

01

Arrow & Heart

Puzzle Goal: Disentangle the two parts.

Materials: Steel nail

Classification: Disentanglement



02

Axes & Hammer

Puzzle Goal: Separate the axes, hammer, and ring.

Materials: Stainless steel, iron

Classification: Topological disentanglement



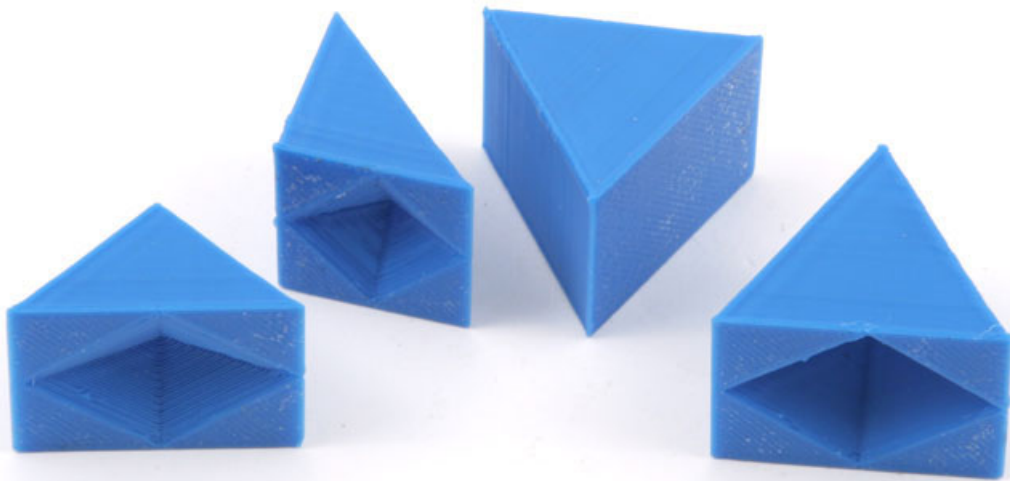
03

Axion

Puzzle Goal: Create a shape that has mirror symmetry in three mutually perpendicular directions.

Materials: PLA 3D-printed plastic

Classification: 1.1. Put-together



04

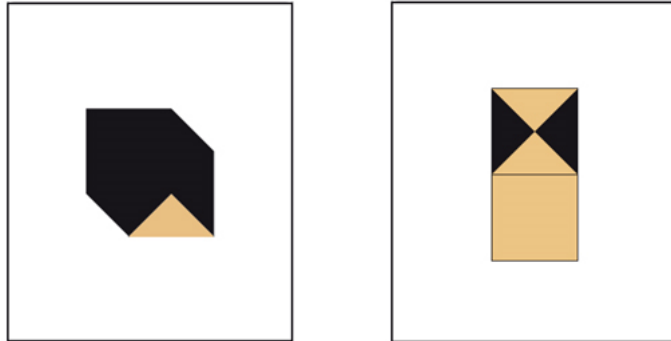
Blockistry

Puzzle Goal: Create a stable, free-standing structure that matches a given image when viewed from directly above.

Materials: Wood

Classification: 1.3 Put together (3D-objects)

Notes: Two of the 54 different challenges are given here:



This entry shares some design attributes with Pyramida, a 1995 design by David Hirsch.



