01

Abraham's Well

Puzzle Goal: **Find the uniquely Australian token hidden inside the puzzle. There are many intermediate challenges to solve as you progress through each level to get to the final goal.**

Materials: Wood with metal and magnets

Classification: 2.1 Trick or Secret Opening

Notes: No bashing/tapping, no external tools, and no brute strength are needed. There's a tool for every step of the puzzle, you just have to find them and then work out how to use them.

02

Akadia

Puzzle Goal: **Make a cube and other possible shapes.**

Materials: Wood

Classification: Put-together

03

Angry Walter

Puzzle Goal: **Find and remove Angry Walter's green power cell.**

Materials: Wood, various metals

Classification: Sequential Discovery

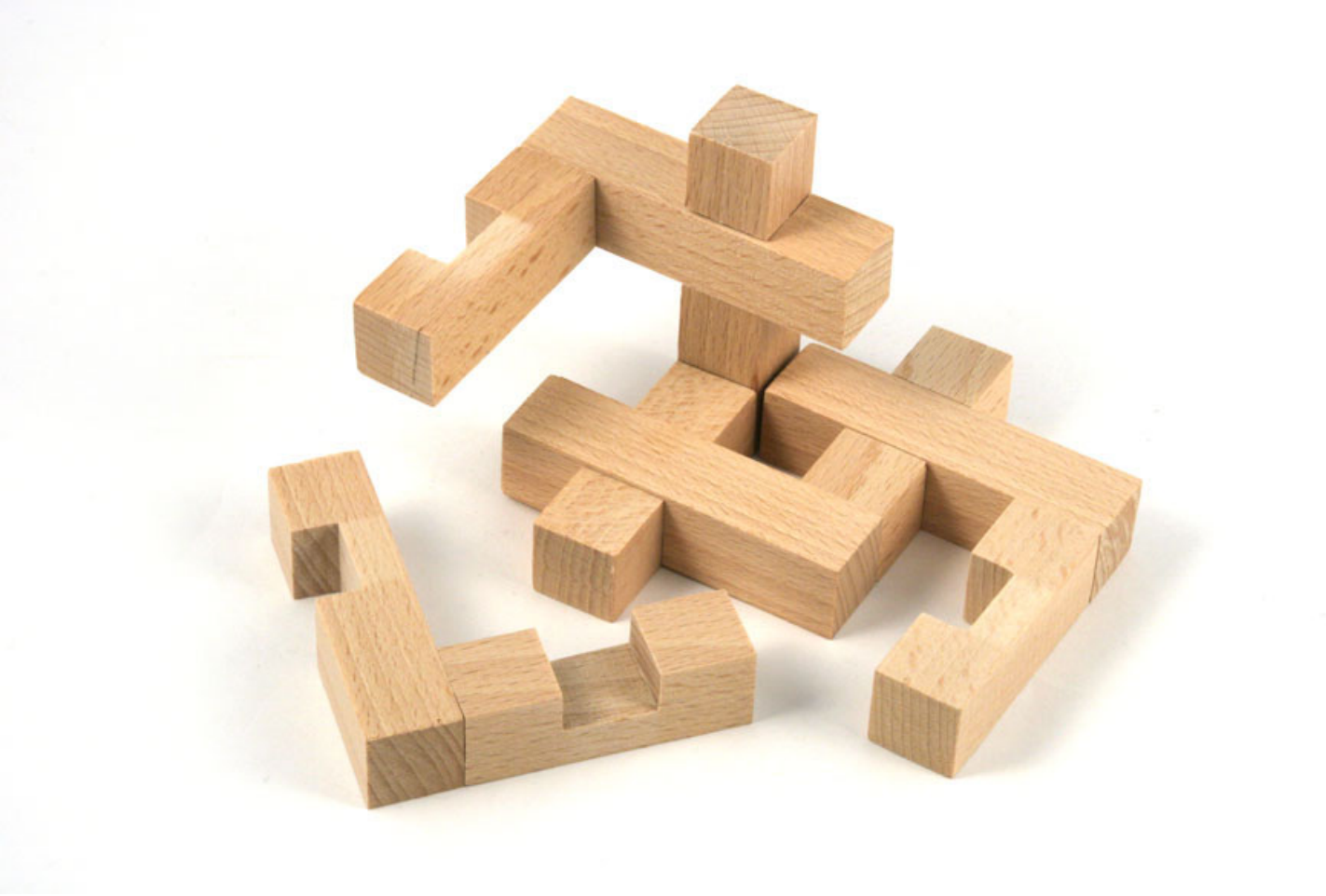
04

ArchiPuzzle

Puzzle Goal: **Connect each piece to two other pieces.**

Materials: Beechwood

Classification: 3D Assembly



05

Bananas

Puzzle Goal:

- **Release your tool(s)**
- **Move vault bars to unlock cage**
- **Introduce yourself to Bananas**
- **Befriend Bananas by treating him to a healthy snack**

Materials: Aluminum, brass, stainless, springs, magnets

Classification: Slocum 2.1

06

BBAM

Puzzle Goal: **Open the lid in seven moves.**

Materials: Upcycled cigar box, exotic woods

Classification: Trick-opening Box

07

Burr Bank

Puzzle Goal: **Open the bank and find the gold.**

Materials: PLA plastic, magnets

Classification: Hybrid Burr/Sequential Discovery

08

Chunky-Octs

Puzzle Goal:

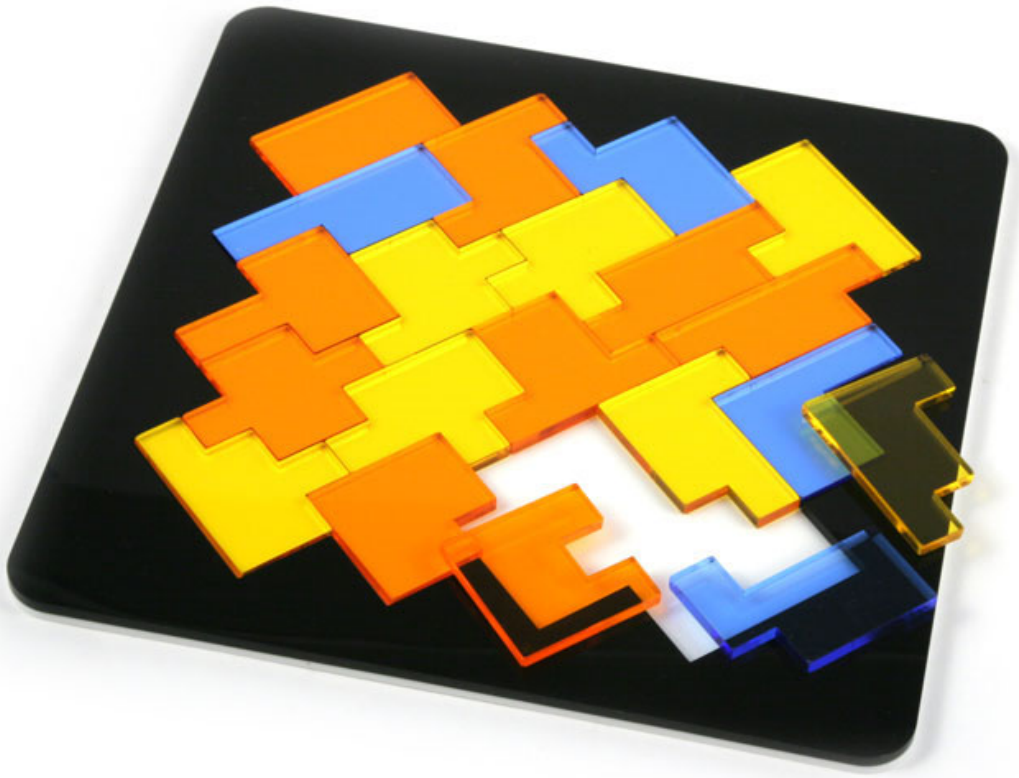
Assemble the 20 pieces into a great variety of different shapes and designs; three challenges given:

- **Fill the tray.**
- **Fill the tray so that pieces of one or two of the same color are connected. (Connecting all three colors is impossible.)**
- **Divide the pieces into ten pairs to simultaneously form 10 symmetric shapes.**

Materials: Laser-cut acrylic

Classification: Put-together dissection, polyform set

Notes: The 20 tiles are a tiny subset of the 369 Octominoes, being all the pieces containing a 2x3 rectangle. The three colors of the set denote 3 groups: symmetrical, those with two single squares attached, and those with a domino attached.



