



Outer Route Ring Sea 2



Outer Route Ring Sea 3



Outer Route Ring Sea 4



Parts List

Columns



Inner Route Ring Column



Inner Route Ring Column Geared



Outer Route Ring Column



Outer Route Ring Column Geared



Sea Ring Column



Sea Ring Column Axle Wrapper



Outer Wind Column Axle



Outer Wind Axle



Inner Wind Axle



Inner Wind Column Axle

Miscellaneous



Tile Ring



Parts List

Islands

	Barren Underworld		Cliff Harbor		Cypress Knoll
	Enchanted Woodland		Grassy Pasture Hill		Jagged Reef Black Rock
	Lush Lowland Lotus		Marsh Reed Lagoon		Mediterranean Scrub Hill
	Olive Domestic Grove		Paradise Cove		Pebble Cove
	Pine Ridge		Rocky Islet		Ruined Beach
	Sandy Crescent Beach		Scylla		Stony Headland
	Terraced Farmland		Volcanic Ash Coast		Windswept Plateau



Parts List

Miniatures

	Aeaea Circe		Aeolia Aeolus		Cyclopes Polyphemus
	Generic Anchor Monument		Generic Bath House		Generic Beehive Stack
	Generic Beehive Tomb		Generic Boundary Marker		Generic Campfire Hearth
	Generic City Gate		Generic Communal Oven		Generic Courtyard House
	Generic Domestic House		Generic Fishermans Cottage		Generic Fishing Net Post
	Generic Fortified Farmstead		Generic Fountain Basin		Generic Grain Store
	Generic Guest Inn		Generic Harbor Mooring		Generic Harbor Warehouse
	Generic Market Amphorae		Generic Megaron		Generic Naiskos
	Generic Olive Press		Generic Open Air Altar		Generic Potters Kiln
	Generic Shepherds Hut		Generic Shipshed		Generic Spring House



Parts List

Miniatures (continued)

	Generic Stoa		Generic Temple		Generic Tholos Temple
	Generic Townhouse		Generic Treasury		Generic Village Well
	Generic Vineyard Post		Generic Watchtower		Ismarus Burning Watchtower
	Ithaca Palace Olive Tree		Land of the Dead Tiresias		Lotus Eaters Lotus Plant
	Ogygia Calypso		Scheria Lighthouse		Scylla
	Sirens Rocks Sirens		Telepylus Laestrygonian		Temple of Poseidon
	Thrinacia Sacred Bull		Troy Trojan Horse		



What else you'll need

Besides the printed parts, gather these before you start assembling

The 3D-printed pieces are not enough on their own. You will also need the hardware, tools, and a paper printer listed below.

12×

608RS bearings

Skate-style bearings for the rotating rings. A 608RS is 8 × 22 × 7 mm with rubber seals on both sides.

30+

Magnets, 8 × 4 mm

At least 30 disc magnets, 8 mm diameter × 4 mm height, for the ship model. If you also want to replace snap connectors with magnets, you will need additional magnets — see the Magnets page.

42×

Rubber dome feet (optional)

8 mm diameter × 3 mm height self-adhesive rubber domes, if you print the dome mounts instead of solid feet. You need 42. See Feet & Connectors.

—

Super glue

For gears, magnets, and other permanent joints. Cyanoacrylate (super glue) works well on PLA.

—

Silicone grease

A thin film on the bearings and other moving parts so the rings turn smoothly.

—

Small pliers

For seating bearings, connectors, and other tight snaps.

—

Tweezers

For placing magnets, snap pins, and other small parts into tight pockets.

—

A paper printer

For printing the cards. This booklet can be printed on the same printer.



Feet & Connectors

Decide how you want the board to sit and lock together before you assemble

Feet

Each sidepanel needs feet on the bottom. You have two options — choose one before you print.

Rubber dome feet

Print the dome mounts instead of the feet. Then stick an 8 × 3 mm rubber dome to the bottom of each dome mount. You need 42 in total.

Printed feet

Simply print the feet. No extra preparation is required — snap them onto the sidepanels as printed. Print them in TPU if you want to have some anti slip properties.

Connectors

Connectors join the different parts together. There is one type. Push them in with pliers — they are a tight fit.

You can glue magnets into the connector pockets instead, at your own choice and risk. Not every joint will stay strong enough with magnets.

Some connections can also be glued so they stay together permanently. This booklet says so on the relevant pages.



Print Instructions

Materials and colours — suggestions, not requirements

Materials

Most parts can be printed in PLA, or another material of your choice. Gears and other moving parts print best in PETG, or something similar.

Colours

For the best visual result you may mix colours and materials. Some elements are a single colour; others are a multi-colour print.

ELEMENT	COLOUR
Sidepanel fronts	Brown, with navy or light brown, and gold
Sidepanel top ring	Metallic
Columns	White
Gearbox	White
Dial	Brown
Ring base elements and cups under the islands	Metallic
Seas	Navy blue and dark blue, with white waves on the same print
Islands	Light brown, navy blue, dark blue, and white
Island rings	Dark red on Gather shores, dark green on Explore shores
Miniatures	White
Dice	Light brown for day, navy for night; white, red, and green faces
Game pawn	Any colour that stands out on the sea

Matching colours

A few colours should match across parts so the table reads at a glance. An island ring tells you which challenge die to pick; Helios on the side of the board tells you whether to pick the day set or the night set.

COLOUR	PRINT TOGETHER
Dark red	Island rings on friendly (Gather) shores, and the faces of the Gather dice
Dark green	Island rings on unfriendly (Explore) shores, and the faces of the Explore dice
Dark navy	All three Night dice (Sail, Gather, Explore), and the centre of the night side panels
Light brown	All three Day dice, and the centre of the day side panels

Sail die faces can stay gold: they do not belong to a shore. Print every Supply amphora in the same colour, whether it sits in a cup or in the ship, so it always reads as Supply. The pawn only needs to be easy to spot.