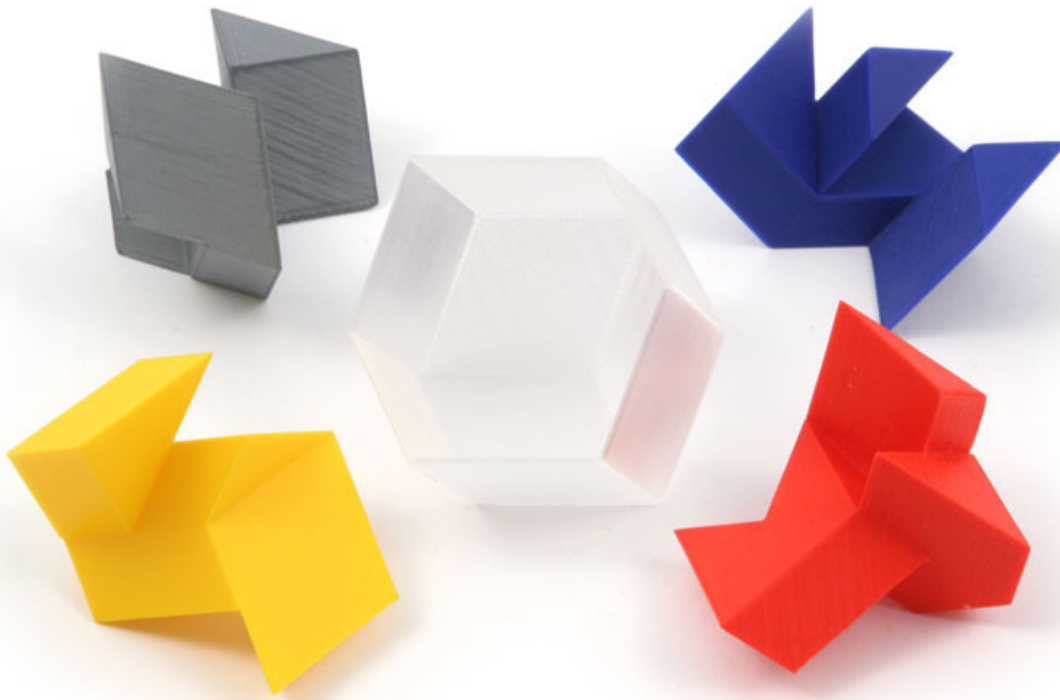
05

Box Rhodode

Puzzle Goal: Assemble the four pieces to fit into the DDH box.

Materials: PLA 3D print, Box PET-G

Classification: INT-POLY



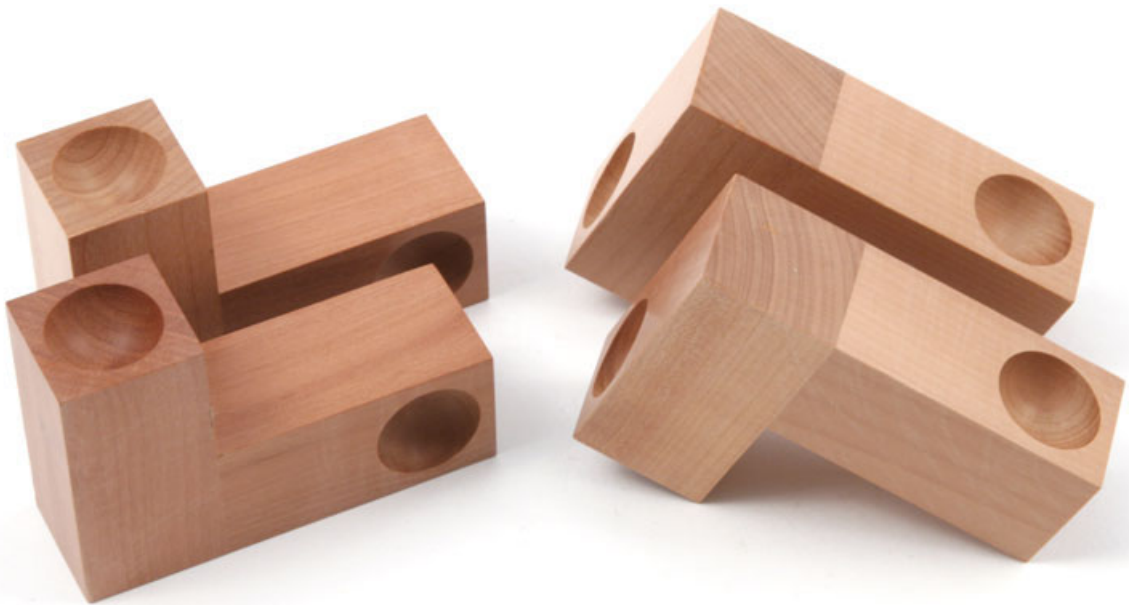
06

Bubble

Puzzle Goal: Form four hollow spheres hidden inside a stable structure.

Materials: Elsberry wood

Classification: Put together



07

Cogra Puzzle

Puzzle Goal: Scramble the puzzle, and then return it to the solved state with four solid colored circles.

Materials: Acrylic

Classification: 5.4 Rotating piece puzzles

Notes: Opposite circles rotate together



08

Coil Enigma

Puzzle Goal: Release the center piece.

Materials: Leather

Classification: Leather tanglement



09

CORVI 2020

Puzzle Goal: Open the box.

Materials: Wood, electronics

Classification: Slocum 2.1



10

DIA

Puzzle Goal: Pack the five diamond-shaped pieces inside the frame.

Materials: Printed MDF

Classification: Put-together



11

Euklid for Kids

Puzzle Goal: Pack three blocks into the box.

Materials: Padauk, merbau, acacia

Classification: Box packing



12

Five Cubes

Puzzle Goal: Make five cubes using all the magnets, with none of the cubes overlapping their neighbor by more than one-half cube.