09

Clutch 1

Puzzle Goal: **Interlock the three pieces into a 4x4x4 space.**

Materials: Wood

Classification: Interlocking 3D assembly

Notes: Rotations are allowed and needed; no undue force required.

10

Cube Snake Boogie

Puzzle Goal: **Manipulate the linked cubes to form a larger 2×2×2 cube. How many different black/red patterns can you discover?**

Materials: 3D printed PLA fillament

Classification: FOL-HGOP

Notes: In all final configurations there should be a yellow, spherical hinge hidden in the center and one centered in each of the six faces of the large cube. How many different black/red patterns can you discover?

11

Detour

Puzzle Goal: **Pack the four polyominoes into the tray so that the result is a sliding block puzzle. That goal of that puzzle is to slide the circular token from one marked (with a hole) corner to the other, such that the token avoids at least one of the other marked spaces.**

Materials: Acrylic

Classification: Slocum 1.1 , 5.3

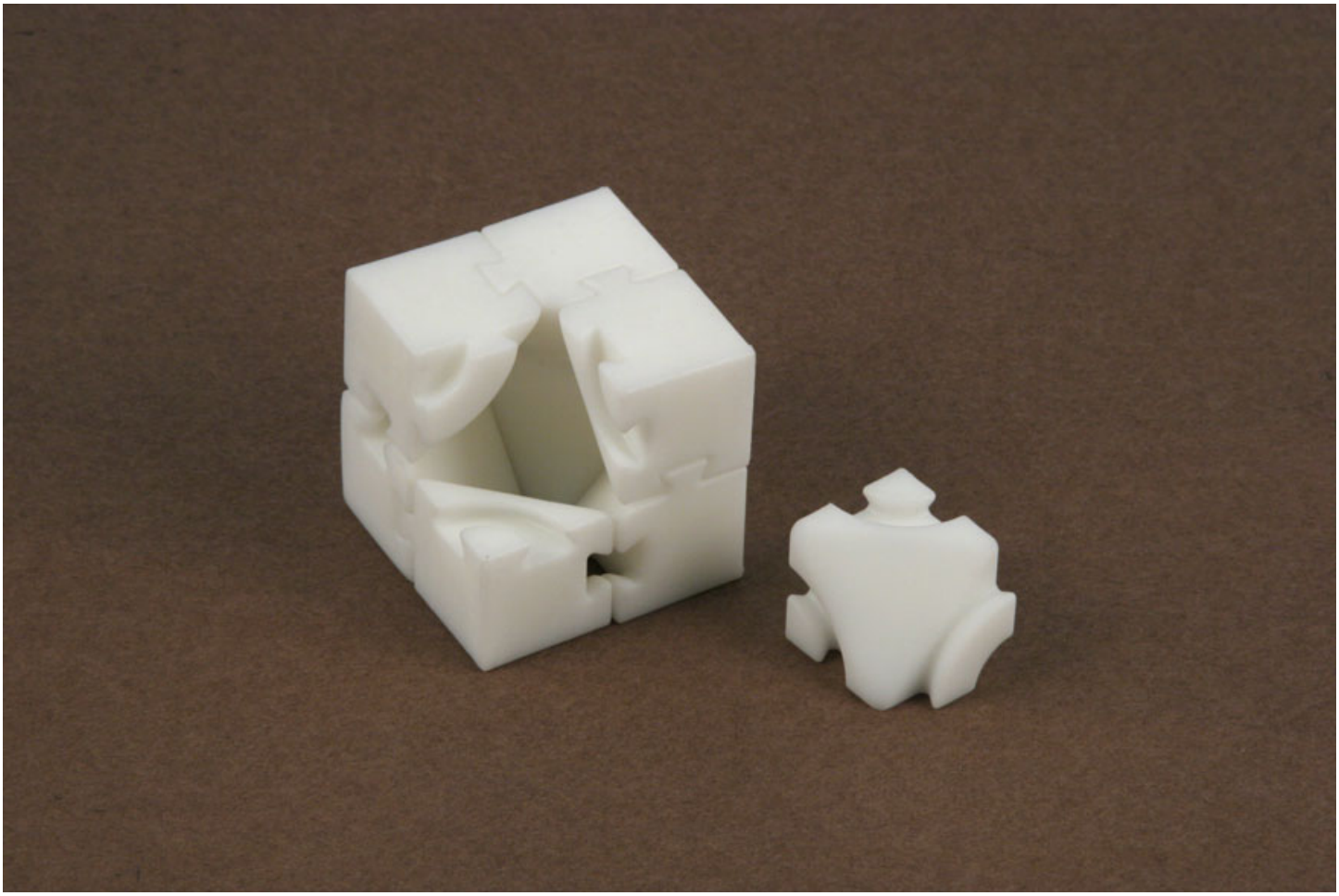
12

Diamond Vacancy

Puzzle Goal: **Assemble the eight identical pieces into a cube-shape.**

Materials: White ABS-like photopolymer resin

Classification: Slocum 3.2 - Interlocking Solid



13

DNA

Puzzle Goal: **Remove the wooden block from inside the frame.**

Materials: Wood (Taiwan acacia, mahogany), metal and magnet

Classification: Trick-opening

14

Domino 2

Puzzle Goal: **Connect all the pieces one after the other to create a solid ring.**

