## **Auzzle A2**

Puzzle Goal: Collect all the magnets drawn to each other along the equator.

Materials: Wood, plastic

Classification: SEQ-GRP





#### **Bermuda Rhombus**

Puzzle Goal:

Pack all 10 elements (including the little rhombus) inside the frame.

Materials:

Acrylic, plastic

Classification:

[1.1] 2Dimensional assembly / Paradox



#### **Double Checkered**

Puzzle Goal:

- 1. Pick six pieces out of the seven pieces and assemble a 3x3 checkered cube with black corners.
- 2. Pick six pieces out of the seven pieces and assemble a 3x3 checkered cube with white corners.
- 3. Pack all seven pieces into the box.
- 4. Use all seven pieces to make a 3x3x4 tower with a hole through the middle.

Materials:

Wood

Classification:

1.2 3-Dimensional assembly

Notes:

All goals have a unique solution.





#### **Box with Two Balls**

Puzzle Goal: Remove the two balls from the box, and get them back to the starting position.

Materials: Bolivian rosewood, yellowheart, padauk, wenge, acrylic

Classification: Interlocking, gravitational maze, dexterity





#### Casino

Puzzle Goal: Pack six discs into the box.

Materials: Dark oak and light false acacia

Classification: Disentanglement





## **Chocolate Box**

Puzzle Goal: Pack the six pieces into the box and close the lid.

Materials: Wood (box), 3D-printed nylon (pieces)

Classification: 3D Assembly



## Chorazin

Puzzle Goal: Put all parts inside the frame.

Materials: Plastic and brass

Classification: [1.2] 3-Dimensional assembly





## **Cube Wrapper**

Puzzle Goal: Wrap the cube steadily with the fabric bag so that all the faces of the cube are completely

covered.

Materials: Fabric and wooden cube

Classification: (Slocum 1.3) Miscellaneous put-together



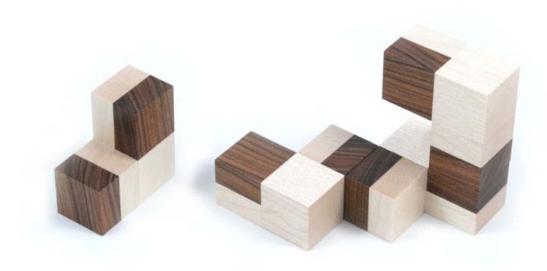
#### Cubemaker

Puzzle Goal: Find the two arrangements to form four dark cubes on the table.

Materials: Jacaranda and maple

Classification: Disentanglement

Notes: The arrangements are perfectly stable without outside support.



## **Disks**

Puzzle Goal: Find the hidden message.

Materials: Acrylic

Classification: PAT-DISS



## **Double Tumbler**

Puzzle Goal: Release the cap from the housing.

Materials: Aluminum, bearings

Classification: Take-apart





## **Duck Pack Puzzle**

Puzzle Goal: Pack all five ducks and the egg inside the box so they all sit flat on the bottom of the box

Materials: Jarra, Tasmanian oak

Classification: 3D packing



#### **5L Box**

Puzzle Goal: Put five identical pieces in the box and close its lid completely.

Materials: Wood,MDF, acrylic

Classification: 3D assembly

Notes: There are two blocking cubes inside the box, including one attached to the inside of the sldiing lid.





## **4-Directional Trapsticks**

Puzzle Goal: Surround a rhombic dodecahedron with the nine pieces.

Materials: Wood (beech and bubinga)





## Free Me 6

Puzzle Goal: Free the coin from the puzzle.

Materials: Wood, metal rods/springs/nails, steel balls, coin

Classification: Take-apart



#### **Fric Cube**

Puzzle Goal:

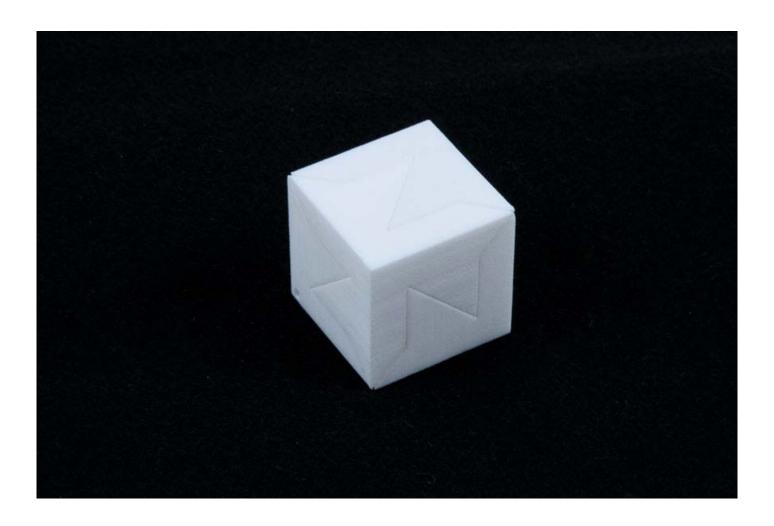
- Disassemble the cube into the four identical pieces. No physical strength is required; with the correct movement the pieces should fall apart.
  Once the pieces have fallen apart, reassemble the cube.
- 2.