Print Instruction: The Ship

Print the ship and drop magnets in at the pause layers



How to print

Print the ship from the included **ship.3mf** profile. There is no assembly after printing: when the printer pauses, drop 8×4 mm magnets into the open cavities, then resume. The next layers lock the magnets in place.

Put every magnet in the **same orientation** so the hull pieces attract instead of repel.

Layer height

Layer height

0.2 mm (including the first layer)

Pause layers

The profile already pauses at these heights. If you slice the ship yourself at 0.2 mm, add a pause after these layers:

PAUSE	HEIGHT	LAYER	DROP MAGNETS INTO
1	6 mm	30	the sail
2	10 mm	50	the hull pieces
3	13 mm	65	the hull piece for the sail

Warning: Same orientation for every magnet. A mix of north and south will make hull segments push apart instead of snap together.



Assembling the Islands

Glue each island to a ring, then set a miniature on top

How to assemble

Every island is glued to an island ring — red or green — with a miniature on top. The ring colour matches the miniature: red for Explore, green for Gather. Which island tile you use is up to you, except for the three pairings below. The print profile marks Troy and Ithaca.

Fixed pairings

- The Scylla miniature only fits the Scylla & Charybdis island.
- The Trojan Horse sits best on the Troy island (marked in the print profile).
- Odysseus' palace sits best on the Ithaca island (marked in the print profile).

Note: Glue the island to the ring first, then glue the miniature onto the island. Let the glue set before you handle the piece.

Story islands / miniatures

● Red ring — Explore ● Green ring — Gather



Troy
EXPLORE · RED



Ismarus
EXPLORE · RED



Lotus-Eaters
EXPLORE · RED



Cyclopes
EXPLORE · RED



Aeolia
EXPLORE · RED



Telegylus
EXPLORE · RED



Aeaea
EXPLORE · RED



Land of the Dead
EXPLORE · RED



Sirens' Rocks
EXPLORE · RED



Scylla & Charybdis
EXPLORE · RED



Thrinacia
EXPLORE · RED



Ogygia
EXPLORE · RED



Scheria
GATHER · GREEN



Ithaca
EXPLORE · RED

Remaining islands / miniatures



Random miniatures
EXPLORE · RED



Random miniatures
GATHER · GREEN



1. Gear / movement mechanisms



- The gear / movement mechanisms consists of a lot of small pieces. There are four separate mechanisms. Gears and axles for each mechanism are marked with the same letter, so you can find the correct pieces and put them in the right place.
- **A — Helios movement.** Transfers rotation from the dial to the indicators on the sidepanels.
- **B — Inner route / wind ring.** Transfers rotation from the dial to the innermost small route ring.
- **C — Chronos movement.** Transfers rotation from the dial to the indicators on top of the sidepanels.
- **D — Outer route / wind ring.** Transfers rotation from the dial to the outermost small route ring.
- Most axles are square. That lets you print them horizontally, which makes them stronger, and it makes connecting a gear to an axle easy: slide the gear on and add a drop of glue. The square fit keeps gear and axle turning together. Where an axle needs to spin smoothly, some segments get cylindrical wrappers.

Note: Grease every surface that touches while moving with silicone grease.

Note: Glue axles to the gears and wrapper cylinders only after you have fitted everything and confirmed the mechanisms turn correctly.



2. Helios indicator mechanism



6 Sun Gear



6 Helios



6 Sun Mount

- Take the six helios indicators, the 6 sunGear sliders, and the 6 mounts.
- Snap a helios indicator mount into each slider.
- Snap the helios indicators into the mounts.



3. Chronos indicator mechanism



1 Time Gear



1 Chronos



1 Time Mount

- Take the hourglass, 1 drive slider, and the hourglass mount.
- Snap the hourglass into the drive slider.
- Snap the hourglass into the mount.



4. Sidepanels



6 Sun Ring



12 Foot



6 Sun Plate Day



6 Sun Plate Night



12 Snap Pins



6 Sun Gear



6 Time Gear



- Take the six sidepanels and snap in 2 feet on the bottom of each sidepanel.
- On each sidepanel glue 1 daylight panel and 1 nightlight panel. Do this for each sidepanel in the same order. The daylight and nightlight panels are permanent.
- Snap 2 snap connectors to one side of each sidepanel.
- Slide a helios slider into each sidepanel (in the outer pocket).
- Put a time slider into each sidepanel as well (in the visible inner pocket).

Note: The sidepanels should snap into place easily.



