

01

Ant Hunt

Puzzle Goal: Open the lock and find the ant!

Materials: Brass and stainless steel

Classification: OPN-LOCK



02

Bicolor 1365

Puzzle Goal: Warm-up: pack the seven pieces into the box and close the lid; there are 1365 solutions.
The Full goal: pack the seven pieces into the box and close the lid so that the colors of the box and lid match (unique solution).

Materials: Wood

Classification: Put-together



03

Binary Disk

Puzzle Goal: Slide the eight colorful tokens through their channels, scramble the puzzle, and then get each token at its home of the same color. There are eight challenges: have the straight gold line point to each of the eight colors while the tokens are in their solved position.

Materials: 3D-printed PLA plastic

Classification: Slocum: 5.6 Miscellaneous sequential movement

Notes: The green solved position is shown.



04

BMSD

Puzzle Goal: Find the bananas and feed them to the monkey.

Materials: Brass, steel and random stuff

Classification: OPN-OTH, 2.1 SD



05

Brian's Big Baffling Bolt

Puzzle Goal: Find the 30th anniversary plaque with its pearl.

Materials: Made from a custom made solid brass bolt with magnets

Classification: 2.1 Trick or Secret Opening SD



Broad Bins

Puzzle Goal: Rotate one bin piece at a time so that all noses face downwards.
Arrange any number of bin pieces on the tray so that they are adjacent to each other. Traditionally each bin piece would be positioned with its "nose" facing upwards. But instead you can arrange the noses either up or down, making it a little bit complicated.

Materials: PLA and acrylic

Classification: SEQ-OTH



07

Brother's Key

Puzzle Goal: Separate the two parts and reconnect them.

Materials: Brass

Classification: Take-apart



08

Busy Hand

Puzzle Goal: Find the hidden game cartridge.

Materials: Wood, magnet, iron ball, aluminum wire

Classification: Take-apart

Notes: The aluminum wire may be manipulated.



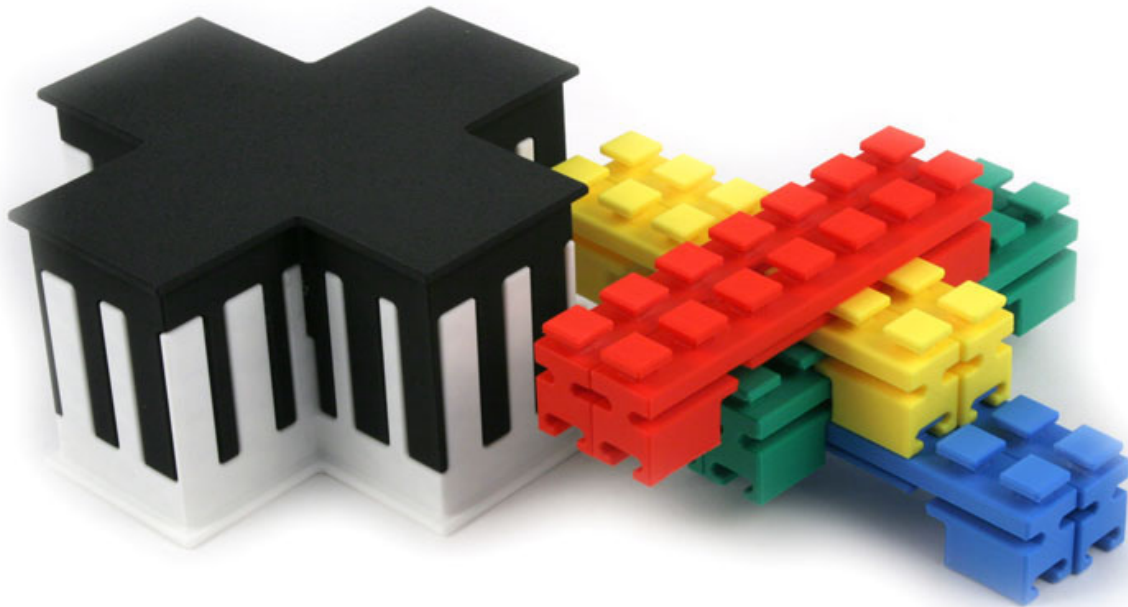
09

Caravan

Puzzle Goal: Separate the eight pieces, and then pack them back into the box.

Materials: PLA

Classification: 3.4



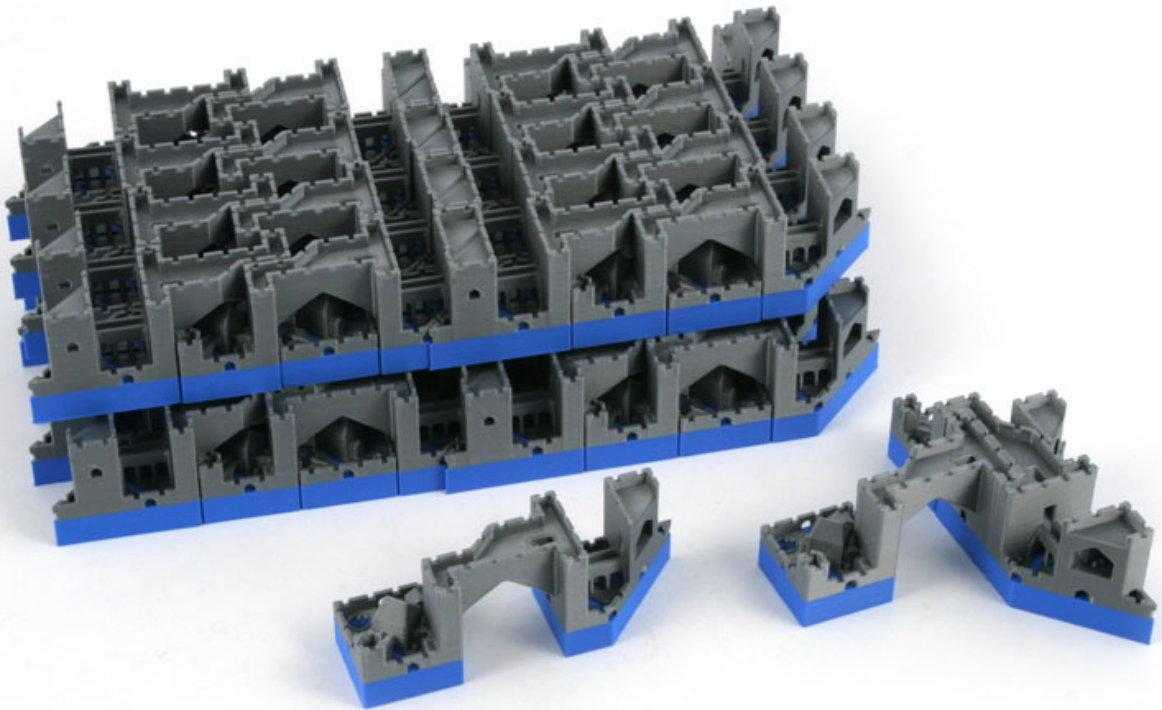
10

Castle Arches

Puzzle Goal: Assemble the 42 pieces to form a castle with a solid rectangular footprint.

Materials: PLA plastic

Classification: 3.1 Figural



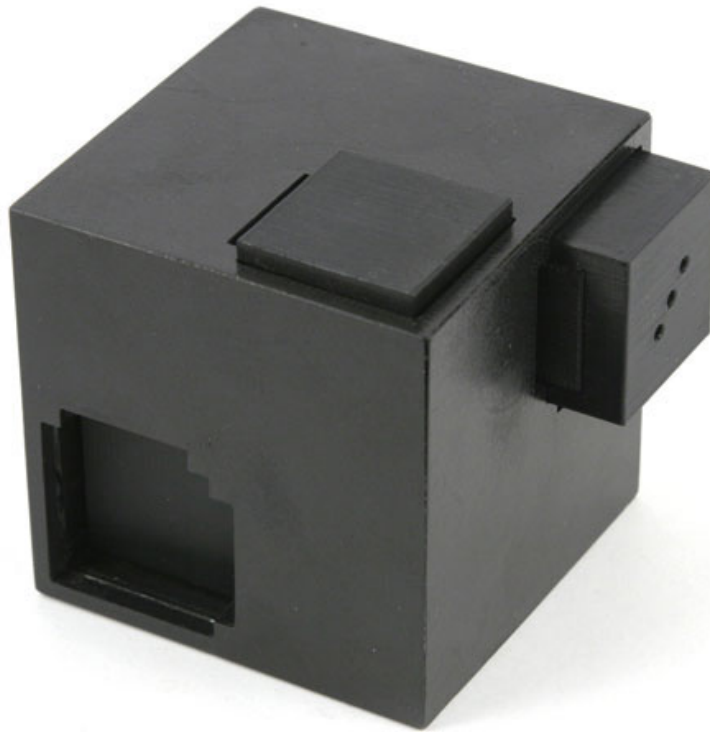
11

Chander's Cube

Puzzle Goal: Remove the three sliders from the box. When you restore the puzzle, the sliders must be fully inside the box.

Materials: Co-Pet

Classification: 3.2 Geometric objects, 3.4 Burr



Cogyrinth

Puzzle Goal: Remove the central gray plug, then manipulate the puzzle so that the plug can be fully inserted from the opposite side. No forcing or unscrewing.