Materials:

3D-printed nylon, wire

Classification:

Slocum 2.1 & 6.4





#### **Garland Puzzle**

Puzzle Goal: Arrange all 30 pieces in a circular ring. Adjacent pieces must interlock (but may have small gaps

where two sockets line up with each other).

Materials:

Acrylic

Classification:

Slocum 1.1



## **Gear and Wrenches**

Puzzle Goal:

Take apart and put together.

Materials:

Stainless steel

Classification:

Disentanglement





#### **GSP**

18 wood tiles are connected with paper hinges, each at a certain length. The objective is to stack all tiles one on top of the other, so no hinge is loose or stretched. Puzzle Goal:

Materials: Wood and Tyvek

Classification: Folding



# **Gyrotwisty**

Puzzle Goal: Take the pieces apart and put them back together

Materials: PLA

Classification: 2.1 Slocum



## **Happy Ending!**

Puzzle Goal: Assemble the four pieces in a "happy ending" way.

Materials:

Wood

Classification:

Put-together

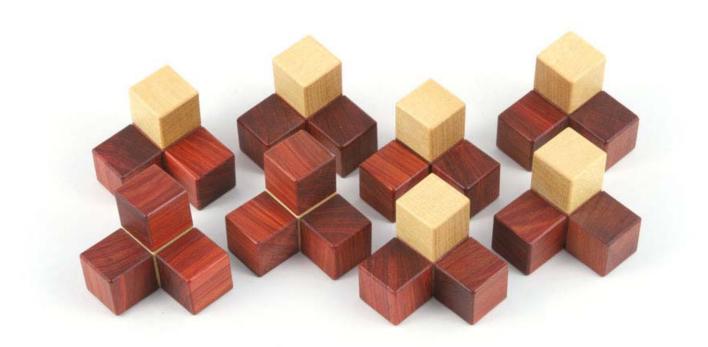


## **Hide the Gold**

Puzzle Goal: Arrange the pieces so that the gold (light) parts are surrounded by the red (dark) parts.

Materials: Redheart and yellowheart.

Classification: Slocum 1.2 : 3-Dimensional Assembly



# **Hydrant**

Puzzle Goal: Find the fire hose.

Materials: Various woods, metal (screws, spring, magnets)

Classification: Slocum 2.1





## **IQ** Lolly

Puzzle Goal: Arrange scrambled blocks into sequential order.

Materials: PLA

Classification: Sliding pieces





## Jenga Block

Puzzle Goal: Place all the pieces so they fit inside the box.

Materials: Jenga blocks, barn wood





# Jenga<sup>3</sup>

Puzzle Goal: Take the puzzle apart into its four pieces, mix them up, then reassemble them back into a cube.

Materials: Jenga blocks



#### **Jewel Thief**

Puzzle Goal: 1. Use thimble cipher and coded message to unlock combination lock.

2. Free the jewel thief

3. Retrieve the jewel

Materials: Aluminum, brass, steel, acrylic

Classification: Take-apart

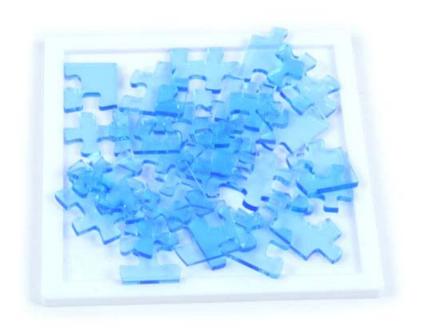


# Jigsaw Puzzle 29

Puzzle Goal: Put all the pieces into the frame.

Materials: Acrylic

Classification: Put-together



## Leftovers

Puzzle Goal: Put the pieces together into a cubic shape.