5. Building the gearbox #1



1

Gearbox Axles



1

Gearbox Gear Sun Input



1

Gearbox Gear Time Input



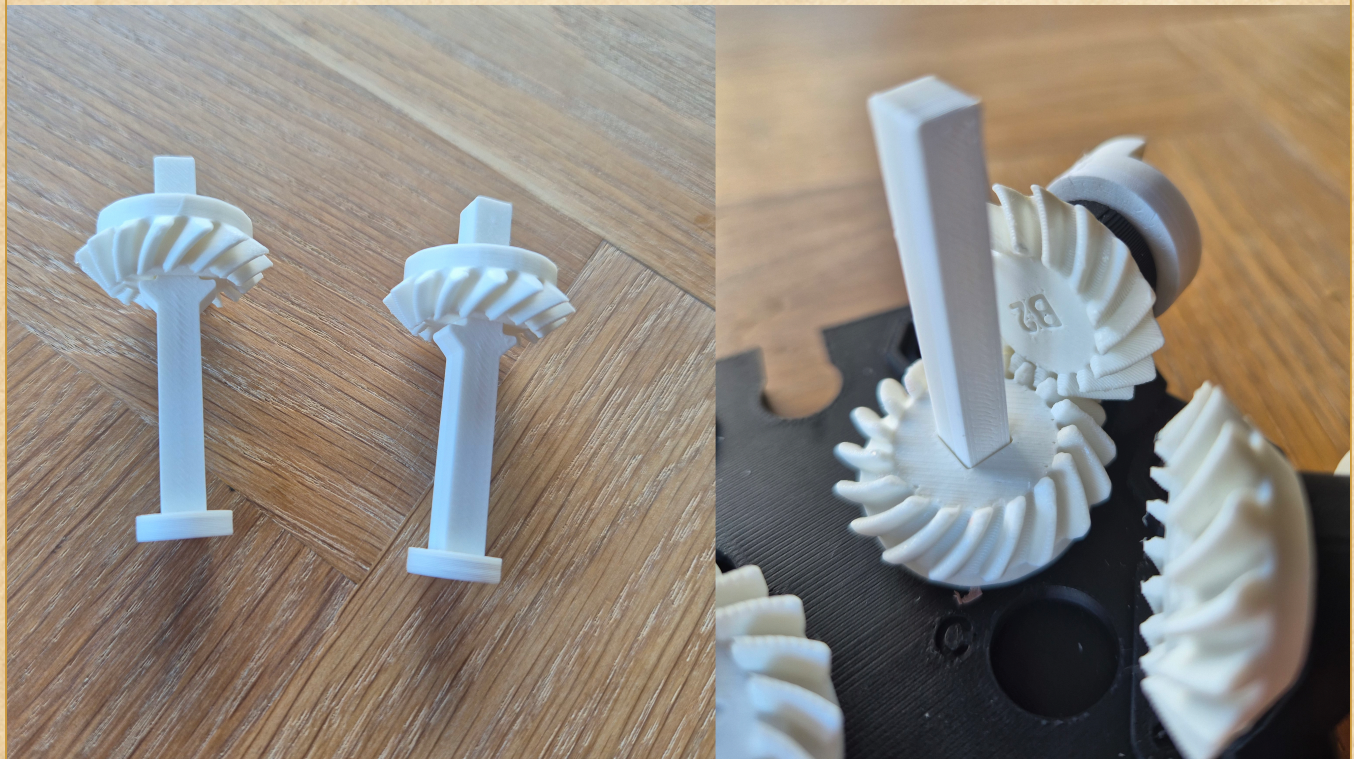
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Gearbox Gear Inner Wind Input



1

Gearbox Gear Outer Wind Input



- All gears and axles that are part of the same mechanism are marked with the same letter.
- First glue the longer gearbox axles to their corresponding disc.
- The discs go on the bottom of the axle. Look at the letters to keep the orientation correct.
- The discs helps them rotate on the bottom of the gearbox.
- Slide the ABCD-1 gears onto the axles, so they sit on the extended parts.

Note: Grease every surface that touches while moving with silicone grease.



6. Building the gearbox #2



- The B-gear assembly is the most difficult. Because you cannot put in the B1 gear after you have put in the B2 gear.
- So first glue the B2 gear to the small axle. Then put the longer axle on the gearbox bottom, put the B1 gear on.
- Put the B2 gear through the hole at the side stand, put in the axle ring and glue in the B coupler.
- When adding glue make sure you do not fix the gears so they cannot rotate.

Note: Grease every surface that touches while moving with silicone grease.



7. Building the gearbox #3



- Then you can do the ACD-2 gears as well, they are easier. Glue them to the short axles, add the rings, put them in the side stands. And glue the coupler in place.
- Put the ACD-1 axles and gears in their place.
- When adding glue make sure you do not fix the gears so they cannot rotate.

Note: Grease every surface that touches while moving with silicone grease.