Materials: PLA, steel

Classification: 5.4

Notes: Gears may be temporarily blocked by gravity pins.

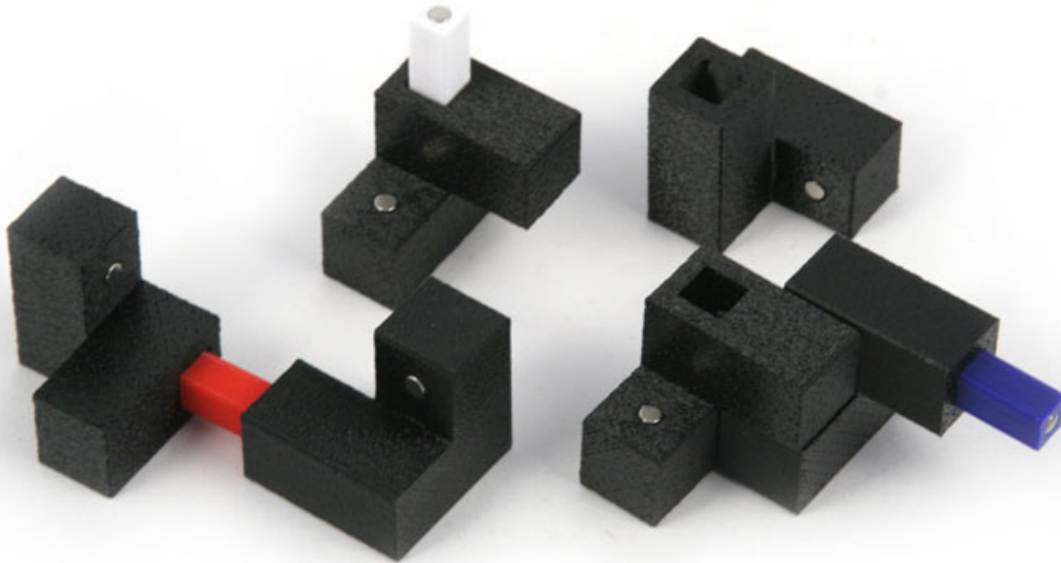


CONNECTING CUB3S

Puzzle Goal: Make 3 connecting cubes. All the square holes must be used as well as the 3 square pegs. There is only one final shape but multiple ways to assemble it.

Materials: 3D Printed PETG+

Classification: Other Interlocking Shapes



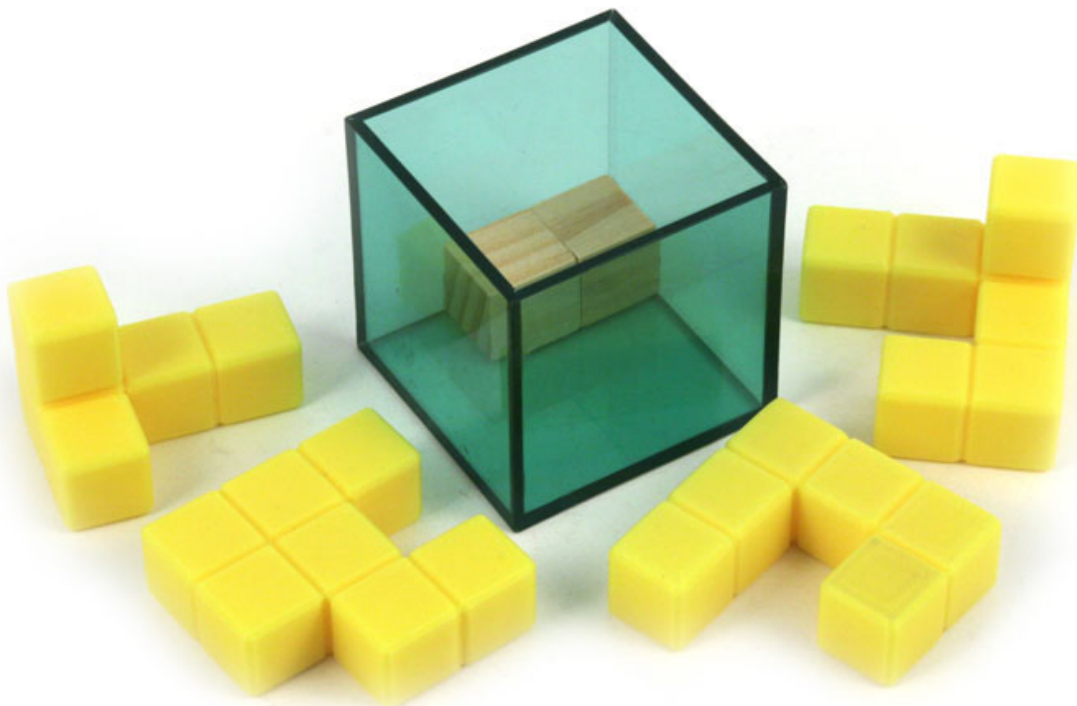
14

Container

Puzzle Goal: Put the four puzzle pieces completely inside the box (avoiding the interior plug).

Materials: Wood,PLA

Classification: 3D Assembly



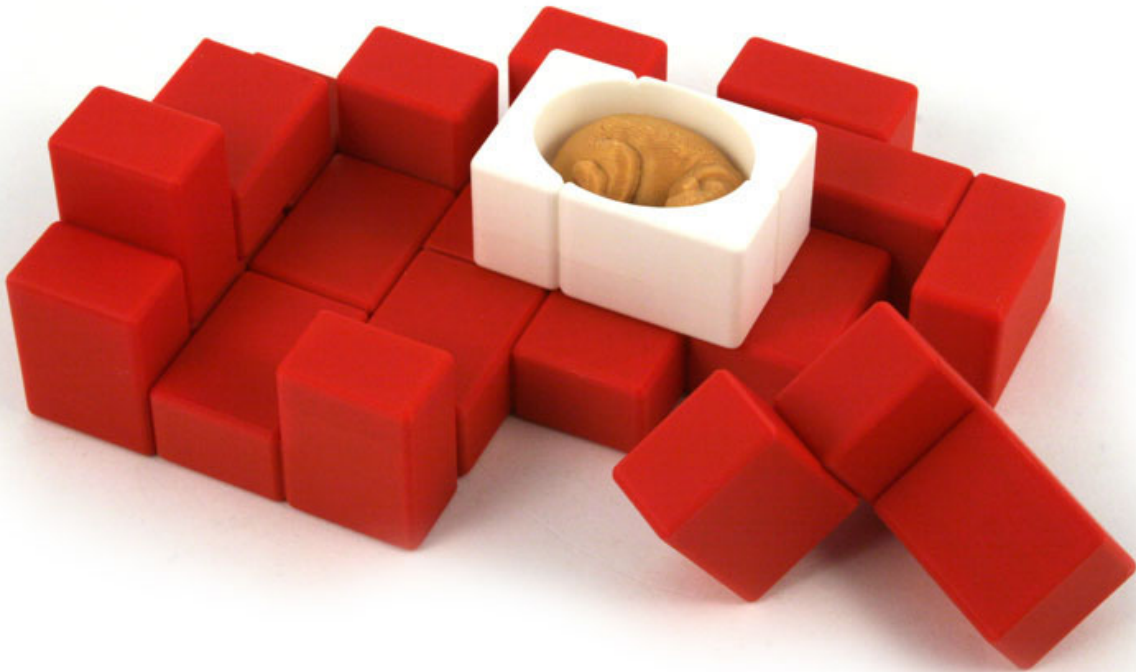
15

Cricket

Puzzle Goal: Construct a red brick sarcophagus for a poor dead dog.

Materials: PLA

Classification: 1.2 3D assembly



16

Crooked Spaceships

Puzzle Goal: Pack all pieces inside the box and close the lid.

Materials: PLA with laser cut acrylic

Classification: 1.2: 3D assembly



17

Diagonal Chaos

Puzzle Goal: Disassemble and reassemble the cube.

Materials: PLA + Plastic

Classification: Interlocking solid



18

Distinction

Puzzle Goal: Pack the pieces into the box.

Materials: Wood, metal

Classification: 1.2

Notes: All pieces are shapeshifting.

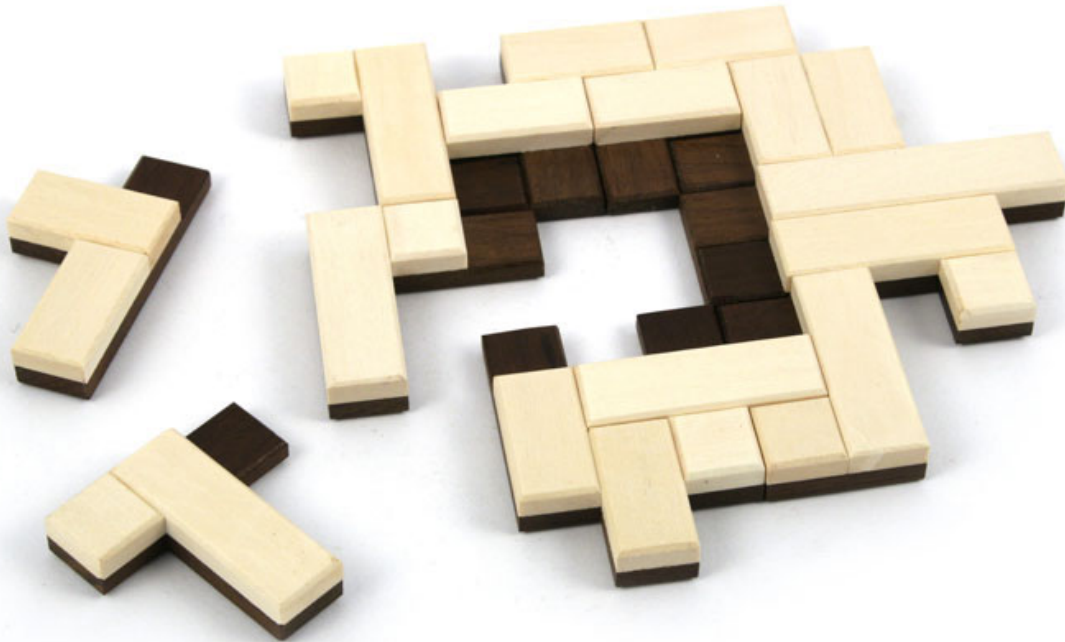


Ditch

Puzzle Goal: Place all 12 pieces flat on the table without overlapping, dark wood down, and create a 4x4 square ring from dark square units when viewed from above.