Materials: Patagonian rosewood

Classification: Put-together



13

Four Squares

Puzzle Goal: Assemble the six pieces to make four square shapes at the same time.

Materials: Printed MDF

Classification: 2D assembly



14

Free Me 8 - The Reptile Puzzle Box

Puzzle Goal: Open the box and free the coin.

Materials: Wood, metal, coin

Classification: Take-apart



15

Genesi

Puzzle Goal: Open the box.

Materials: Mahogany, maple, linden, magnets

Classification: Take-apart puzzle box



16

Grooved Three Piece Burr

Puzzle Goal: Assemble and disassemble.

Materials: Leopardwood

Classification: Interlocking burr



17

Heart & Heart

Puzzle Goal: Disentangle the two pieces.

Materials: Steel nail

Classification: Disentanglement



18

Impossible Butterfly

Puzzle Goal: Is it possible to remove two pieces of wood (without using force)?
Is it possible to make with natural wood (without using glue)?

Materials: Natural wood (black & white ebony)

Classification: Impossible object



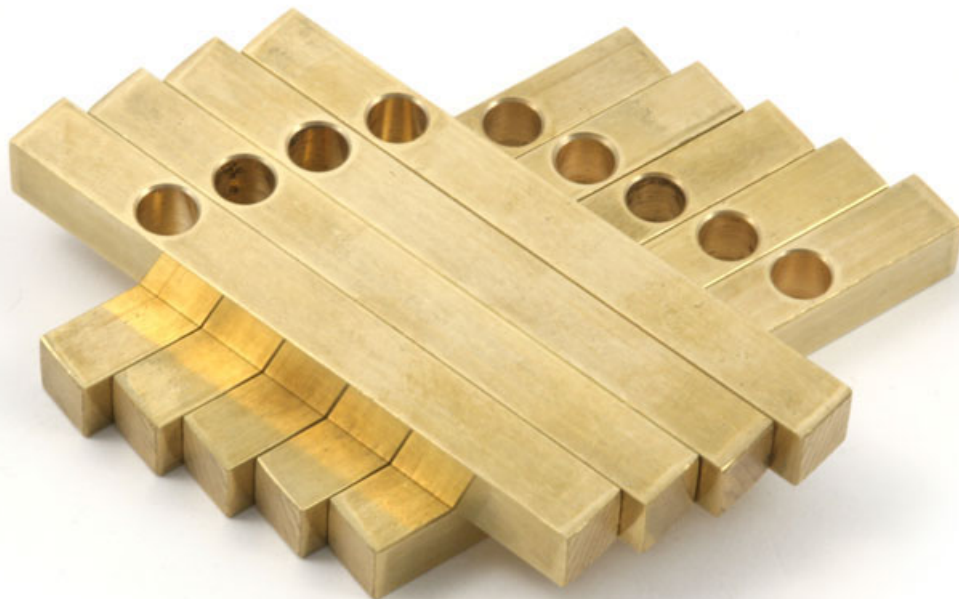
19

Incertezza del Futuro

Puzzle Goal: Arrange the nine identical pieces so that no hole is visible from any side, even from below (glass table).

Materials: Brass

Classification: Put-together



20

Jigsaw Cube [Black]

Puzzle Goal: Disassemble and assemble the eight blocks.

Materials: Natural wood (yellow poplar & black walnut)

Classification: Interlocking solid



21

Jigsaw Cube [Red]

Puzzle Goal: Disassemble and assemble the eight blocks.

Materials: Natural wood (shina & padauk)

Classification: Interlocking solid



L Plates

Puzzle Goal: Slide the four shapes around the cube...

1. To form a colored circle on one face.
2. To form a colored rectangle by sliding shapes.

Materials: Oak (reclaimed)

Classification: 5.3 Sliding piece puzzle 3D



23

Leaf 15

Puzzle Goal: Slide the pieces so that the proper order of pieces 14 and 15 is restored.

Materials: Acrylic

Classification: 5.3 Sliding piece

Notes: This is a homage to the classic 14-15 Puzzle of Sam Loyd.



24

Lock Box

Puzzle Goal: Open the box using the key.

Materials: Sapele, Jatoba, Birch

Classification: Sequential discover take-apart (Slocum 2.1)

Notes: No force, banging, spinning, outside tools, or gravity is necessary or allowed. Do not put any discovered components other than the key inside the keyhole.