8. Building the gearbox #4



4 Dial Clutch



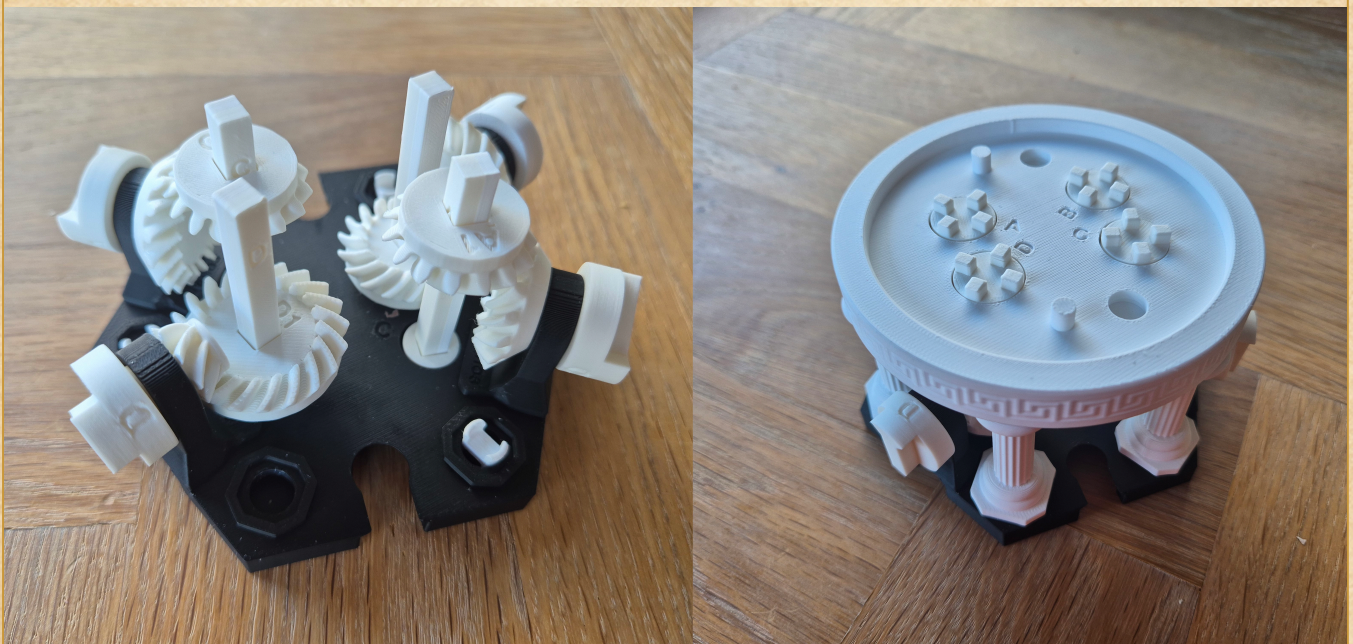
6 Gearbox Column



6 Snap Pins



1 Gearbox Ceiling

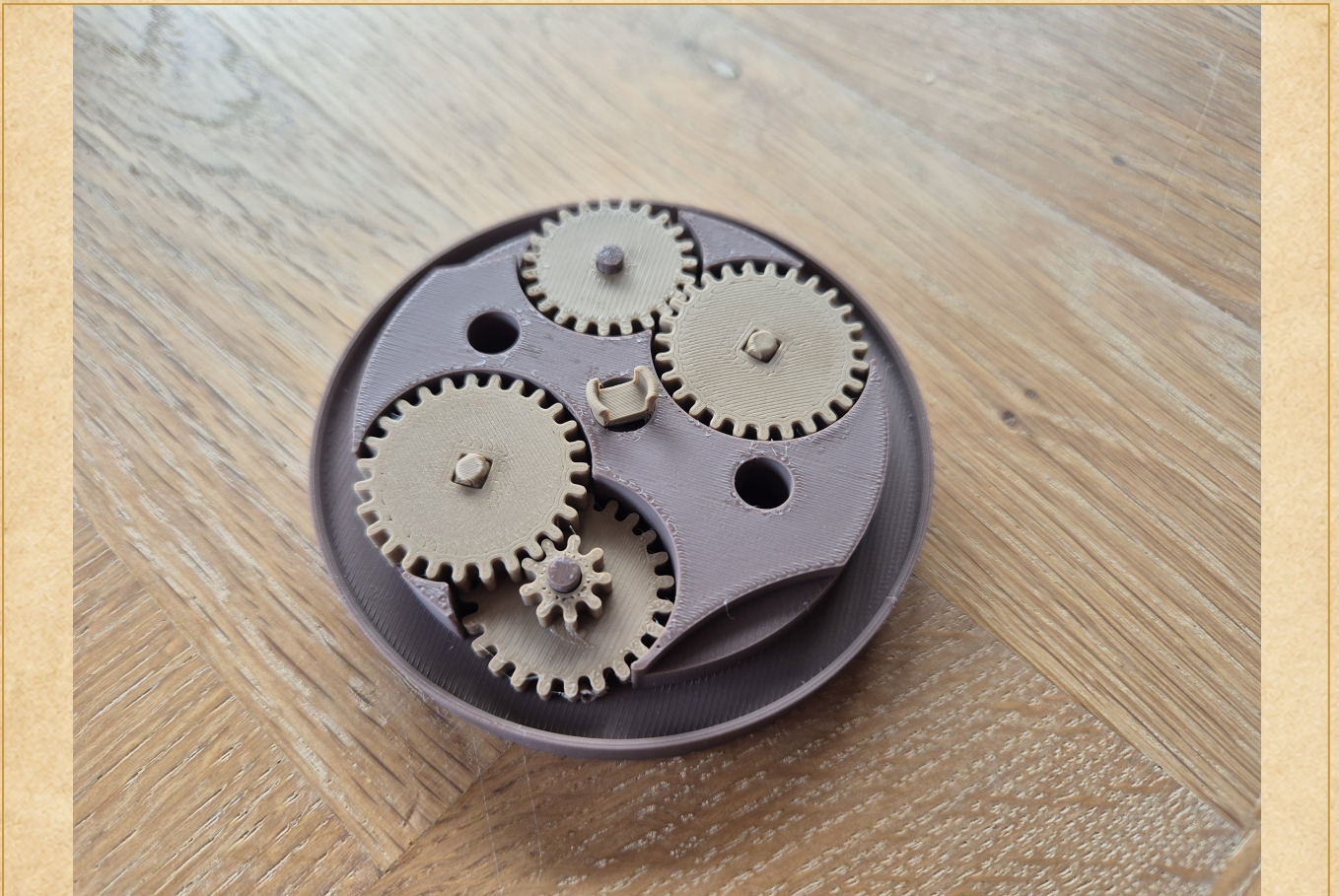


- Then close the gearbox by snapping connectors to the columns. Put all the columns on the gearbox floor and push on the ceiling.
- Last: Add in the dial clutches. Glue them to the axles, but only after you have tested the board.

Note: Grease every surface that touches while moving with silicone grease.



9. Building the dial #1



- Start with the dialWindGearLayer. Make sure the couplers which are printed in place are freely turning. Use pliers to turn them a few times from the bottom if needed.
- Drop in the dialWindGears. The double gears go in first, with the larger gear towards the bottom. Then the single gears go in with the smooth part towards the bottom.
- Add the shorter axles to connect the single gear to the couplers in the bottom. You may need to turn a bit to get it right.
- Put in one connectors in the center.

Note: Grease every surface that touches while moving with silicone grease.



10. Building the dial #2



1 Dial Outer Ring



1 Dial Outer Lock Ring



1 Dial Sun Gear Layer



- Take the outer ring and put it in place. Then put in the lock pieces, they just sit in their pockets, and will prevent the outer ring from going loose in the end.
- Then snap in the dialSunGearLayer. To lock everything in place. Look at the bottom of the dialSunGearLayer to match the holes correctly.

Note: Grease every surface that touches while moving with silicone grease.