Materials: Cast brass

Classification: Put-together

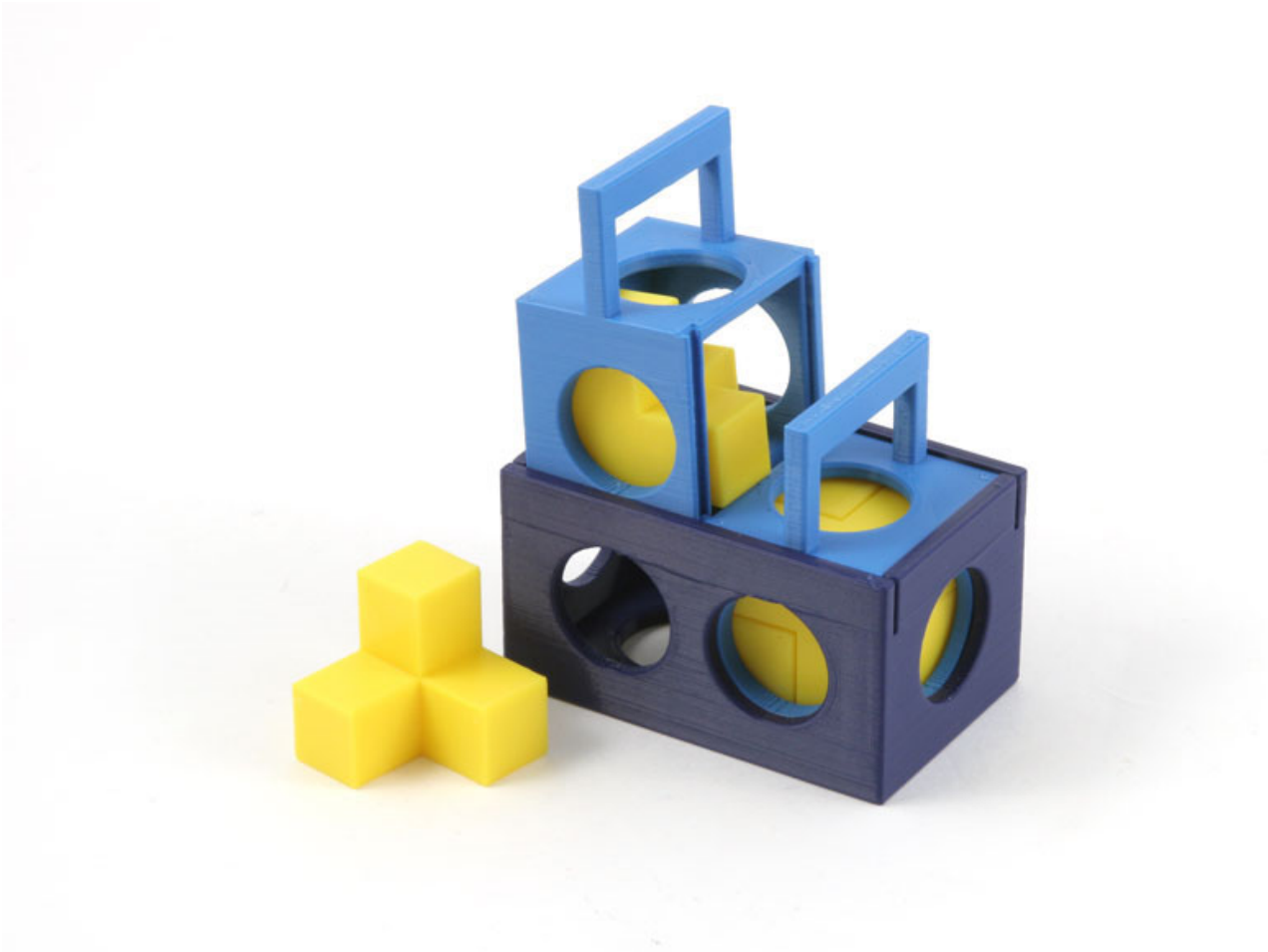
15

Double Drawers

Puzzle Goal: **Pack the four pieces in the box with the drawers closed.**

Materials: PLA

Classification: 3D Assembly



16

Earth and Sky

Puzzle Goal:

- **Cover the dark earth pieces with the bright sky pieces.**
- **Fit all six pieces into the tray without overlapping.**

Materials: Bocote and holly (pieces) cherry (tray)

Classification: Slocum 1.1, 2D Assembly

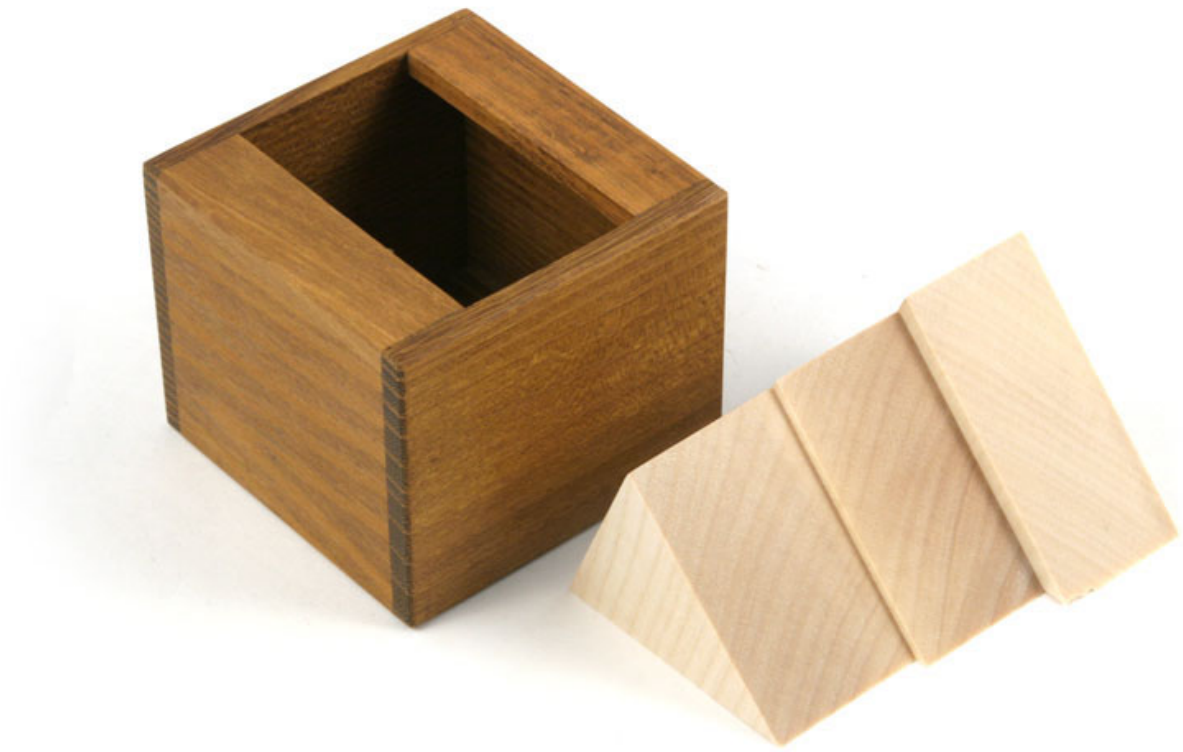
17

Fermat

Puzzle Goal: **Pack three triangular prisms into the box.**

Materials: Acacia and maple

Classification: 3D Packing



18

Five Snakes

Puzzle Goal: **Fit the five snakes into the frame.**

Materials: Stained wood and acrylic

Classification: 2D Assembly

Notes: The goal of the design was to create a more organize packing puzzle with as much empty space as possible, while still maintaining a unique solution.

19

Flip Top Box Modular Series

Puzzle Goal: **Arrange the box into one of the four different color coded configurations, and then place all seven Soma pieces inside the box beneath the closed hinged lid(s).**

Materials: PLA and magnets

Classification: 1.2 3D Assembly

Notes: Solution is given only for the yellow configuration.