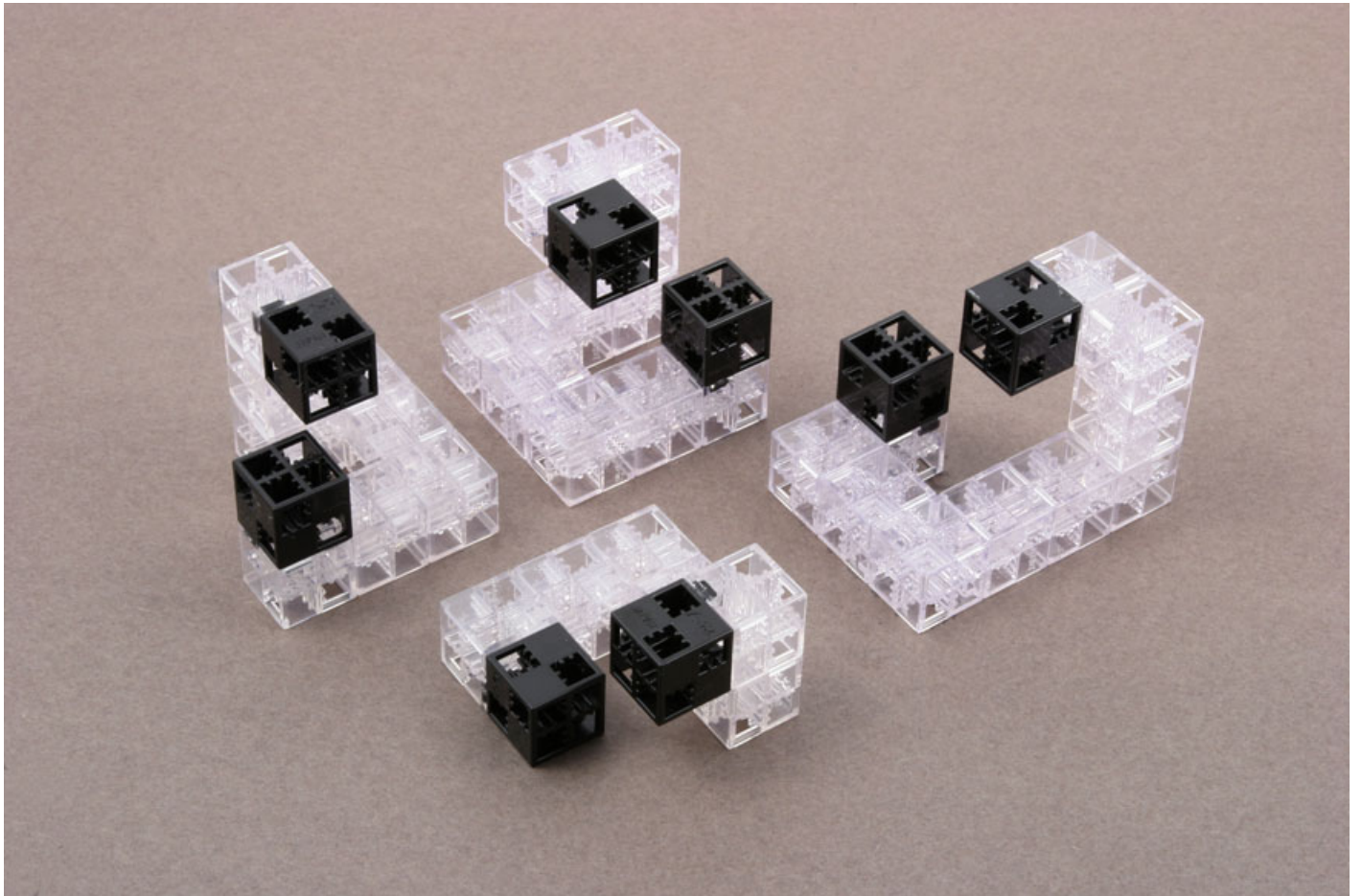
25

Looser Cube

Puzzle Goal: Assemble the pieces so that the black blocks make a 2x2x2 cube.