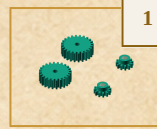


11. Building the dial #3



2

Dial Sun Drive Axle



1

Dial Sun Gears



- Drop in the dialSunGears, the single gears go in first this time. With the smooth part up. Then go in the double gears, just drop them in.
- Add the longer axles to connect the single gear to the couplers in the bottom. You may need to turn a bit to get it right.

Note: Grease every surface that touches while moving with silicone grease.



12. Building the dial #4



1 Dial Top



1 Dial Sun Main Gear



3 Snap Pins



- Take the dialSunMainGear and put 3 connectors in it. Then take the dialOuterRingPlate put it on the main gear, and then snap the dialTop on it.
- Now you can put the two assembled parts together. And test the dial. When everything is done and the board works you can glue the outer ring to the rest of the dial making it a single part.

Note: Grease every surface that touches while moving with silicone grease.



13. Sea ring bases



- There are three sea rings — inner, middle, and outer — each with a base. Glue the 30 tile cups to the bottom of the bases.
- The middle sea ring is 3 base pieces; the outer sea ring is 6. First add the correct connectors to each base piece. Snap them in so they sit flush with the edge, then glue them to the bases.
- You can optionally add magnets to the connectors or join the base pieces together with snap pins to make full circles. If you use magnets, make sure the magnets are facing the correct way, so they can attract each other.

Note: Do not glue the snap pins to the bases. Because then you can't disassemble the rings.



14. Sea pieces



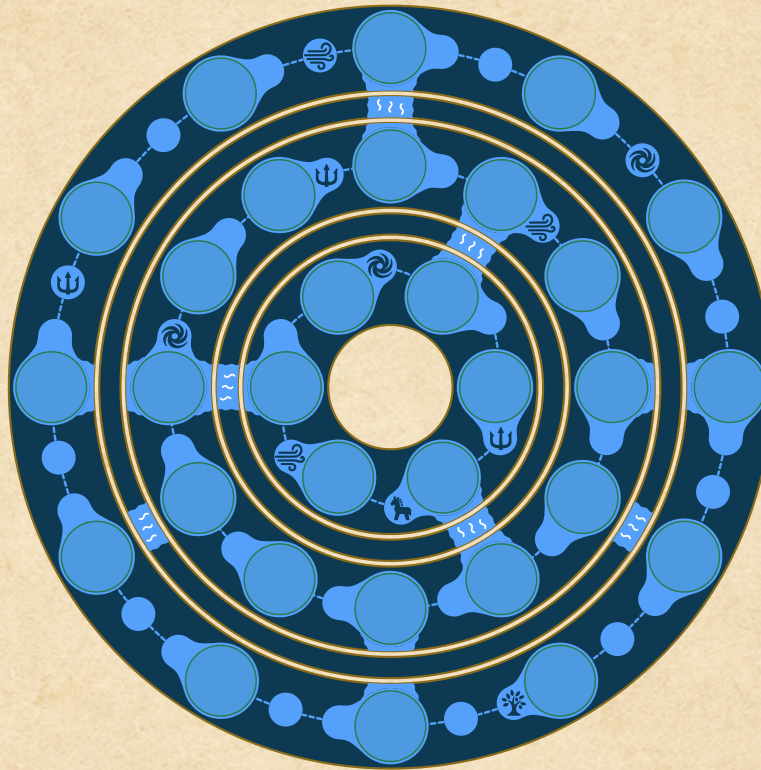
1 Inner Sea Ring Sea



3 Middle Sea Ring Sea 1



6 Outer Sea Ring Sea 1



- Take the assembled sea ring bases. Place all sea pieces on the bases according to the picture. Make sure all icons on the board are in the correct position.
- Each sea panel must sit precisely on exactly one base piece. Do not overlap sea panels across base pieces.
- Do not glue the sea pieces. They rest on the bases. And you can slide them around during board setup, which makes it easier to align the board.

Note: Leaving the sea pieces unglued lets you replace them later if the pattern is updated.



15. Building the wind ring bases



1 Inner Route Ring Bearing Base



5 Outer Route Ring Bearing Base



1 Outer Route Ring Bearing Base Geared



- Put a 608RS bearing on each cylinder, and push it into the base parts.
- The bearings should sit on the inside of the wall.
- Add some glue from the outside to glue the cylinders to the base.