20

Fort Knox PRO

Puzzle Goal: **Solve multiple challenges to open the secret compartment.**

Materials: Birch wood

Classification: Trick-opening

21

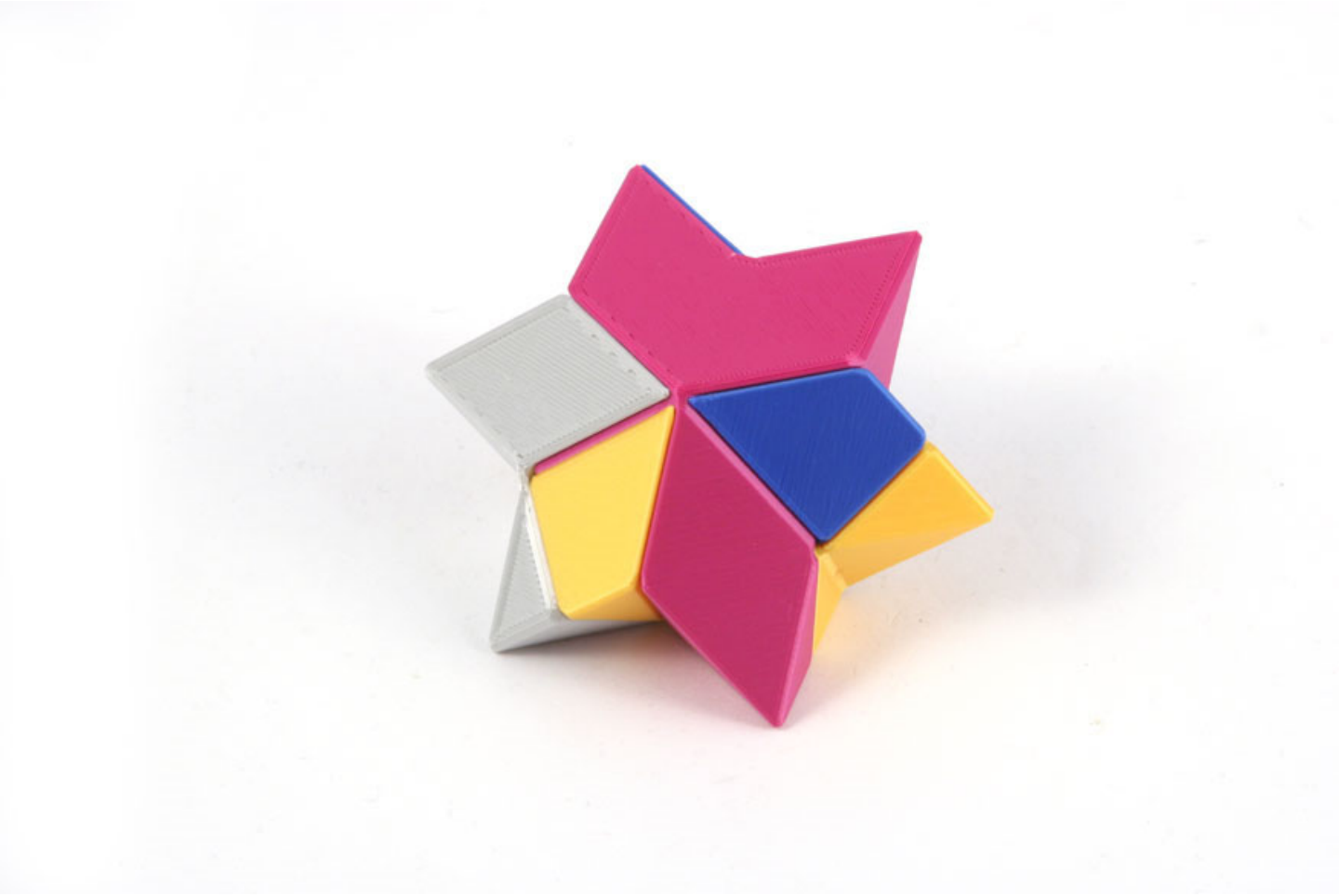
Frankenstar

Puzzle Goal: **Take it apart, put it back together.**

Materials: PLA plastic

Classification: [3.2] Geometric objects / INT-POLY

Notes: Nine possible assemblies, all coordinate motion; one is symmetric



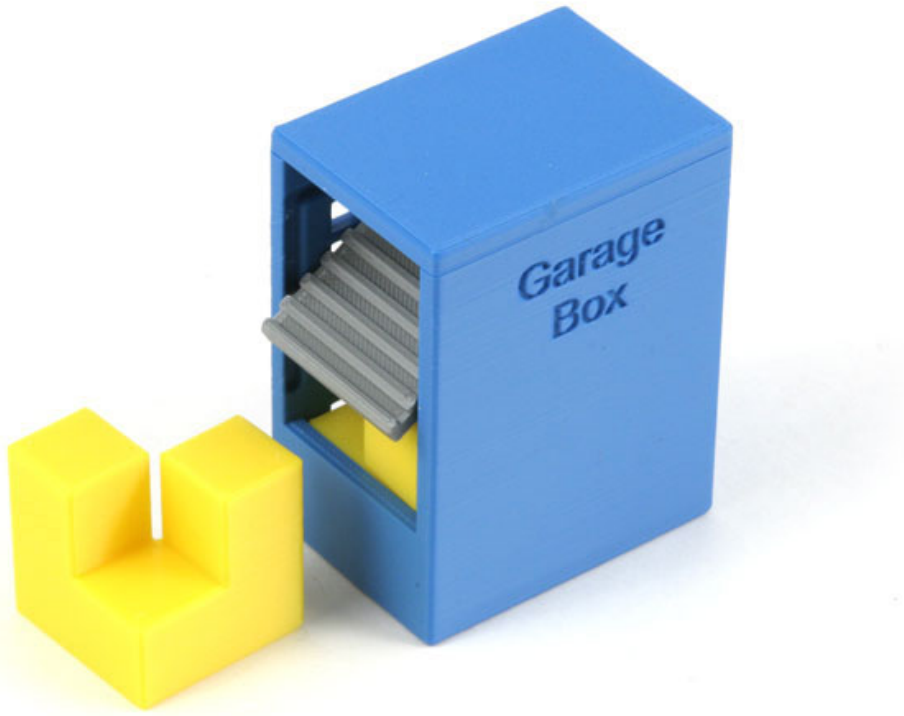
22

Garage Box

Puzzle Goal: **Pack the four polycubes in the box and shut the lid.**

Materials: PLA

Classification: 3D Assembly



23 Golem Heart

Puzzle Goal: **Assemble pieces so that gemstone is fully encased in its stone cube to make the Golem's Heart.**

Materials: Cast resin

Classification: Interlocking Solid

24

Heinz

Puzzle Goal: **Pack the six blocks (two sizes) into the box with restricted opening.**

Materials: Wenge, ash, sapele, acrylic

Classification: 3D Packing

25

Hidden Curry No. 90

Puzzle Goal: **Pack eight blocks into the restricted box.**

Materials: Acacia, garapa

Classification: 3D Packing

26

House of the Dragon

Puzzle Goal: **Solve multiple challenges to open the secret compartment.**

Materials: Birch wood

Classification: Puzzle box

27

Hypno Balls

Puzzle Goal: **Take the puzzle complete apart. Then learn to solve it in 30 seconds.**

Materials: 8 steel balls, PLA plastic

Classification: 2.1 Trick Opening

28 I-Ching Divination Puzzle

Puzzle Goal: **Place the 16 pieces into the tray.**

Materials: Fiberglass, copper clad, frosted acrylic, beechwood

Classification: 2-D assembly / JIG-LAYR

Notes: The edges of the pieces represent the full set of 64 I-Ching hexagrams.

29

Inelegant Fake

Puzzle Goal: **Assemble the pieces in the stand to form a cubic shape.**

Materials: Shedua pieces, walnut and alder stand

Classification: 3D Assembly / ASS-CART

30

Insider

Puzzle Goal: **Place three pieces fully inside the box.**

Materials: Zebrano and jatoba wood

Classification: 3D Assembly

Notes: One piece is captured inside the box and cannot be removed.