Materials: Artec Blocks

Classification: 3D Assembly



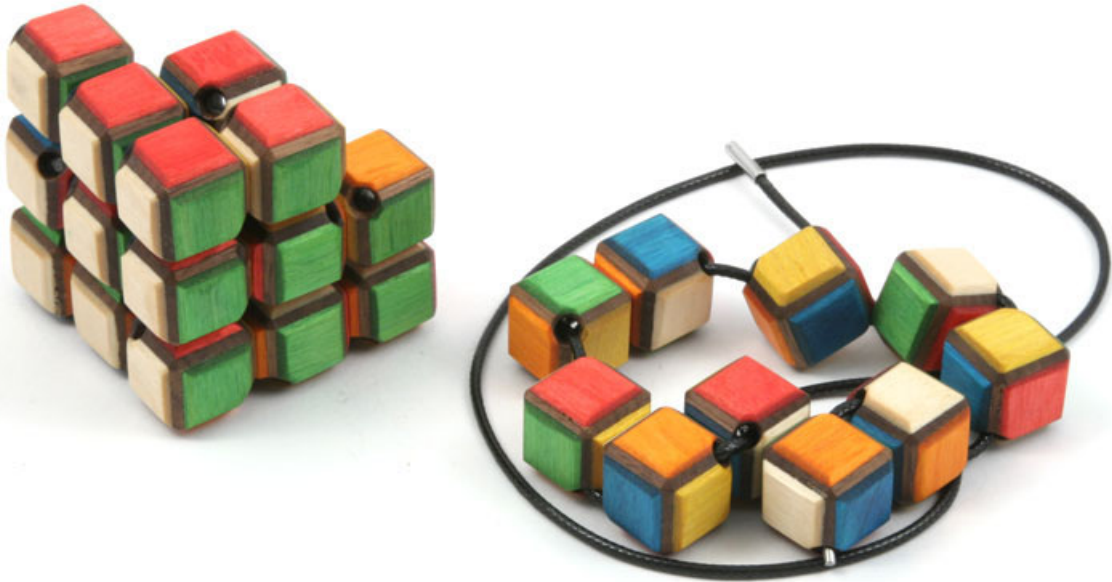
Magic Pearls

Puzzle Goal: Take apart the necklace and use the blocks to build a fully functional 3x3x3 magic cube.

Materials: Walnut, birch, magnets

Classification: 1.2 3 Dimensional assembly puzzles -non-interlocking

Notes: The puzzle is considered solved when you can (carefully) twist, mix and solve it like an ordinary magic cube without the cube falling apart or any adjacent sub cubes repelling each other.



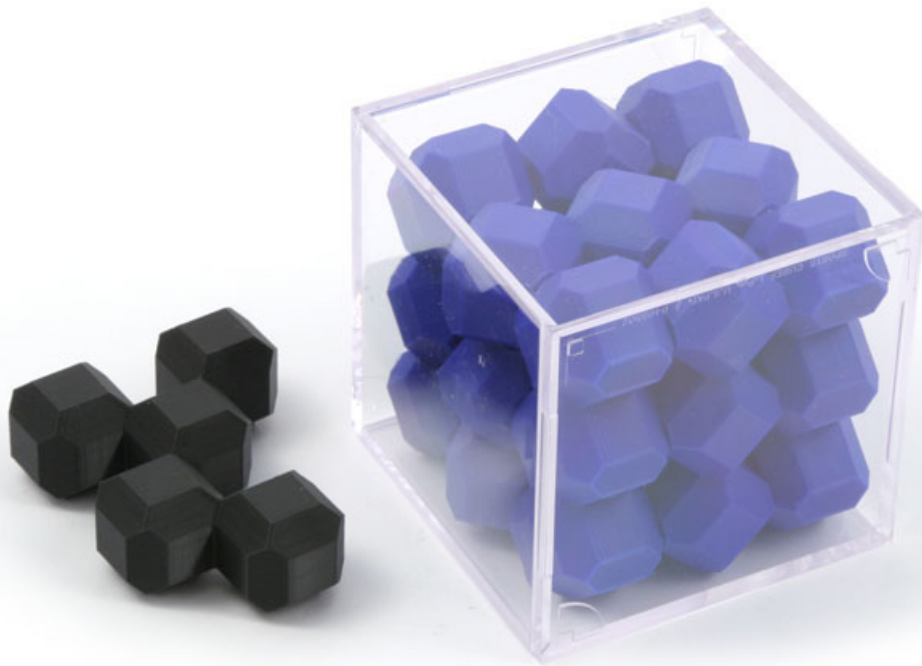
27

Melting F

Puzzle Goal: Pack all 10 pieces in the box.