16. Building the wind rings



1 Inner Route Ring Base



4 Outer Route Ring Base



1 Inner Route Ring Top



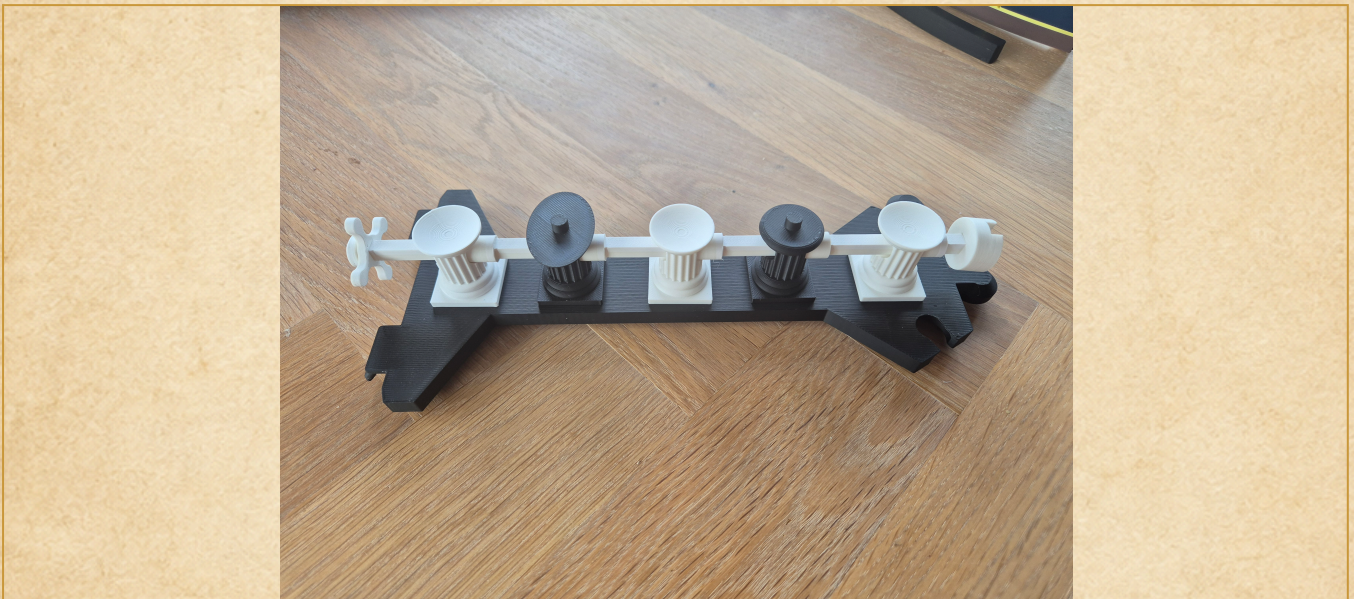
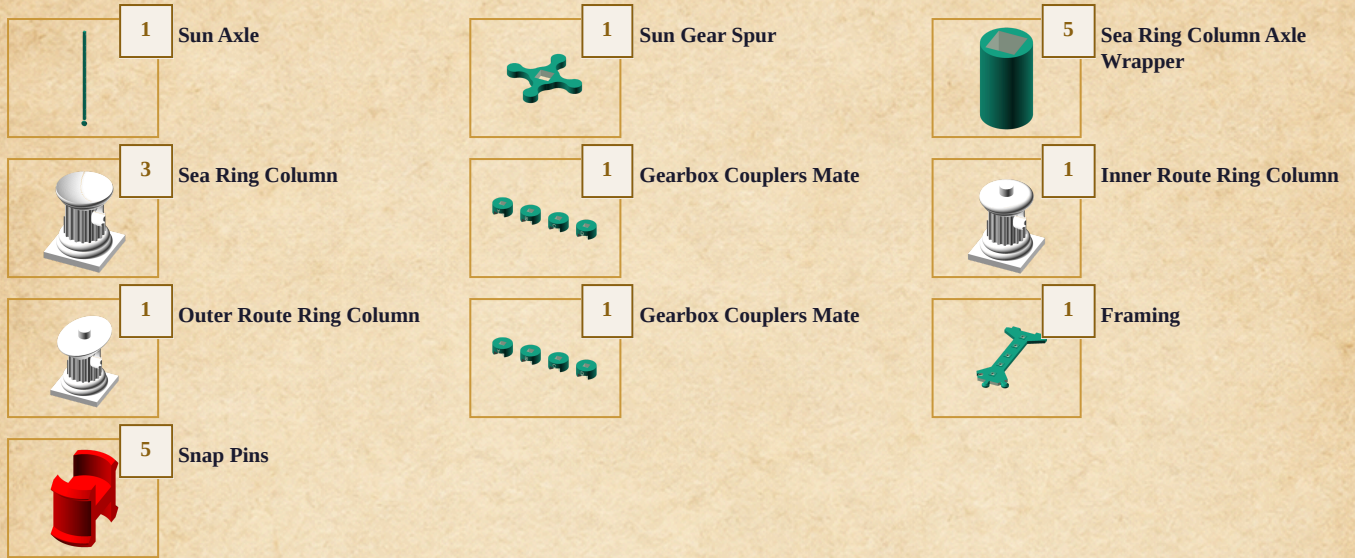
4 Outer Route Ring Top



- Glue the top parts to the bases.
- For the inner ring, just center it as good as possible.
- For the outer ring, make sure they sit flush to the end edges of the base parts.