Materials: Wood: holly and Peruvian walnut

Classification: 1.1 2D assembly puzzle

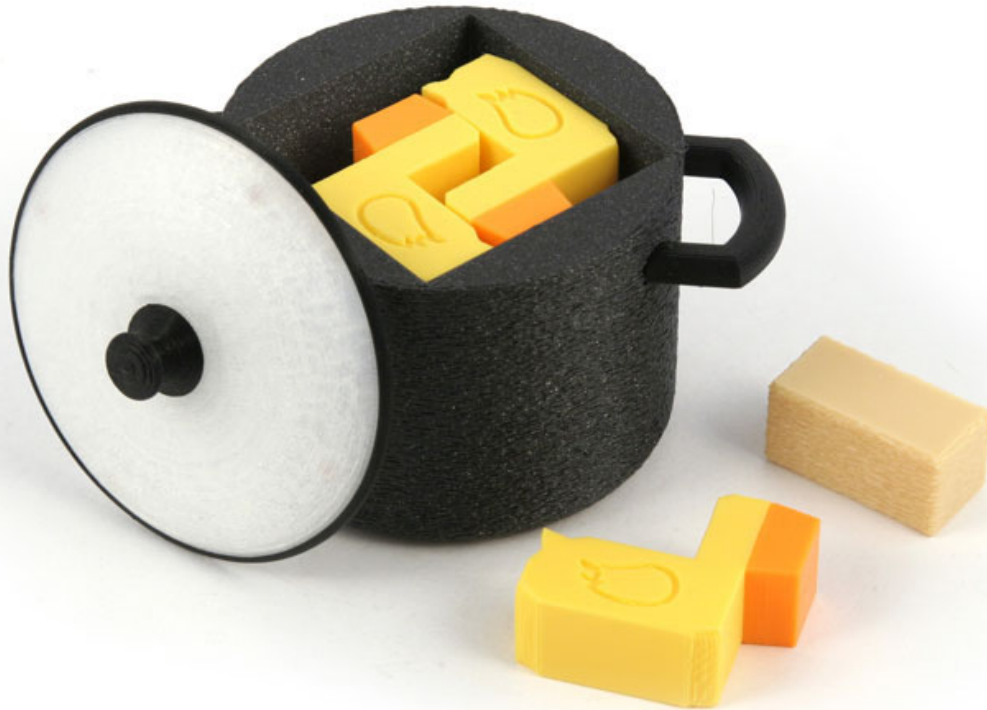


Duck Soup

Puzzle Goal: Packing all seven ducks into the pot is as easy as duck soup: 180 possible solutions. But making duck soup with an added Bouillon cube in the pot is very difficult: only 1 solution.

Materials: PLA

Classification: Slocum 1.2 3D Assembly



21

Eagle

Puzzle Goal: Remove the bar and steel balls from the eagle's body by moving the steel balls in the grooves found inside the eagle and the bar.

Materials: Stainless steel, titanium alloy

Classification: Take-Apart Puzzles



22

Enlaced

Puzzle Goal: Assemble all the pieces within a 5x5x5 cube, then take them apart again.

Materials: East Indian Rosewood, padauk and holly

Classification: 3.4



23

Euler Not For Dummies

Puzzle Goal: Pack six pieces into the restricted (fixed brass rod) box.

Materials: Bubinga, birch, poplar, brass

Classification: 3D Packing



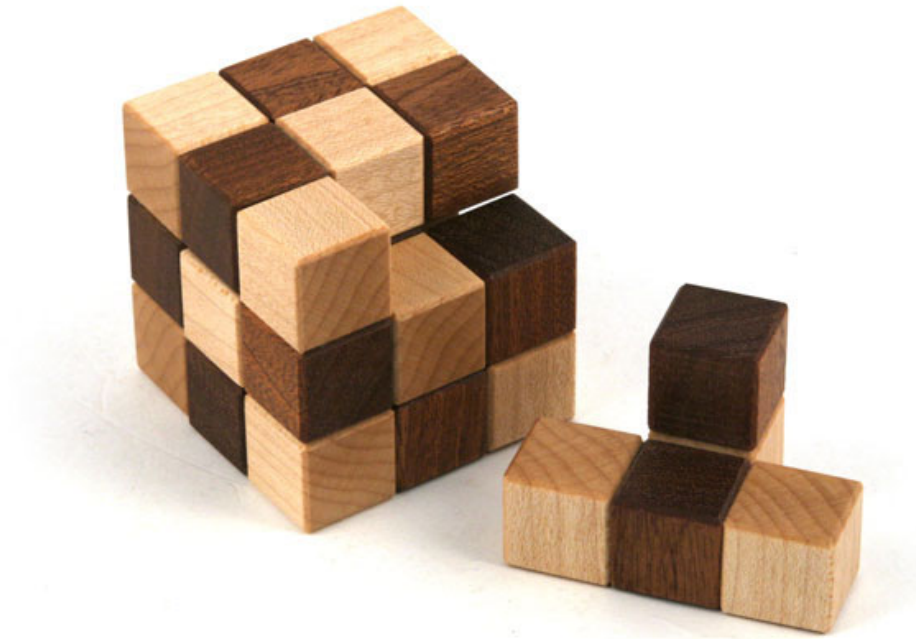
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Exchequer

Puzzle Goal: Form a non-chequered cube!

Materials: Wood

Classification: 1.3 3D Assembly



25

Exquisite

Puzzle Goal: Assembly all blocks and pins into a burrlike structure.

Materials: ABS

Classification: Burr



Five Barrels

Puzzle Goal:

Assemble the four pieces and hide the five barrels at the same time. Extra challenges:

- **First, place the pieces flat on a table and insert the barrels into the cavities. Then, assemble the pieces to create a mirror symmetrical shape. The position of the barrels must be symmetrical too.**
- **Again, place the pieces flat on a table and insert the barrels into the cavities. Then, assemble the pieces into a 3x4 rectangle so that the barrels form a pentomino. Which of the 12 pentominoes are possible?**

Materials:

PLA

Classification:

Slocum 1.2 : 3D Assembly



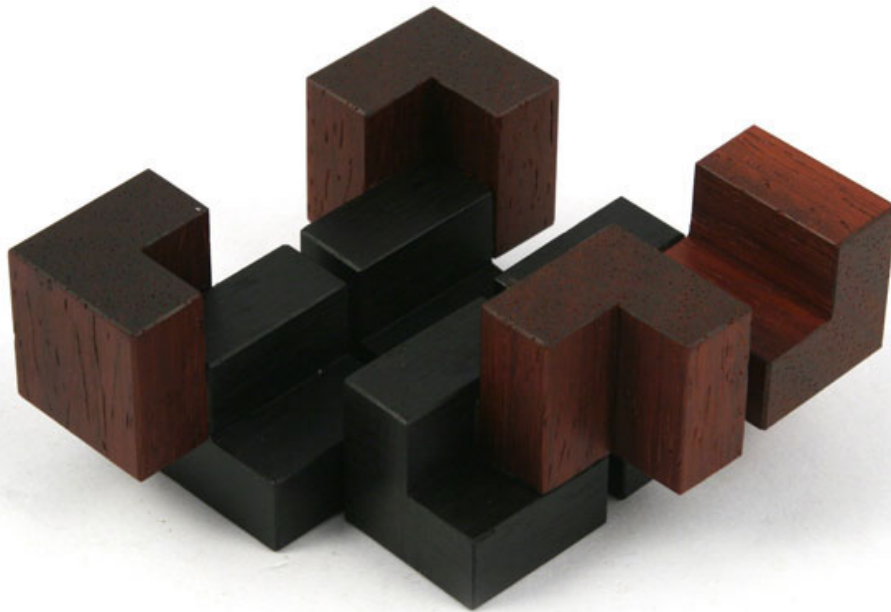
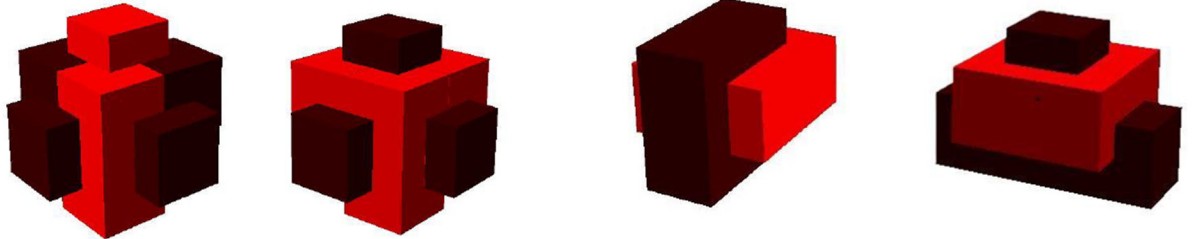
Four Building Blocks

Puzzle Goal: Form a variety of given shapes.