Materials: Ziricote , brass

Classification: 1.2 3-D assembly



## **Loopy Lattice Puzzles**

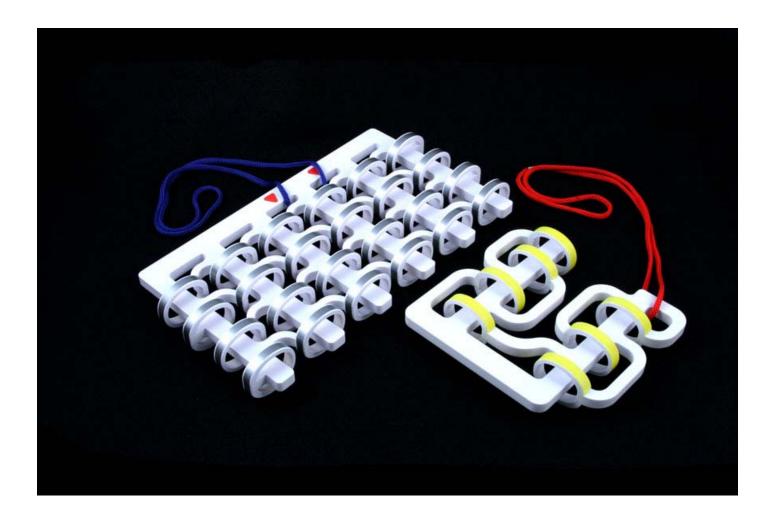
Puzzle Goal: Release the looped rope from the lattice or branch, and then embed it into the start position

Lattice: the deepest compartments indicated by red pointers

Branch: the root compartment in the top end

Materials: Vinyl, rope with clasp

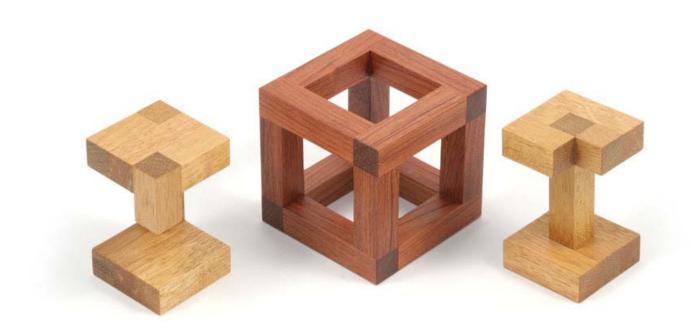
Classification: 4.3 String puzzles, 5.6 Miscellaneous sequential movement



## Lucida

Puzzle Goal: Assemble two pieces fully inside the frame.

Materials: Wood



## **Magnetic Madness**

Puzzle Goal: 1. Remove the key piece

2. Rescue (remove) princess figure from inside of puzzle

Materials: Wood, magnets, metal pins



## 33 Mesh

Puzzle Goal: Weave the stripes to a 4x4 grid.

Materials: Horween shell, cordovan, and brass





## Mini Lock

Puzzle Goal:

Remove the blocks and shackle from the frame, and return the pieces to the starting position.

Materials:

Ash, purpleheart

Classification:

Interlocking



#### **Mischief**

Puzzle Goal: Fold the handkerchief into a square, with 1-2 (in order) on on side, and 3-4 (in order) on the other.

Both sides of the handkerchief can be used, but all the numbers must be right side up.

Materials:

Polyester

Classification:

Folding



## **Mobius Ring**

Puzzle Goal: Remove the rope and ring.

Materials: Metal, rope

Classification: Topological disentanglement



# **Mobius Triangles 540**

Puzzle Goal: Disentangle the two parts.

Materials: Bronze, stainless steel

Classification: Disentanglement

Notes: Steel piece has a straight gap; bronze piece has none.



#### Nail S&S

Puzzle Goal:

Disentangle the two parts.

Materials:

Steel nails

Classification:

Disentanglement



# **Nail Trinity**

Puzzle Goal: Disentargle the three parts.

Materials: Steel nails

Classification: Disentanglement



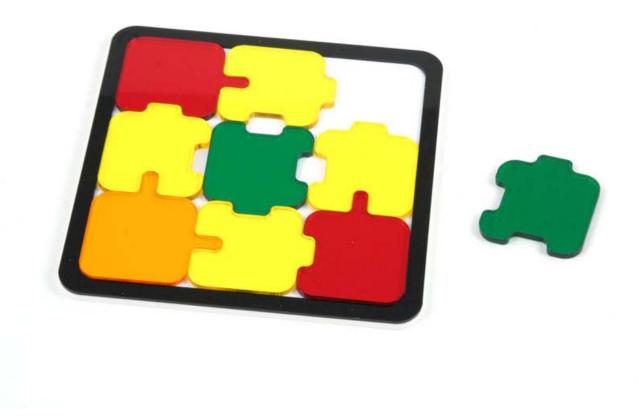


# **Nosey Puzzle**

Puzzle Goal: Fit all nine pieces flat in the tray without overlaps.