31 Karagiozis

Puzzle Goal: **Interlock the square and the Karagiozis man figure so that they look exactly like the picture he is holding.**

Materials: Paper, plastic, metal connectors

Classification: Miscellaneous Disentanglement

Notes: Solve only by rotating parts (please, no bending)

32

Keep Safe

Puzzle Goal: **Find the king and his most valued treasure ("happiness").**

Materials: ABS plastic

Classification: OPN-OTH

33

Loki

Puzzle Goal: **Open the lock. Then, lock it again.**

Materials: Brass and stainless steel

Classification: OPN-LOCK

34

Luzon

Puzzle Goal: **Find the blue six-pointed star.**

Materials: Acrylic, screws, nuts and magnets

Classification: Sequential Discovery (Take Apart)

35

Matisse

Puzzle Goal: **Place all the pieces in the frame.**

Materials: Acrylic and Corian

Classification: 2D Assembly

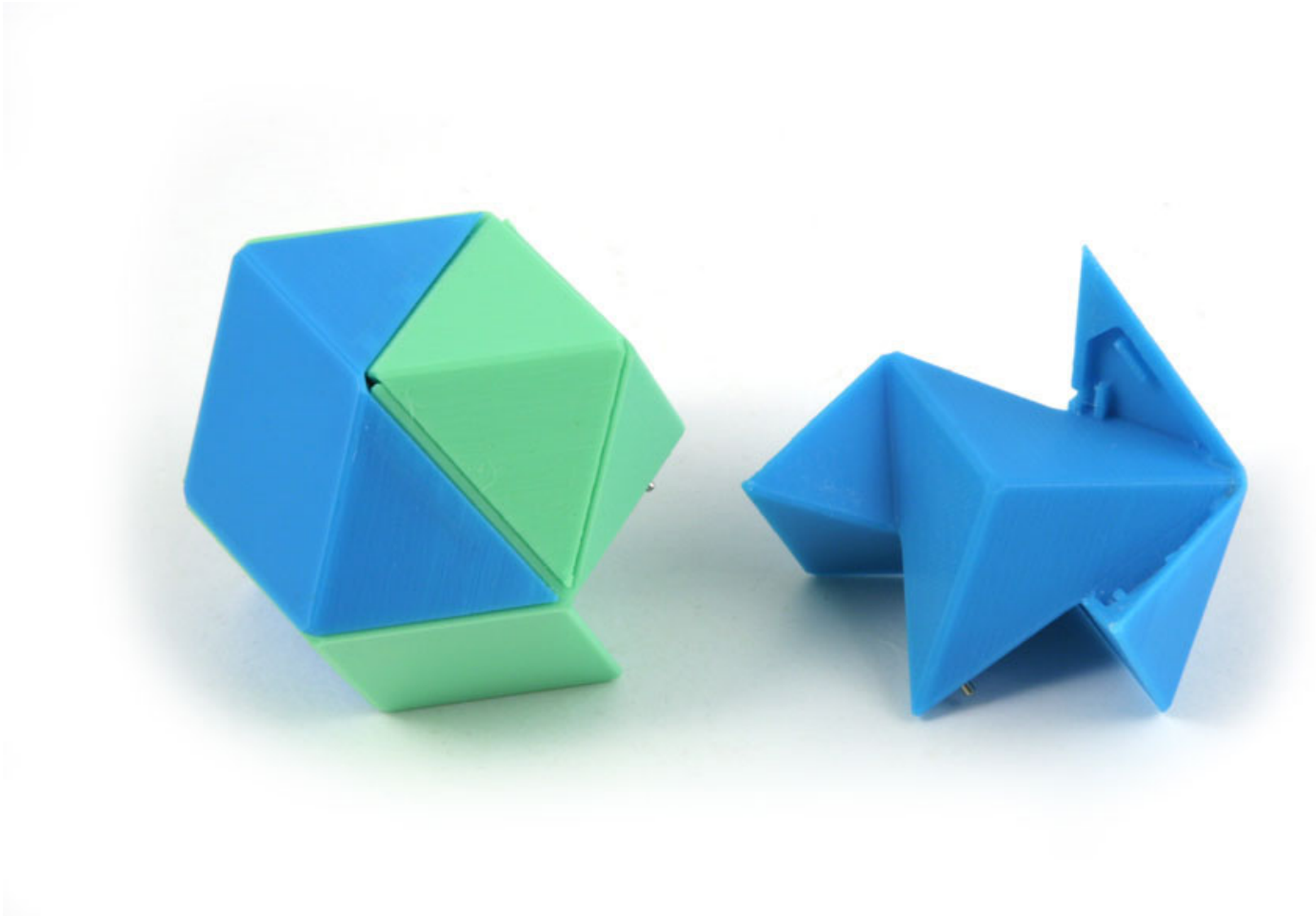
36

Maze Pennyhedron

Puzzle Goal: **Take it apart, put it back together.**

Materials: PLA plastic, steel pins

Classification: 3D Assembly+Maze / INT-POLY+RTF-OTH



37

Minima 12

Puzzle Goal: **Pack the three pieces into the box so that no empty space is visible.**

Materials: Wood (walnut, tamo)

Classification: 3D Assembly

38

Mittan

Puzzle Goal: **Open the box, and put a bell on the cat.**

Materials: Wood, metal

Classification: Sequential Discovery (2.1 Trick-opening)

39 The Music Cube

Puzzle Goal: **Solve the Rubik's Cube with colors replaced by small pitch pipes. When solved, each face consists of pipes that play the same note, different from the other five faces.**

Materials: 3x3x3 Speed Cube, Acrylic, Pitch Pipes, Straws

Classification: 5.4 Rotating Pieces

Notes: The pipes are wrapped with removable colored tape so that you may check the accuracy of your solution, or solve in the traditional colored way.

Sealed straws and alcohol swabs are provided so that the puzzle can be solved in a sanitary fashion.

40

Naked Lock Puzzle

Puzzle Goal: **Completely disassemble the lock.**

Materials: Plastic

Classification: 3.6 Misc Interlocking Solid

41

Nexus 16

Puzzle Goal: **Assemble the pieces into a square.**

Materials: Cherry wood

Classification: 2D Assembly Jigsaw

Notes: All 16 pieces are potential edge-pieces, and 10 potential corners.

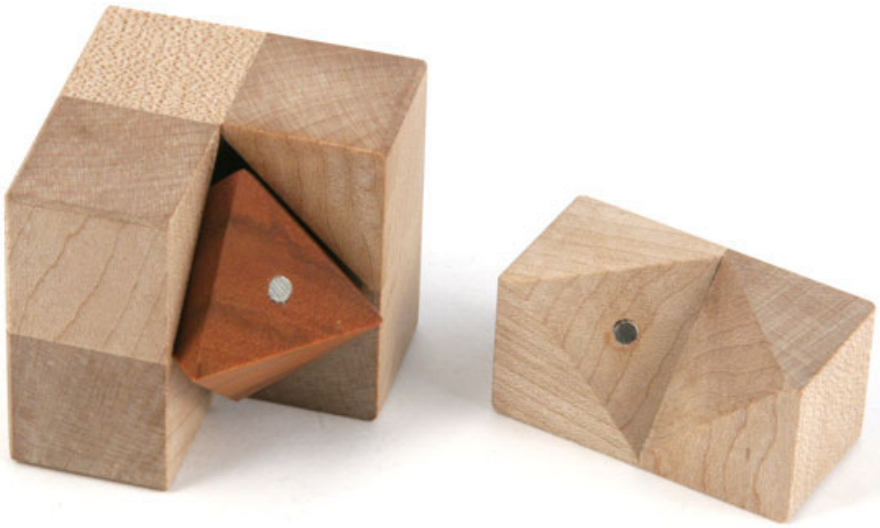
42

Octahedron in a Cube

Puzzle Goal: **Put the octahedron inside the cube, so that correct magnetic polarity is maintained.**