Materials: Ebony, padauk

Classification: Put-Together

Shapes:



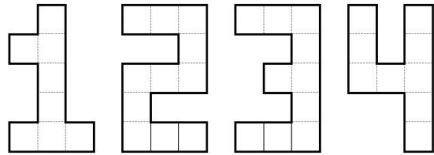
Four Numbers

Puzzle Goal: Use the three square plates to create four numbers (1,2,3,4) at the same time. The numbers may be rotated or flipped over. (The lines where the individual parts of the plates were glued together are not included in the solution.)

Materials: wood: Patagonian rosewood

Classification: Put-Together

Example Digits:



Four Pieces

Puzzle Goal: For each side, place all four identical pieces into the frame.

Materials: Plexiglass

Classification: 2D Put-Together



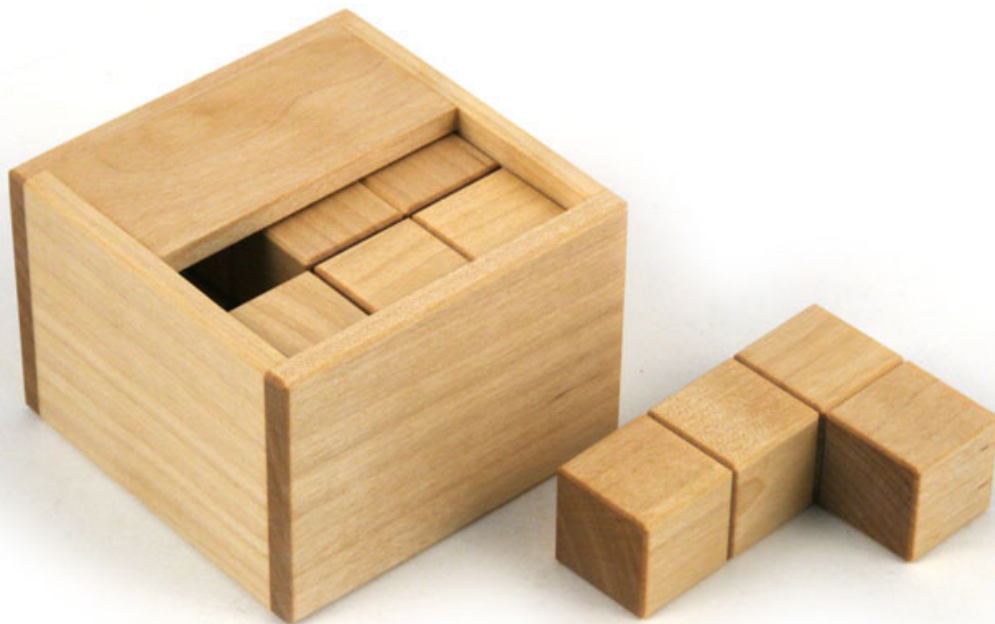
30

Fritz-Flop

Puzzle Goal: Pack five pieces into the restricted box.

Materials: Downy birch

Classification: 3D Packing



31

Gaudis

Puzzle Goal: Explore the locked compartments and construct the image of La Sagrada Familia.

Materials: PLA

Classification: 2.1 Trick-opening SD



32

Handy Burr

Puzzle Goal: Remove the brass ball.

Materials: Wood, magnets, metal pin, brass ball

Classification: Burr



33

Hugo the Hippo

Puzzle Goal: Open the box to find the secret compartment.

Materials: Wood and metal

Classification: 2.1 Trick opening



Jammed Gem Again

Puzzle Goal:

- Retrieve the gem from the box
- Find the hidden message
- Put the puzzle back in its original state

Materials: Wood, MDF, metal, magnet, sapphire

Classification: Take-Apart



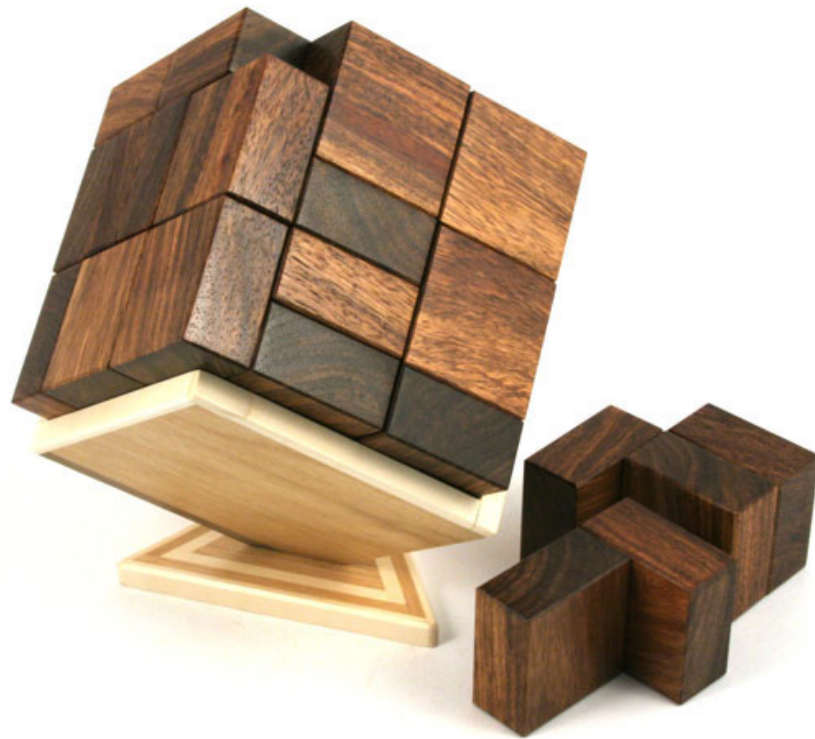
35

JHC (Just Honoring Conway)

Puzzle Goal: Position the 12 pieces so that they will fit inside a 5x5x5 cube (using the stand as a guide).

Materials: Wood

Classification: ASS-CART



36

Jukebox

Puzzle Goal: Find the Wurlitzer token, insert it into the slot and reveal what music plays on the Jukebox.

Materials: Aluminum, steel, brass, machined plastics

Classification: Sequential Discovery (2.1 Trick-opening)



37

Keebox Blue

Puzzle Goal: Find the hidden token (marked with a "k").

Materials: PLA

Classification: Slocum: 2.1 (SD puzzle box)



38

Keebox Yellow

Puzzle Goal: Find the hidden token (marked with a "k").

Materials: PLA

Classification: Slocum: 2.1 (SD puzzle box)



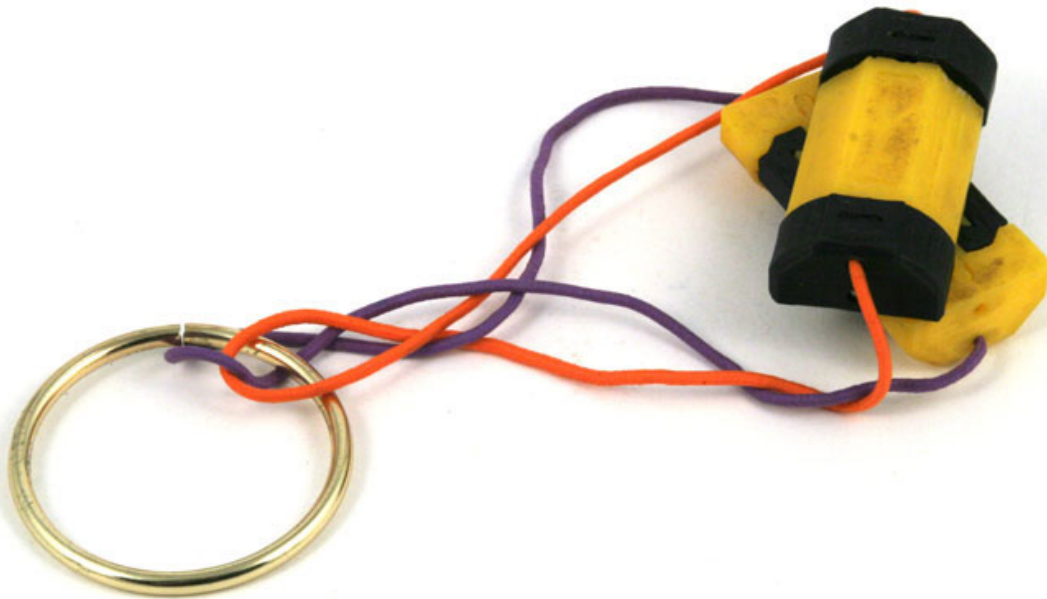
39

Knot-Machine

Puzzle Goal: Manipulate the KM to release the ring. You may rotate the two ends of the cylinder, rotate one half about a vertical axis, and even separate the two halves. Rotation allows tying any knot, even composite knots.