Materials: PLA

Classification: [1.2] 3D assembly, ASS-POLY Assembly of Polyhedra



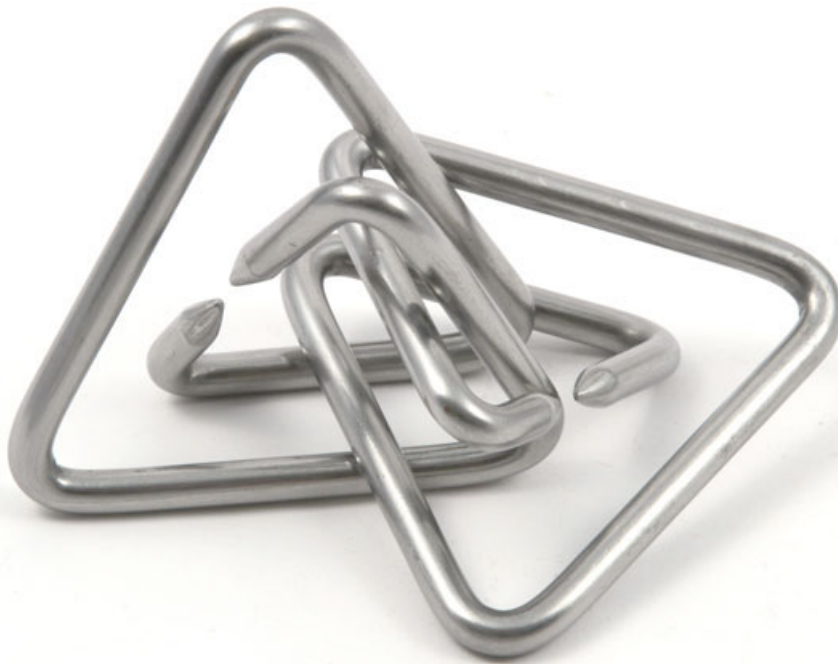
28

Mobius Triangle Junior

Puzzle Goal: Disentangle the two parts.

Materials: Steel

Classification: Disentanglement



29

Mutex

Puzzle Goal: Open the container by turning the knobs and removing the top.

Materials: Brass, aluminum, acrylic

Classification: 2.1 Trick or secret opening puzzles

Notes: No force, banging, spinning, gravity, or tools are required.