Materials: Maple, cherry and magnet

Classification: Put-Together



43

12345

Puzzle Goal: **Put the pieces into the tray with various constraints:**

- **Pieces of the same color (except black) are connected**
- **Pieces of the same color (except black) cannot touch each other**
- **Each color forms a mirror symmetric (and possibly disjoint) shape, all with the same axis.**

Materials: Acrylic

Classification: 2D Put-together

44

Os Sirius

Puzzle Goal: **Arrange the segments so that the (2-colored) balls on each side show the same color.**

Materials: Plastic

Classification: 5.4 Rotating Pieces

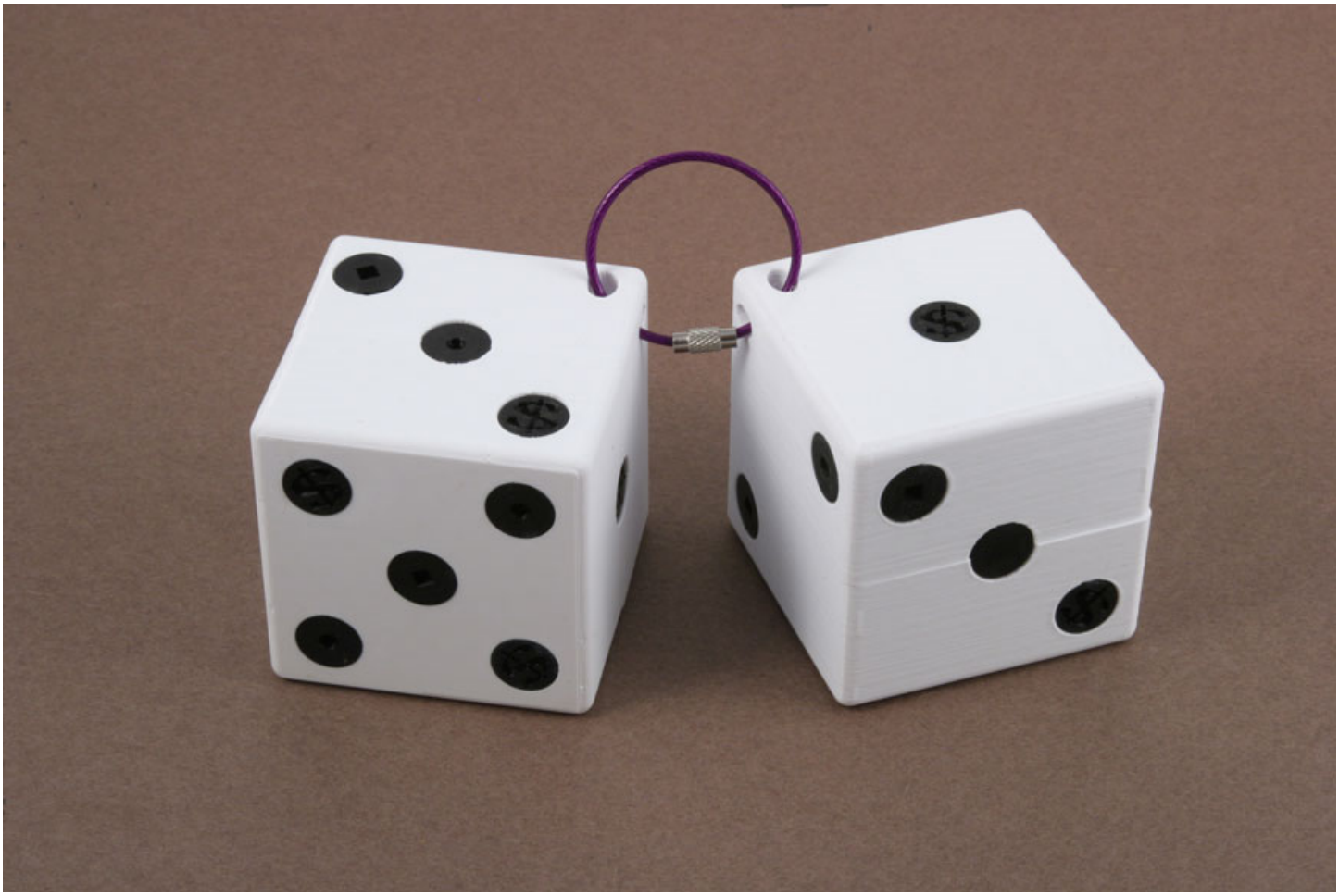
45

Pair O' Dice

Puzzle Goal: **Find your lucky dice and the gold coin.**

Materials: PLA, metal bits and magnets

Classification: Sequential Discovery (Take-Apart, Maze, etc)



46

Pennytentiary

Puzzle Goal: **Remove the penny.**

Materials: Birchwood and acrylic

Classification: Sequential Discovery (Take-Apart)

47

PKS-Hex Puzzle

Puzzle Goal: **Make and untie various knots.**

Materials: Plastic and string

Classification: 4.3 String, 5.4 Rotating

Notes: The ends of the strings are manipulated by rotating the six dials and also the top and bottom layers of the ring.

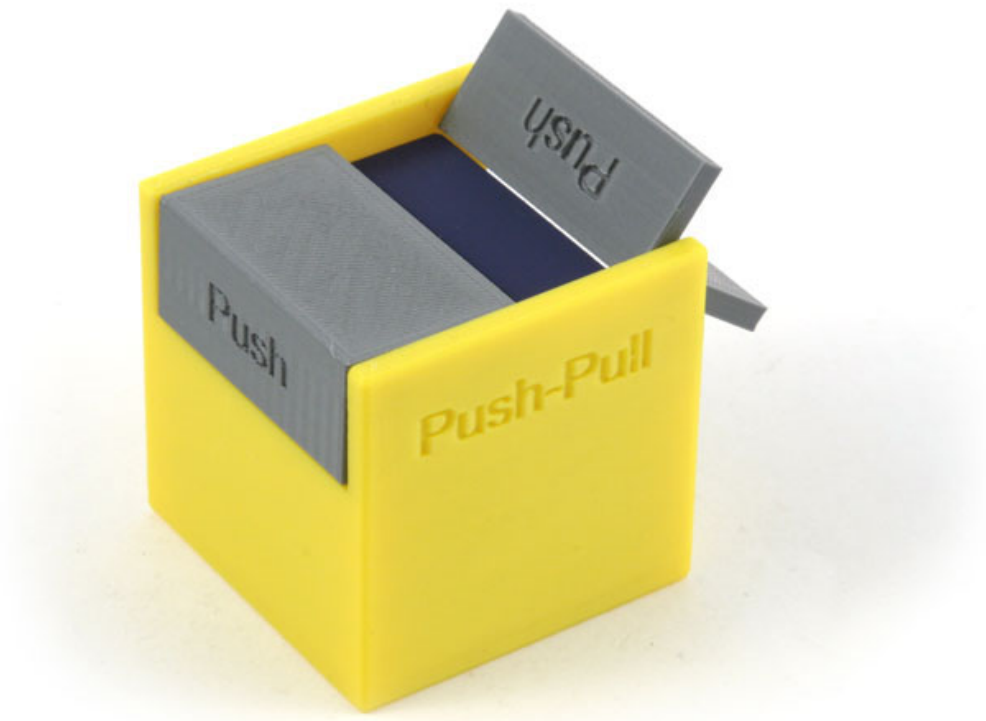
48

Push-Pull

Puzzle Goal: **Pack the five pieces in the box with the lids closed.**

Materials: PLA

Classification: 3D Assembly



49

Ratchet

Puzzle Goal: **Remove the rope from the metal frame.**

Materials: Stainless steel

Classification: Disentanglement

50

A Ring's Secret

Puzzle Goal: **Take all parts apart.**

Materials: PLA plastic

Classification: 2.1 Trick Opening

51

Ripple Box

Puzzle Goal: **Open the box.**

Materials: Bog oak, brass, birch, felt

Classification: OPN-BOX

52

Sandwich

Puzzle Goal: **Assemble a three-layer sandwich (6x8 rectangle) with the cubes inside.**