Materials: Plastic, magnets, string, metal ring

Classification: 4.3 (Slocum)



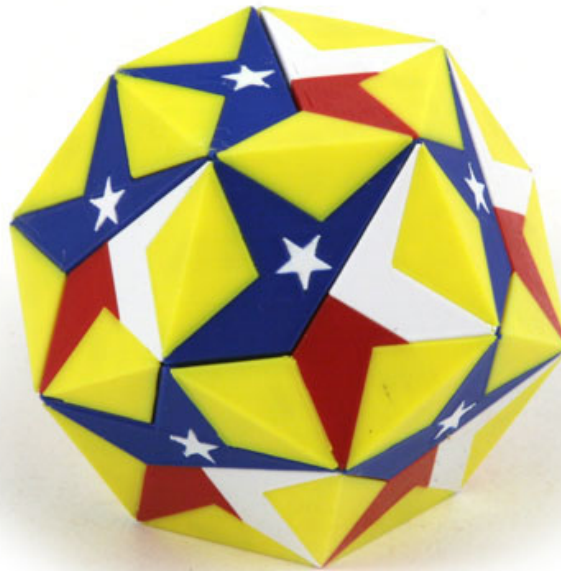
40

Lone Star Burr

Puzzle Goal: Take apart and put back together.

Materials: 3D Printed PLA

Classification: H/D INT-POLY, Slocum 3.2



41

The Lost Vault of Jesse James

Puzzle Goal: Recover the gold bullion from the locked safe.

Materials: PLA, wood, and brass

Classification: Slocum 5.6 Miscellaneous sequential movement



MailCall!

Puzzle Goal:

- Remove the tape
- Open the lid
- Find your number
- 4. Reset the puzzle making sure everything is back in its original place

Materials:

PLA, magnets, stainless steel, brass

Classification:

Take-apart



43

Mighty Dice Trap

Puzzle Goal: Open the tetrahedron and release the dice. Reset the trap.

Materials: PLA plastic

Classification: [2.1] Take Apart, OPN-OTH Opening other objects

Notes: Warning: contains mighty small dice!



Moonage M5

Puzzle Goal: Retrieve the moon lander, flag, and spaceman from the rocket. No need for banging or gravitational forces.

Materials: Wood, acrylic, magnets, metal, pla,

Classification: 2.1 Trick or secret opening



45

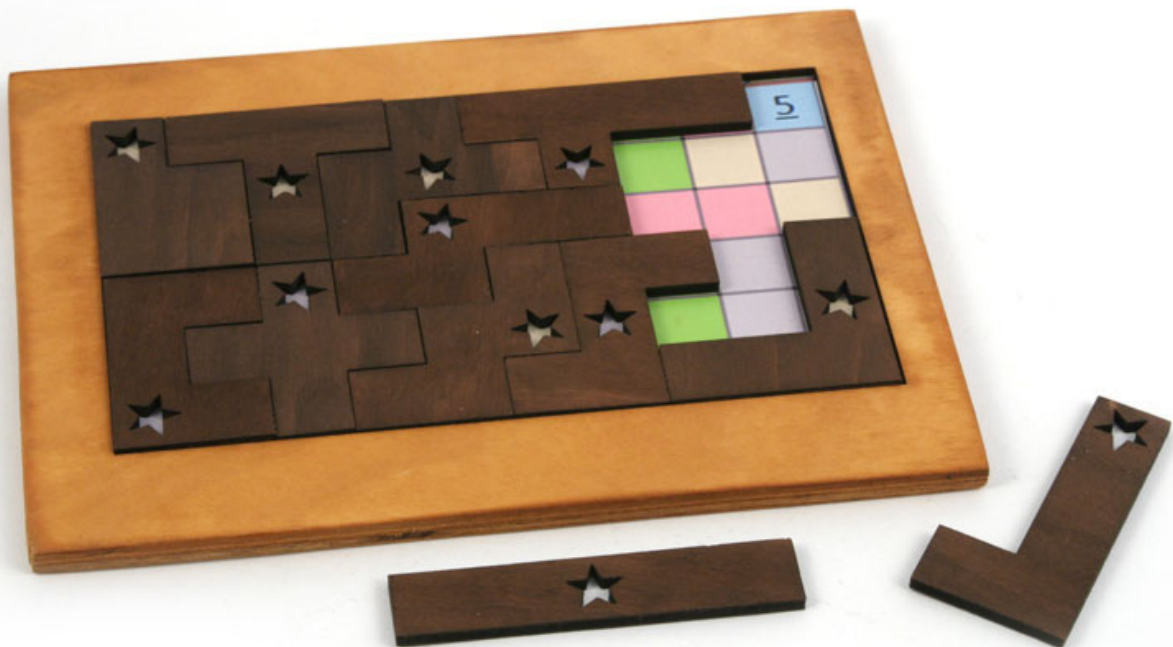
Pen2mine

Puzzle Goal: Place a two-sided challenge card in the frame, then place the 12 pentomino pieces in the frame so that only one single color is visible through each of the stars.

Materials: MDF

Classification: Put-together

Notes: On each card, there are only three solutions; it is up to you to determine to possible colors



46

Penrose Tiling Box

Puzzle Goal: There are three tasks, in order:

- Restore the Penrose pattern on the rotating pieces
- Open the box
- Repack the the 12 Penrose blocks plus the 13th bonus block.

Materials: 3D print from PETG

Classification: 5.4 / 2.1 / 1.2



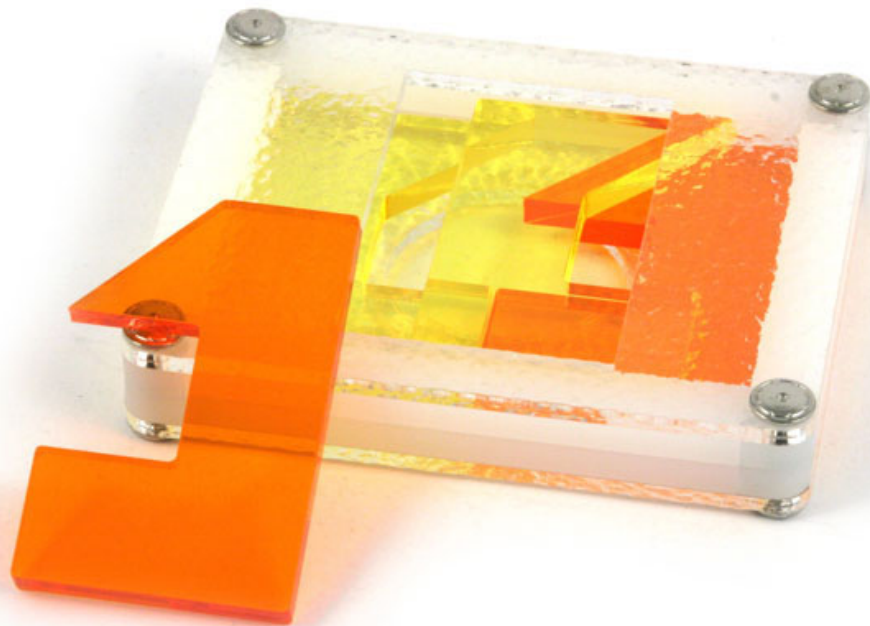
47

Perfect Entrance

Puzzle Goal: Put the four pieces completely into the restricted box.

Materials: Acrylic

Classification: 3D Assembly



48

Piano Box

Puzzle Goal: Disassemble the puzzle and find the reward inside!

Materials: Plastic - PLA

Classification: Sequential movement



Piston Box

Puzzle Goal:

- **Open the box**
- **Free the coin**
- **Break down the box and build it back up**
- **Replace the colored maze pieces to try additional challenges.**

Materials: Plastic, steel, copper, paper

Classification: 2.1



50

Pit Box

Puzzle Goal: Pack the pieces into the box.

Materials: Wood

Classification: 1.2

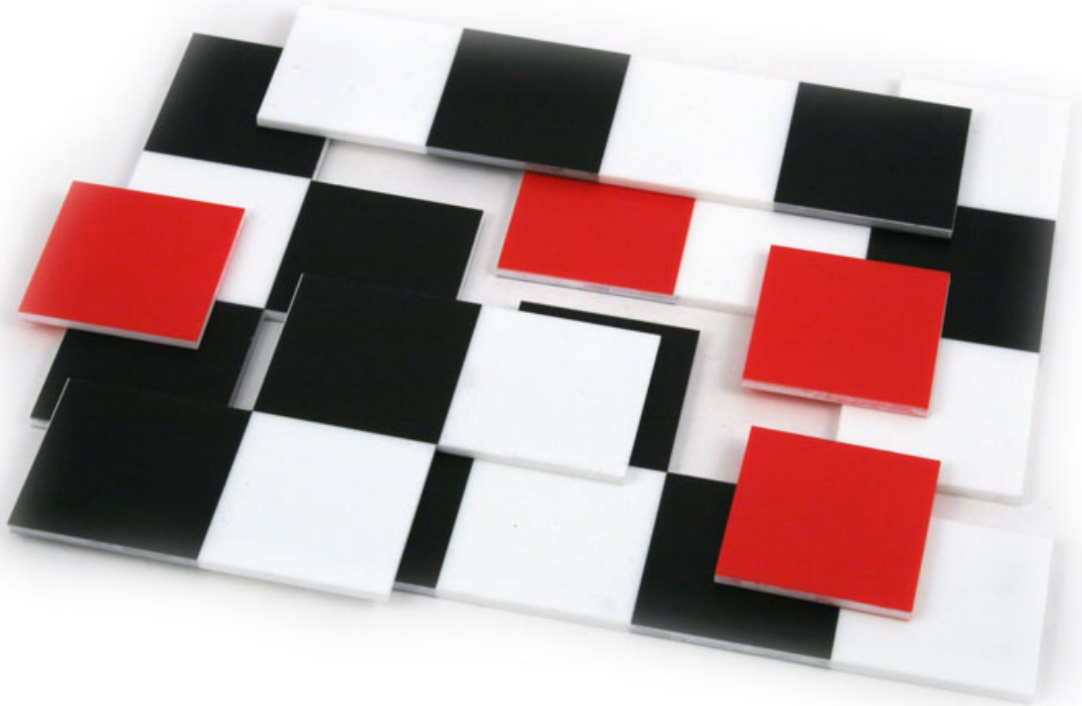


Please Check It

Puzzle Goal: Arrange the eight pieces into a 5x5 square so that adjacent unit squares are not the same color. Two challenges are given: either using three or four red unit squares (depending on which side of the T piece is used).