17. Preparing the Helios axle

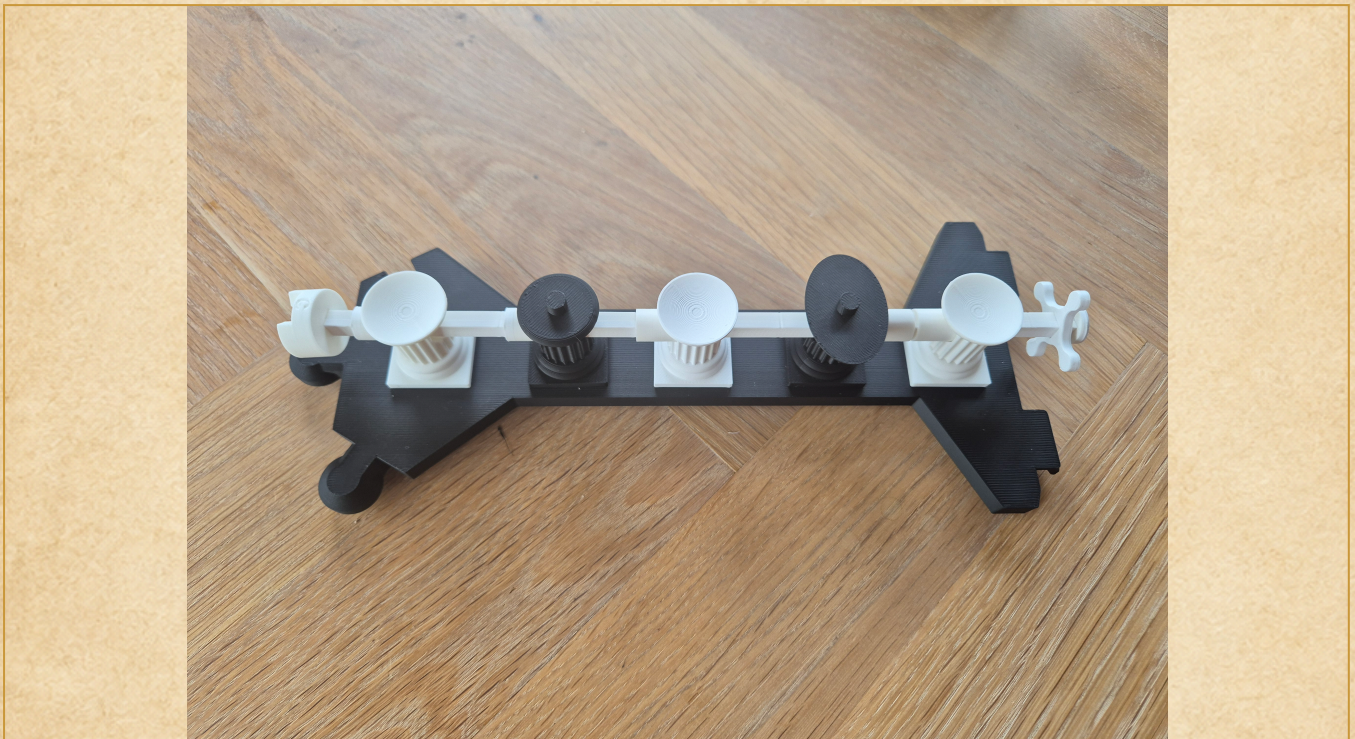


- Take the sun axle and glue the disc to the bottom end of it. Look at the letter on the axle to keep the orientation correct.
- Then slide the sunGearSpur onto the axle until it sits at the disc. Just let it loose there.
- Then take the 5 wrapper cylinders and glue them to the axle, look at the indents on the axle to see where they go.
- Then take the columns and slide them over the axle cylinders. Start with a seaRingColumn, then the outerRingColumn, then another seaRingColumn, the innerRingColumn, and the last seaRingColumn.
- At the end the coupler should go, but wait with glueing until you have tested the board.
- Snap in the connectors to the frame piece. And then line everything up and push the columns on the frame piece. When everything is done and working, you might want to add glue so the columns are permanently in place.

Note: Grease every surface that touches while moving with silicone grease.



18. Preparing the Chronos axle

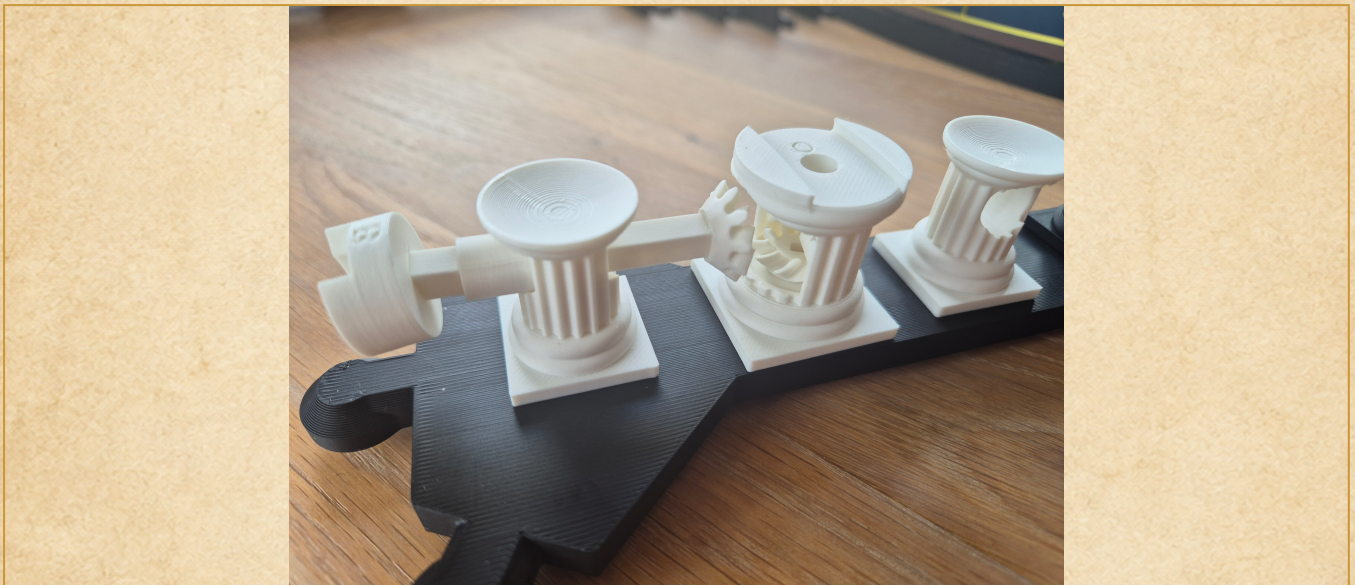


- Take the time axle and glue the disc to the bottom end of it. Look at the letter on the axle to keep the orientation correct.
- Then slide the timeGearSpur onto the axle until it sits at the disc. Just let it loose there.
- Then take the 5 wrapper cylinders and glue them to the axle, look at the indents on the axle to see where they go.
- Then take the columns and slide them over the axle cylinders. Start with a seaRingColumn, then the outerRingColumn, then another seaRingColumn, the innerRingColumn, and the last seaRingColumn.
- At the end the coupler should go, but wait with glueing until you have tested the board.
- Snap in the connectors to the frame piece. And then line everything up and push the columns on the frame piece. When everything is done and working, you might want to add glue so the columns are permanently in place.

Note: Grease every surface that touches while moving with silicone grease.