Materials: Wood

Classification: 3D Assembly

53

Sanib

Puzzle Goal: **Exorcise the ghost!**

Materials: Acrylic, screws, nuts and magnets

Classification: Sequential Discovery (Take-Apart)

54

Shark Attack

Puzzle Goal: **Pack six sharks and the unlucky swimmer into the tray.**

Materials: Wood (padauk, canarywood, zebrawood, and wenge)

Classification: 2D Assembly

55

Shutout

Puzzle Goal: **Build an apparent 3x3x3 block inside the box. (The opening of the box is completely filled and any empty space is hidden within the box.)**

Materials: Wood and MDF

Classification: 3D Interlocking Sold

56

Social Distancing

Puzzle Goal: **Nine pentominoes walk into a bar...**

You need to seat the nine pentominoes while following social distancing guidelines, no two may touch, not even at a corner. You must choose one pentomino to sit safely in the small 3x4 patio while the remaining eight are seated in the bar.

Materials: FDM printed ABS

Classification: 2D Assembly

57

Spump

Puzzle Goal: **Find the hidden prize.**

Materials: Wood

Classification: Take-Apart

58

Symmphony

Puzzle Goal: **Create a mirror symmetrical shape with the three pieces.**

Materials: PLA

Classification: 2D Assembly

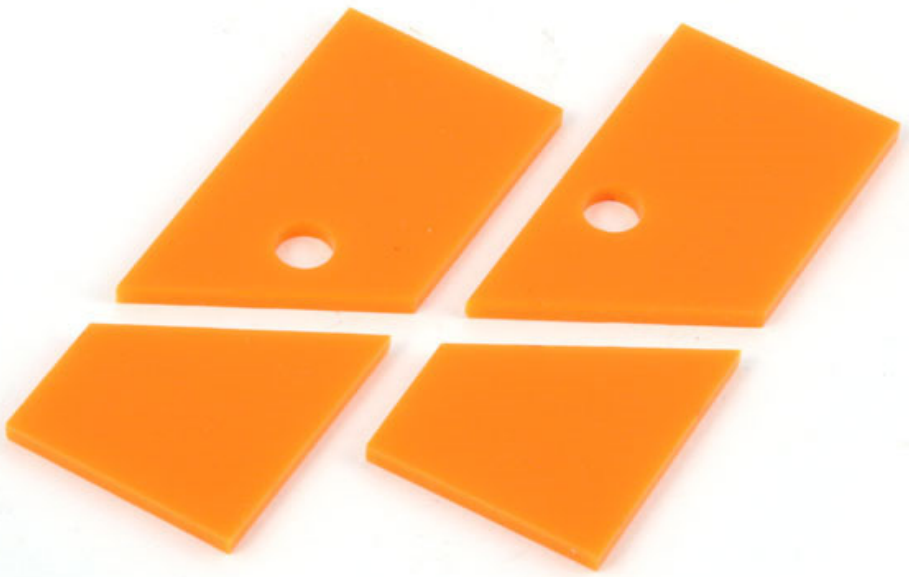
59

Synchronizer

Puzzle Goal: **Arrange four pieces to make two identical shapes, including the position of the hole.**

Materials: Acrylic

Classification: 2D Assembly



60

Three Numbers

Puzzle Goal: **Use the six pieces to create three separated numbers (3,4 and 5) at the same time.**

Pieces can be flipped over and rotated; the resulting numbers in solution can be rotated but not flipped.

Materials: Black palm, Moluccan ironwood

Classification: 2D Assembly

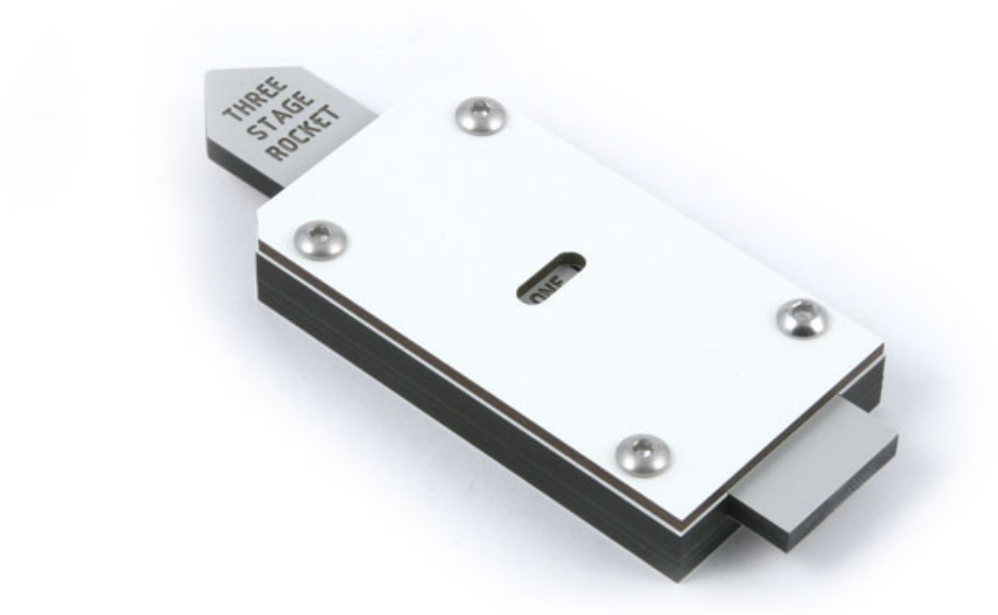
61

Three Stage Rocket

Puzzle Goal: **Go to level three!**

Materials: Trespa, steel balls, magnet

Classification: Secret Opening Box



62

Triorchidism

Puzzle Goal: **Remove the three balls from the box, then return them to their starting position.**