Materials: Acrylic

Classification: 2D Assembly

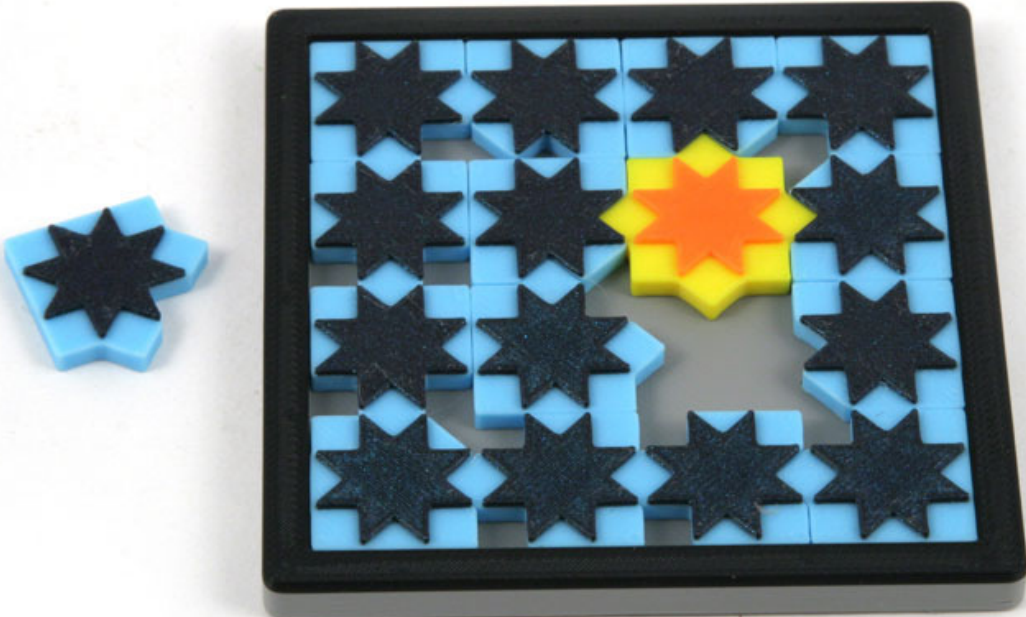


Praise The Sun

Puzzle Goal: Fit all 16 pieces inside the frame.

Materials: PLA

Classification: 1.1: 2D assembly

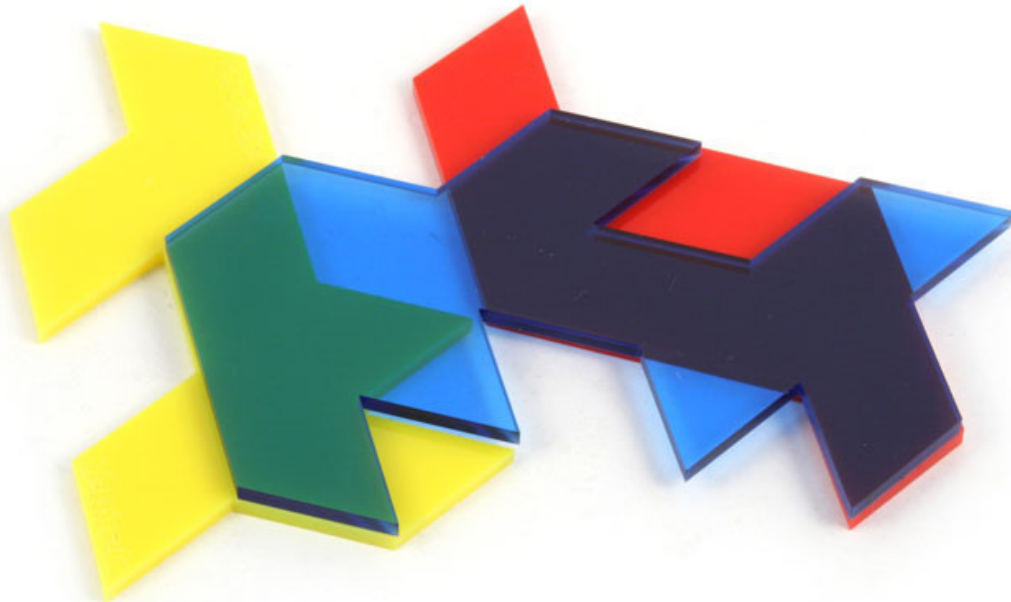


Puzzle Bird

Puzzle Goal: Place the semi-transparent blue piece on top of both the yellow piece (giving green) and red piece (giving deep purple) to form six (not five!) identical shapes at the same time, and each with a different color.

Materials: Plexiglas, plastic

Classification: 1.1 2D assembly



Rainbow Stairs XL

Puzzle Goal:

- **Swap the top two steps**
- **Scramble and solve**
- **Make other nice stairs patterns.**

Materials: 3D-printed PLA plastic

Classification: Slocum: 5.3 Sliding pieces



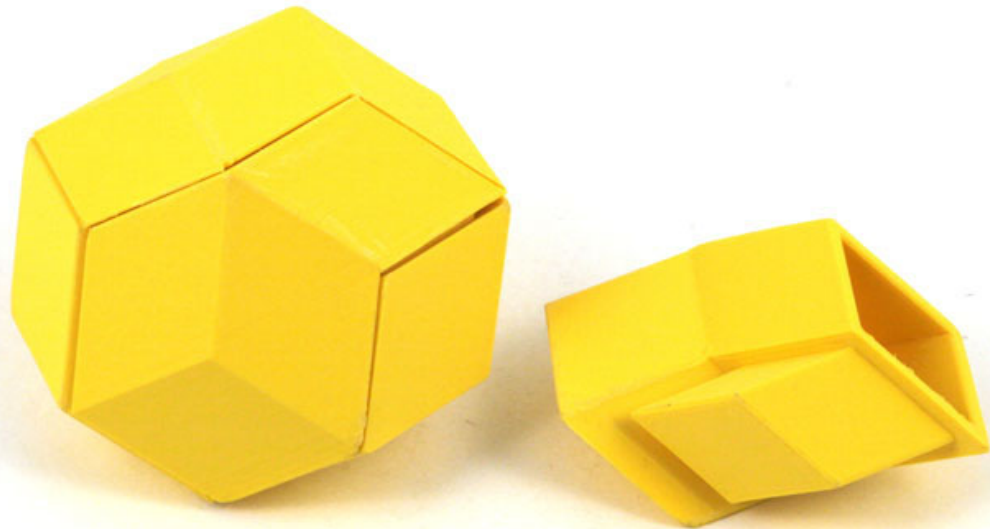
55

Rhombico

Puzzle Goal: Take apart, and put together.

Materials: PLA NX2

Classification: INT-SHAP / DEX-MECH



Ring the Changes

Puzzle Goal: Enclose each piece in turn by the other four pieces. Leave no space, even at corners.

Materials: Tulipwood, black limba, lacewood, padauk, mansonia

Classification: 1.1: 2D Assembly



57

RingE

Puzzle Goal: Take the ring apart.