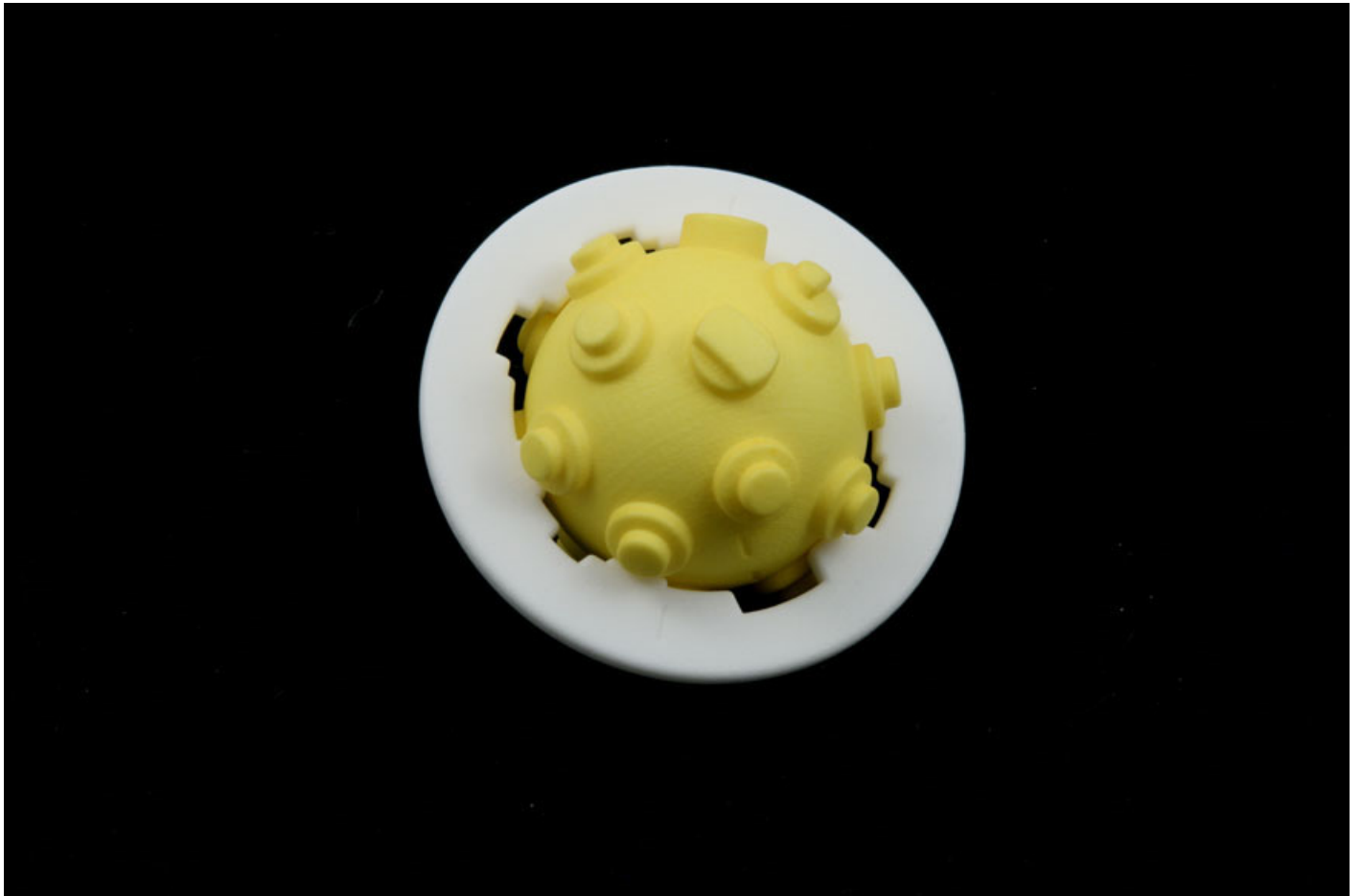
30

Planet

Puzzle Goal: Separate the two parts and return it to the start position (so that the etched lines are aligned).

Materials: Nylon

Classification: Slocum 4.1



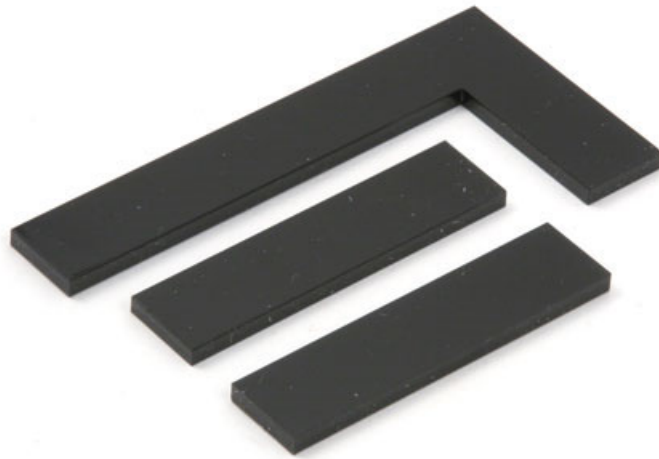
31

Simplicitas

Puzzle Goal: Make a symmetrical shape with the three pieces.

Materials: Acrylic

Classification: 2D Assembly



32

Sisyphus

Puzzle Goal: Place Sisyphus' boulder into its base.

Materials: Soapstone and black walnut

Classification: ASS-POLY



33

Slow Motion

Puzzle Goal: Pack the eight pieces into the frame to make a square.

Materials: Acrylic, metal

Classification: Put-together, sliding pieces



34

Small Drawer Box

Puzzle Goal: Open the small drawer box.

Materials: New Guinea rosewood

Classification: Take-Apart (open the box)



35

Starmaker

Puzzle Goal: Use all eight cubes to create the image of a 2D star.

Materials: Acrylic

Classification: Put-together



Superpack

Puzzle Goal: Fit the indicated five pieces into the box.

Materials: Wood (masseur birch box, Bolivian rosewood, yellowheart, purpleheart pieces)

Classification: ASS-OTH

Notes: Six different challenges are provided.

⇕	EASIER						"Why Snakes?"	>25 solutions
							"Wise Snakes"	22 solutions
							"Snake Pack 2"	11 solutions
							"Y Pack"	1 solution
							"Snake Pack"	1 solution
HARDER						"Snakewise"	2 solutions	



37

Swift Mystery

Puzzle Goal: Arrange the six pieces in three layers to form a familiar figure.