Materials: Wood, glass, acrylic

Classification: Sequential Movement, Dexterity

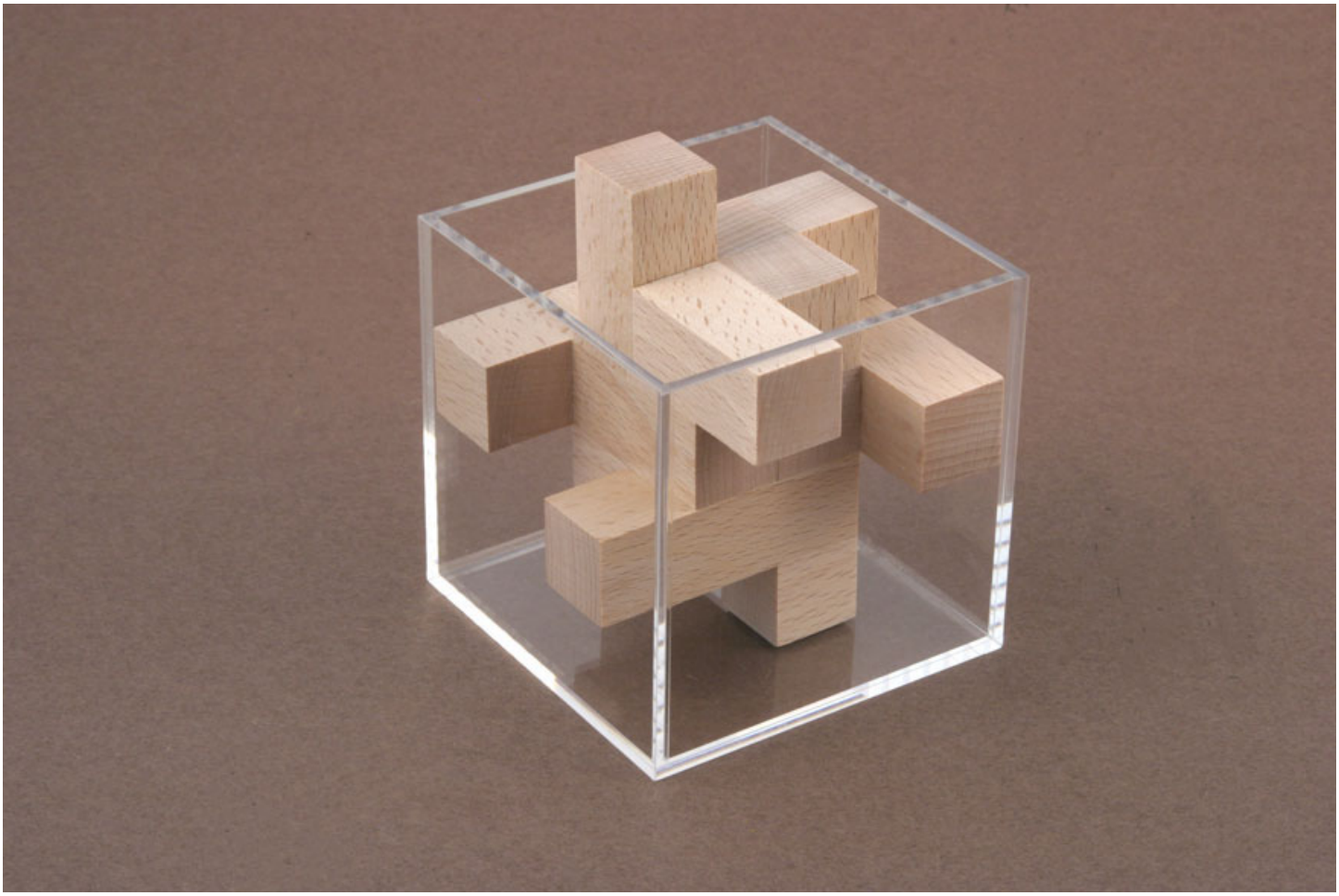
63

Triple Product

Puzzle Goal: **Pack the three pieces fully into the box.**

Materials: Wood, acrylic

Classification: Put-together



64

Triple Yolk

Puzzle Goal: **Find and retrieve the three brass yolks.**

Materials: 3D-printed resin, brass

Classification: Sequential Discovery

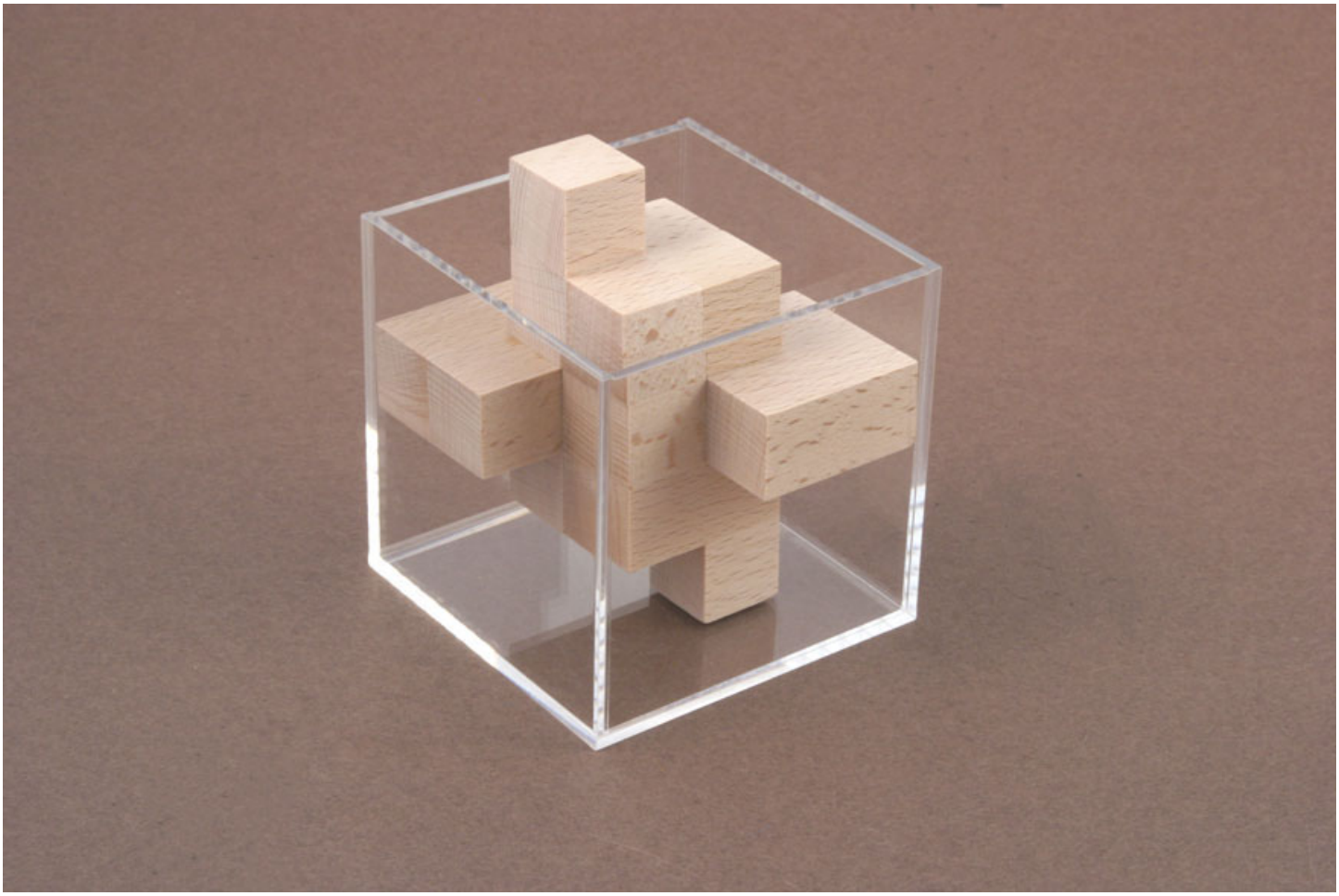
65

Twinship

Puzzle Goal: **Pack the two pieces fully into the box.**

Materials: Wood, acrylic

Classification: Put-Together



66 Uroborus

Puzzle Goal: **Interlock the three pieces into a 4x4x4 space.**

Materials: Wood

Classification: 3D Interlocking

Notes: Rotations are allowed and needed; no undue force required.