Materials: 3D printed nylon PA12

Classification: 3D Take-Apart



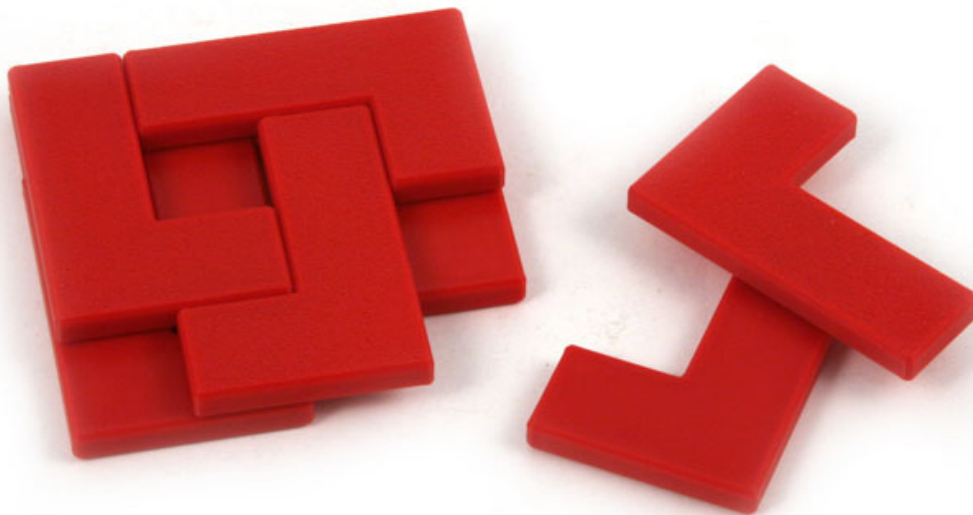
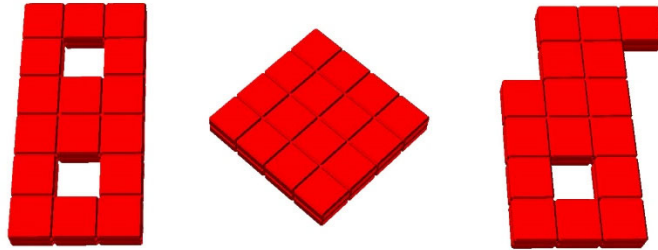
Rot'n L

Puzzle Goal: Assemble the four articulated pieces into one of three target shapes, such as a 4x4 square.

Materials: PLA

Classification: 1.3 Miscellaneous put-together

Target Shapes:



59

Scion of the Tesseract

Puzzle Goal: Remove the Scion from the Tesseract and return it to its original state.

Materials: Carbon fiber PLA, brass, steel, neodymium magnets

Classification: Sequential Discovery, Trick Opening



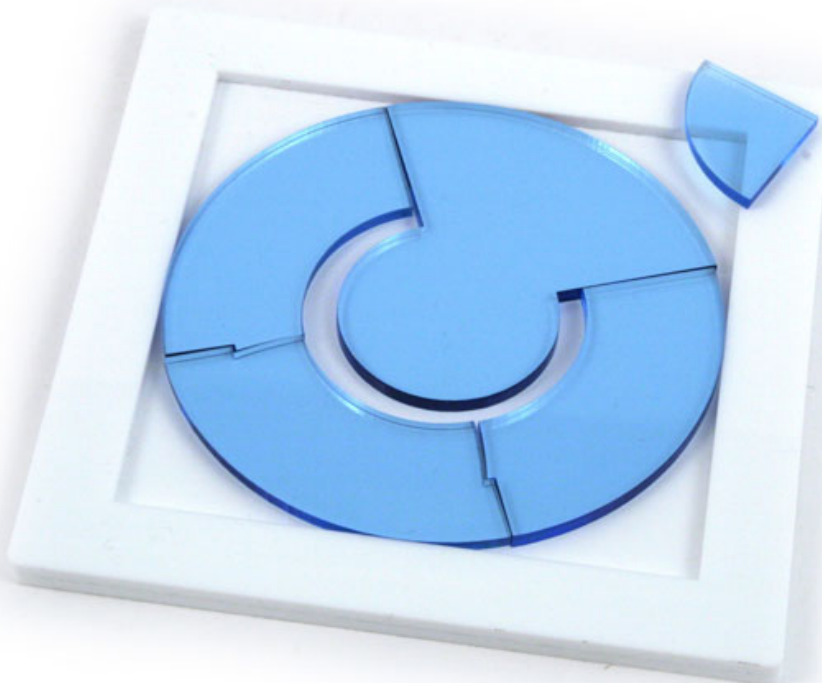
60

Shallows

Puzzle Goal: Place all light blue pieces inside the white frame.

Materials: Acrylic

Classification: 2D Assembly



Shapeshifter

Puzzle Goal: Scramble and unscramble the puzzle.

Materials: PLA

Classification: 5.3

Notes: There is no apparent outer frame holding the pieces together.



Sliding Gears2

Puzzle Goal: Arrange the 15 sliding pieces so that the black gear will cause a selected goal gear (separately either red, blue or yellow) to rotate.

Materials: 3D print from PETG

Classification: 5.3



63

Split Block Box

Puzzle Goal: Pack all of the pieces fully inside the box through the restricted opening.

Materials: Wood

Classification: Put-Together



64

Strange Cube

Puzzle Goal: Put the three pieces together to form a cube.

Materials: Wood

Classification: Put-together



65

Sugar Cube

Puzzle Goal: Eight little sugar cubes, is there any way?
To fit them happily, within the black tray.
But let me tell you one thing, as you proceed further.
They mustn't be, on top of each other.

Materials: 3D printed nylon

Classification: 1.2 3D Assembly



Symétrie Par 3

Puzzle Goal: Place the 3 pieces to form a symmetrical figure, flat without overlapping.

Materials: MDF

Classification: 1.1

Notes: The pieces are not comprised of unit squares.



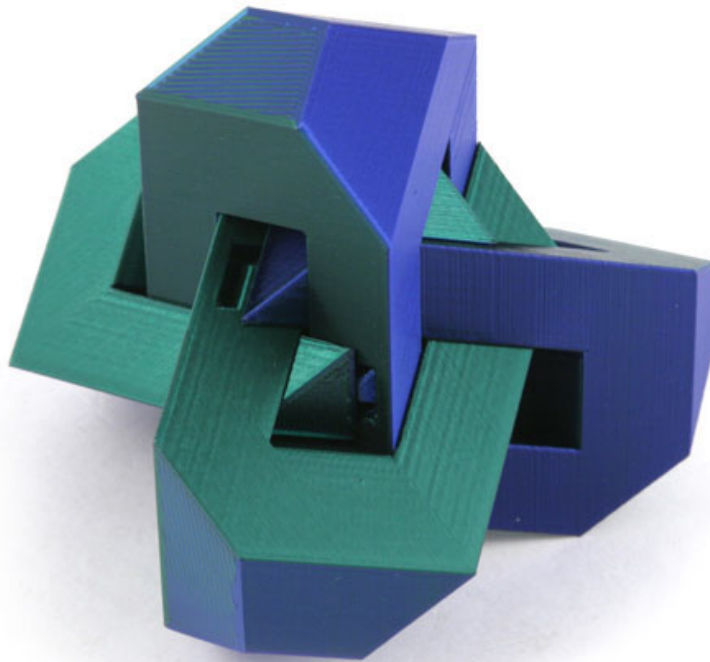
67

Tetra Claw

Puzzle Goal: Disassemble and reassemble the four pieces by traversing the interior mazes.

Materials: PLA plastic

Classification: interlocking / 4D maze



Tetra-1

Puzzle Goal: Build the apparent 3x3x2 block inside the box.

Materials: Wood and MDF

Classification: Interlocking



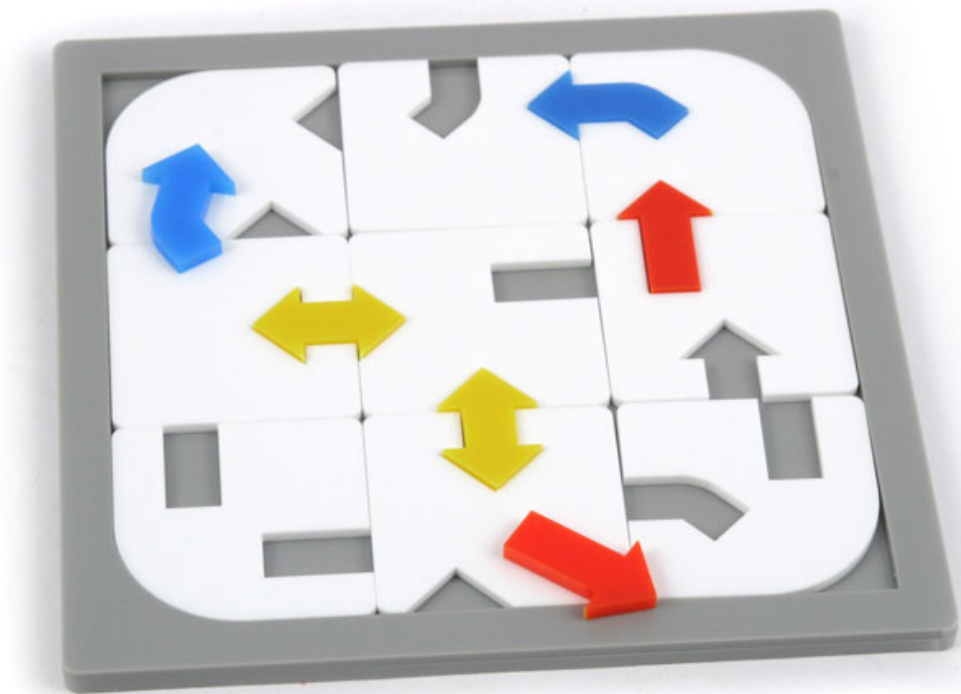
69

Traffic 15

Puzzle Goal: Put all the pieces into the frame.