Materials: Walnut, alder, poplar

Classification: 1.3 Miscellaneous put-together



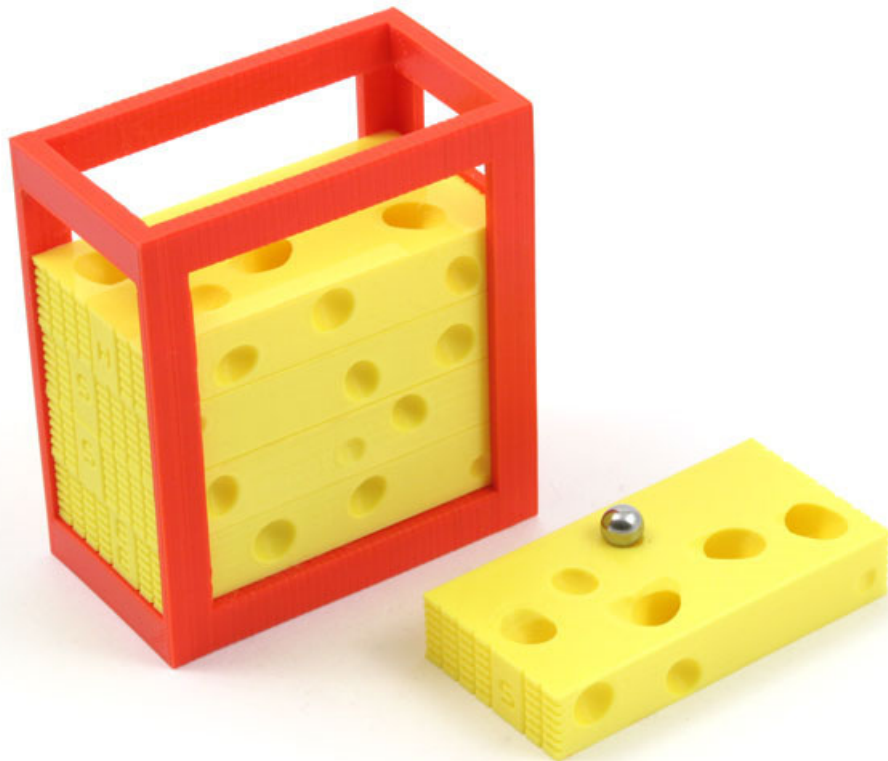
38

Swiss Cheese and Grape

Puzzle Goal: Arrange the five pieces of Swiss cheese in the box so that the ball can drop into the top of the box, through the stack of Swiss cheese, and then out at the bottom of the box.

Materials: 3D printing

Classification: Maze & route puzzle



39

10 of Diamonds

Puzzle Goal: Pack the pieces in the tray.

Materials: wood

Classification: 1.1 2D



40

Three Coins

Puzzle Goal: Take apart the ring.

Materials: Rosewood

Classification: Topological disentanglement



41

ze Tomago (Egg)

Puzzle Goal: Open the box and find the diamond.

Materials: Wood

Classification: Slocum 2.1



Triple Chocolate Box

- Puzzle Goal:**
- 1) Pack all six pieces in the round box.
 - 2) Pack all six pieces in the square box.
 - 3) Pack all six pieces in the triangular box.

Materials: PLA boxes, wood balls

Classification: [1.2] 3D assembly, ASS-POLY Assembly of Polyhedra

Notes: In all solutions, when the lid is in place it should not touch the pieces.



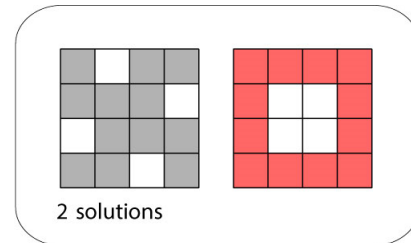
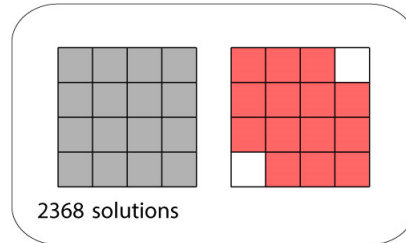
2+One

Puzzle Goal: Arrange the pieces into a 2x2x2 cube, so the given patterns are visible from the three directions when looking through the assembly. (The patterns in the two black directions must be identical.)

Materials: Acrylic

Classification: Slocum 1.3

Notes: Two of the 21 different challenges are given here:



44

WASP

Puzzle Goal: Take the six tangled bands and arrange them into an orderly ring.

Materials: Silver - Ring / SLS 3D Printed Nylon - Ring Box

Classification: 1.3 Miscellaneous put-together



45

Where's My Hammer

Puzzle Goal: Gain access to the interior compartment.

Materials: Wood, metal

Classification: 2.1 Secret opening box



46

X Marks The Spot

Puzzle Goal: Align the white arms on the rotating discs so that they form an "X".

Materials: 3D printed PLA, springs, screws

Classification: Sequential Movement



47

Yendred's Packing

Puzzle Goal: Place all the feet of all the pieces into the box simultaneously.

Materials: Plastic

Classification: Slocum 1.1

Notes: The pieces should not be bent, even slightly.