19. Preparing the inner wind axles

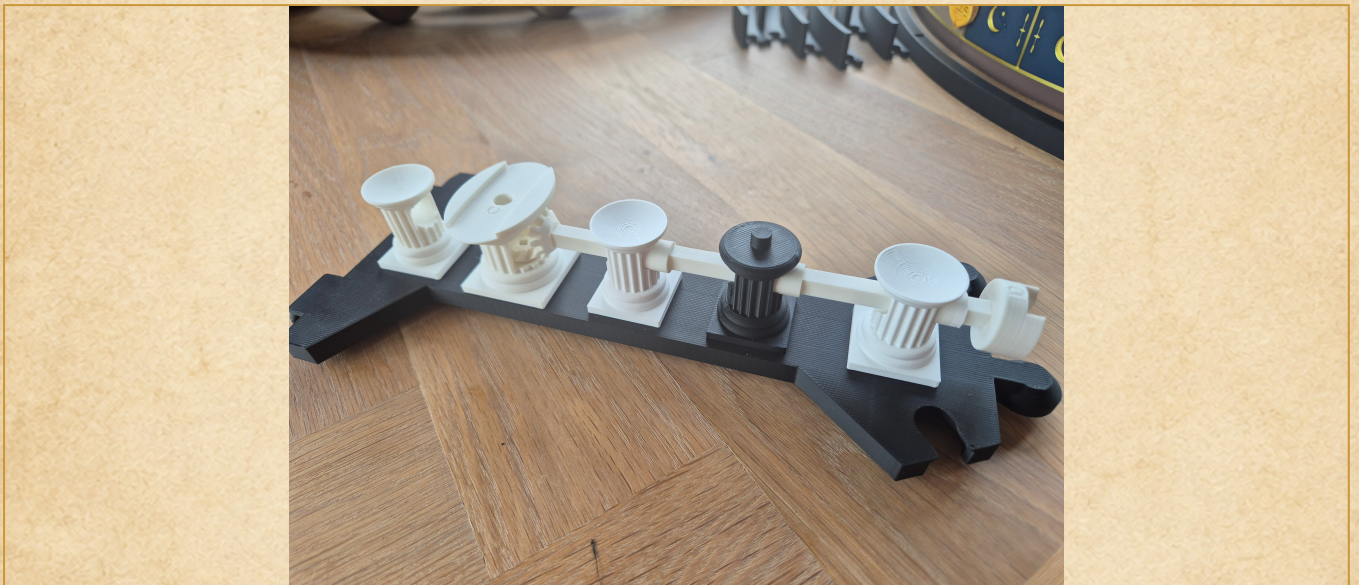


- Glue the B3 gear to the B-axle.
- Then slide an axle wrapper cylinder over the axle and glue it to the axle at the correct position.
- Slide the seaRingColumn over the cylinder.
- At the end the coupler should go, but wait with glueing until you have tested the board.
- Glue the thin innerWindColumnAxle into the B5 gear. Put it completely in.
- Drop in the B4 gear into the innerRouteRingColumnGeared. It just sits there.
- Snap in the connectors to the frame piece. And then line everything up and push the columns on the frame piece. When everything is done and working, you might want to add glue so the columns are permanently in place.

Note: Grease every surface that touches while moving with silicone grease.



20. Preparing the outer wind axles



- Glue the D3 gear to the D-axle.
- Then slide an axle wrapper cylinder over the axle and glue it to the axle at the correct position.
- Slide the seaRingColumn over the cylinder.
- At the end the coupler should go, but wait with glueing until you have tested the board.
- Glue the thin outerWindColumnAxle into the D5 gear. Put it completely in.
- Drop in the D4 gear into the outerRouteRingColumnGeared. It just sits there.
- Snap in the connectors to the frame piece. And then line everything up and push the columns on the frame piece. When everything is done and working, you might want to add glue so the columns are permanently in place.

Note: Grease every surface that touches while moving with silicone grease.



21. Assembling the dice



1

Dice Day Sail



1

Dice Night Sail



1

Dice Day Gather



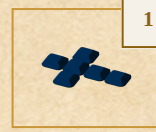
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Dice Night Gather



1

Dice Day Explore



1

Dice Night Explore



- There are six dice: a Sail, Gather, and Explore die for day, and the same three for night.
- Add glue to the slopes on the inside of each die, then fold it into a cube and press until the glue sets.



22. Assemble the board, finally!



- Take one of the sidepanels and put the frame piece with the helios assembly (A) in place. Start with this one because it is the most difficult to assemble.
- Take another sidepanel and frame piece, and snap the sidepanel to the previous one and insert the framepiece as well. Work clockwise.
- Take another sidepanel and the framepiece with the inner ring (B) assembly. Connect them in the same way.
- Then a sidepanel and the framepiece with the chronos assembly (C) assembly. Connect them in the same way.
- Again a sidepanel and an empty framepiece. Connect them in the same way.
- With the last part, insert the framepiece with the outer ring (D) assembly first. You may need to lift the center a bit to piece in the frame piece.
- Then snap the last sidepanel between the first and the last to make the circle complete.
- Put in the ring bases with the bearings. Make sure the cutout parts lines up with the gear assembly.
- Put on B5 and D5 gears into slots. They are exactly the same, so you can use them interchangeably.
- Put on the wind/route rings onto the bases.



23. Assemble the board, really finally!



- Now set the gearbox in the center. First turn all axles on the board so the opening of the couplers point upwards, then turn the gearbox axles so the couplers point downwards and carefully set the gearbox in place. You might need more hands to line everything up correctly.
- Put the island rings together.
- Put the island rings on the boards. For each ring 6 island cups will rest on the columns.
- Put the island pieces on the boards. For each ring you have 6 island pieces.
- Turn the clutches on the gearbox so every mechanism is in the correct starting position.
- Put the dial on the gearbox. Make sure it aligns, sometimes putting it on and just start turning the dial until it clicks in place is the best way.