Materials: acrylic

Classification: 2D Assembly



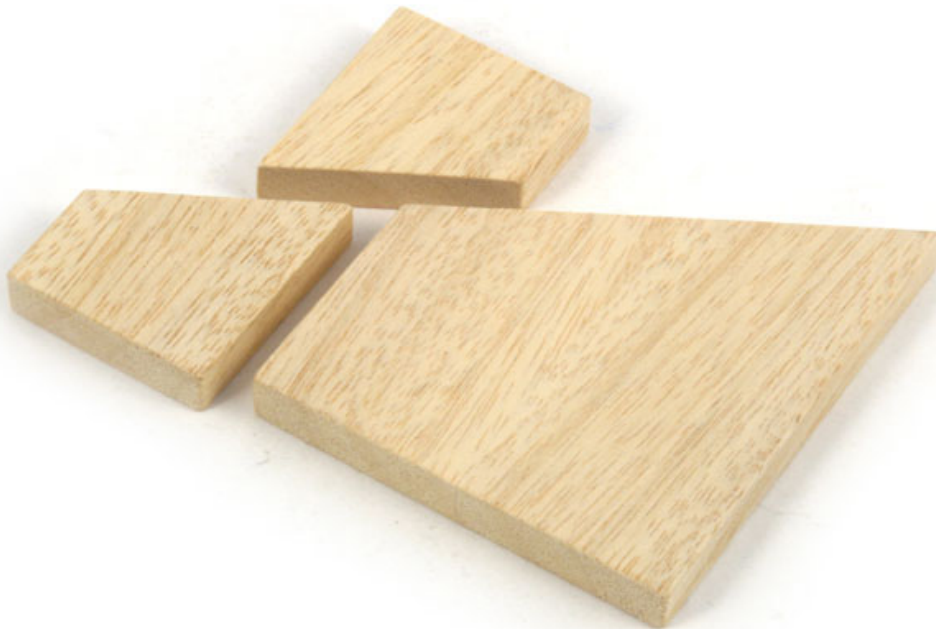
70

Traple

Puzzle Goal: Arrange the three pieces to make a mirror symmetric shape.

Materials: Wood

Classification: 2D Assembly



71

Two Guys & a Gal (Free Me 9)

Puzzle Goal: Free the two guys and the gal (each in the form of a coin).

Materials: Wood, Kennedy & Innovation coins, and other stuff

Classification: 2.1 Take-Apart



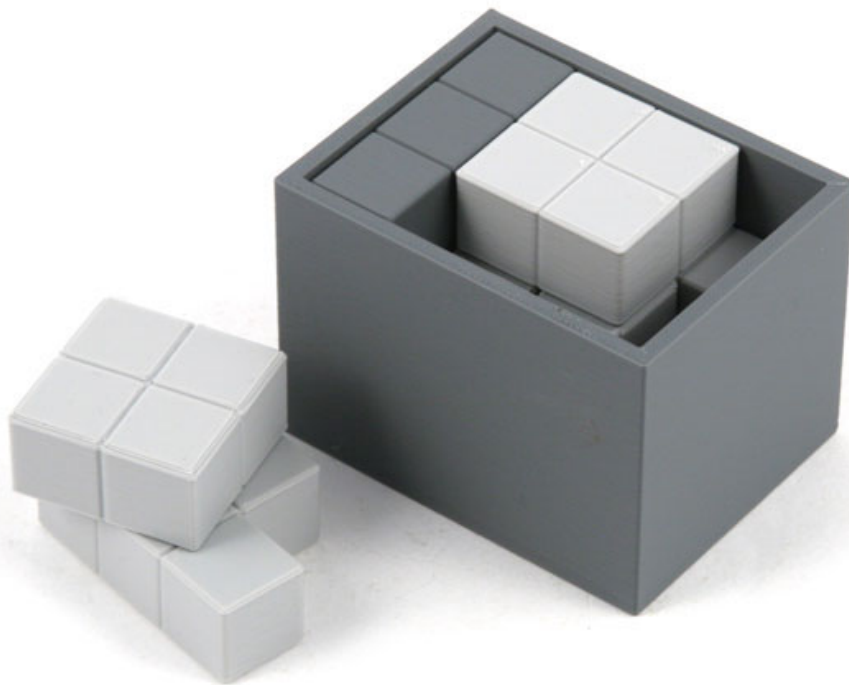
72

2Pack

Puzzle Goal: Pack all 6 pieces into the box with the gray flap lying down
Pack all 6 pieces into the box with the gray flap standing up (shown)

Materials: PLA

Classification: Slocum 1.2 3D Assembly



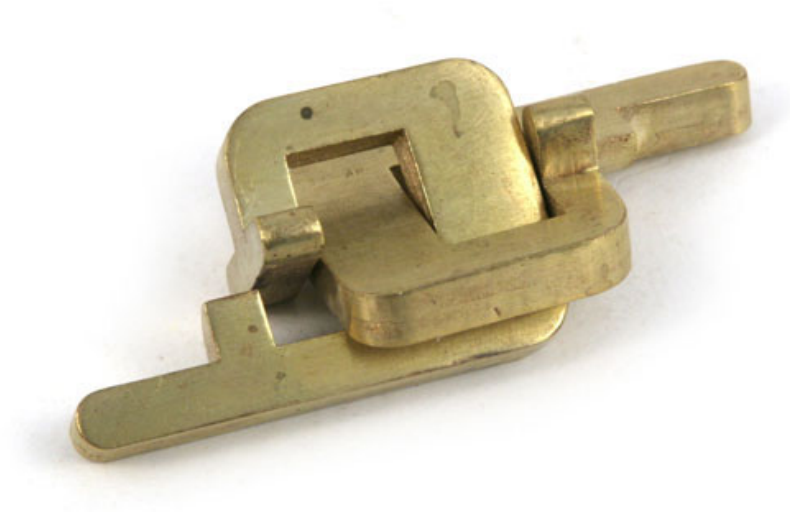
73

Unit Puzzle

Puzzle Goal: Separate the two pieces and reconnect them.

Materials: Brass

Classification: Take-Apart



74

Vertigo

Puzzle Goal: Find the golden bar hidden inside.

Materials: LEGO bricks

Classification: 5.6



75

Vertigo

Puzzle Goal: Navigate your way through the puzzle to find the final prize.

Materials: Wood, resin

Classification: Sequential Discovery

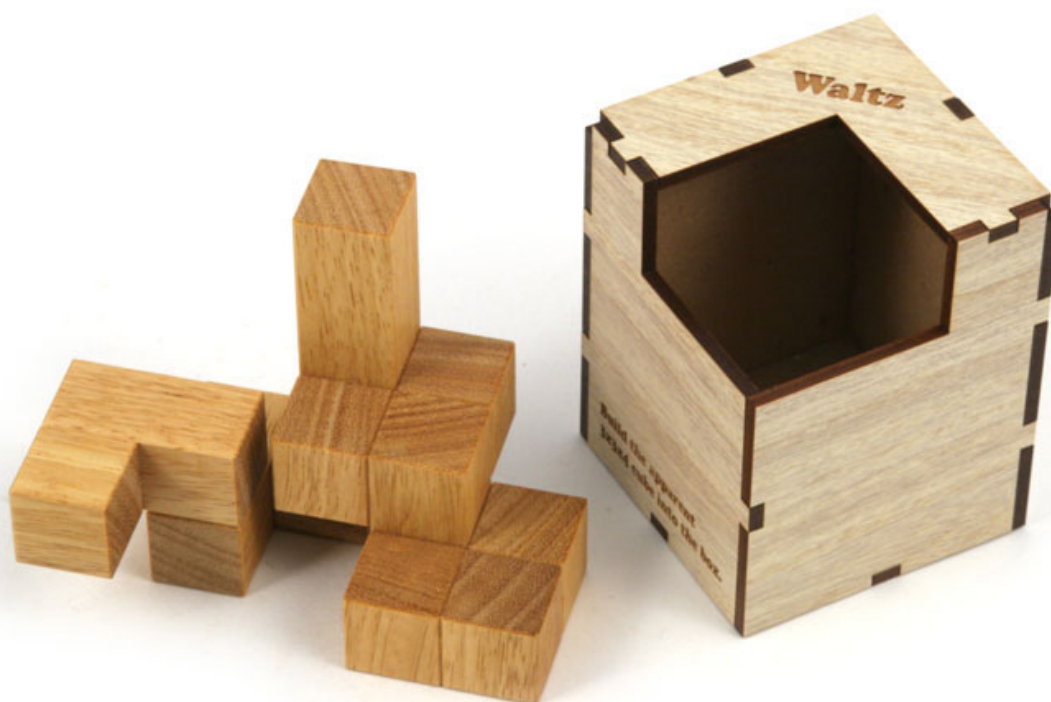


Waltz

Puzzle Goal: Using the two pieces, build the apparent 3x3x4 block into the box.

Materials: Wood and MDF

Classification: Interlocking



77

Water Puzzle

Puzzle Goal: Using the inscribed hints, guide the hidden water droplets (steel balls) to the designated positions, and then open the box.

Materials: Wood, steel balls, springs, magnets

Classification: Uncased Dexterities



78

Who Filled the Sorter Cube?

Puzzle Goal: Remove the six blocks from the frame.

Materials: Cherry, wenge, American walnut, bubinga, jatoba, walnut

Classification: 3D Assembly/Disentanglement



79

Yeti!

Puzzle Goal: Help the Yeti retrieve his magic snowflake.

Materials: PLA and metal internal parts

Classification: 2. Trick-Opening



80

Zigguflat XL

Puzzle Goal: Take apart, remove the green piece, and put the remaining five pieces together into a rectangle.

Materials: 3D-printed PLA plastic

Classification: Slocum: 5.6 Miscellaneous sequential movement