Materials: Acrylic

Classification: Slocum 1.1





#### Pack 012

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

Materials: Wood and MDF (color print)

Classification: Interlocking





#### **Pocket**

Puzzle Goal: Put the four pieces into the case (pocket) completely.

Materials: Acrylic

Classification: Put-together, sliding pieces

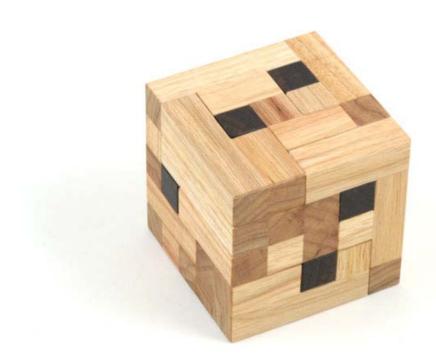


## **Pushbutton Burr**

Puzzle Goal: Disassemble and reassemble. Push the buttons to start the disassembly process.

Materials: Canarywood and Indian rosewood

Classification: Interlocking (geometric object)





## **Quadrupled Quadlooplet**

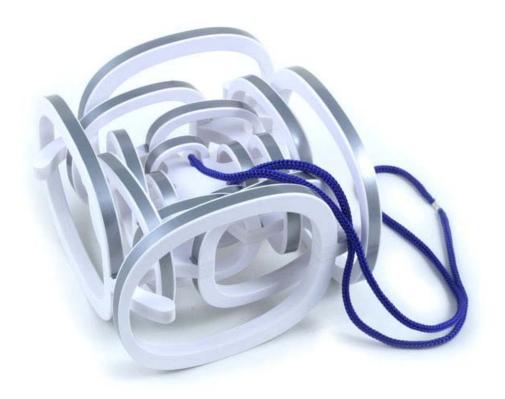
Puzzle Goal:

- 1. Start with the looped rope threaded through adjacent holes of the core plate. Release the rope, and then return it to the starting position.
- 2. Start with the looped rope threaded through opposite holes of the core plate. Release the rope, and then return it to the starting position.

Materials: Vinyl, rope with clasp

Classification: 4.3 String puzzles, 5.6 Miscellaneous sequential movement

Notes: Unscrew the clasp in the rope to change the starting position for the two goals.



## **Quartet Box**

Puzzle Goal: Open the box.

Materials: Hardwood and metal

Classification: 2.1 Trick or secret opening box



#### **RDS Interlock**

Puzzle Goal: There are three types of puzzle pieces and multiple challenges.

• Receivers (R) are composed of five sticks.

- Standard pieces (D) are composed of four sticks.
- Sliders (S) are composed of three sticks.

Assemble 12 pieces around a rhombic dodecahedron:

- 1. Use 4 R's, 4 D's, and 4 S's (11 solutions)
- 2. Use 3 R's, 6 D's, and 3 S's (14 solutions)
- 3. Use 2 R's, 8 D's, and 2 S's (3 solutions)

Materials: Wood (bubinga, white oak, zircote)

Classification: interlocking



#### Rollercoaster

Puzzle Goal: Put the pieces fully inside the box, without touching them inside the box.

Materials: Acrylic, exotic wood

Classification: put-together, dexterity



#### **Rota Cube**

Puzzle Goal: Take apart and assemble.

Materials: Wood

Classification: 3.2 Interlocking geometric object



# **Sewing Box**

Puzzle Goal: Take the pieces apart and put them back together.

Materials: ABS, PLA

Classification: 2.1 Slocum

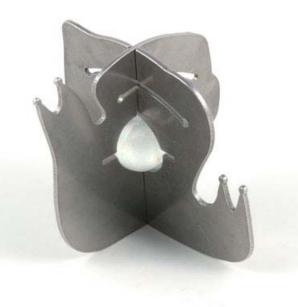


## **Siamese Snails**

Puzzle Goal: Take apart and put together.

Materials: Stainless steel and glass

Classification: Interlocking solid



#### Six Mix

Puzzle Goal:

Starting from the arrangement shown:

- Slide chains to make an inner orange circle. Slide chains to make an inner black circle. 1.
- 2.
- 3. Make one color inner circle with outer colors sorted.

Materials:

Recycled wood and hardboard

Classification:

5.3 2D sliding block



# **Slideways Cube**

Puzzle Goal: Disassemble and reassemble.

Materials: Aluminum, stainless, bronze matrix, maple, ebony

Classification: interlocking coordinate motion





## Symmetry 2345

Puzzle Goal: You have four double-sided pieces from 2-5 units. For each possible group of three pieces, and

using all four pieces, make a symmetrical shapes. The position and orientation of the triangle

marks must also be symmetrical (8 solutions in all).

Materials: MDF

Classification: 2D assembly

**Notes:** The position and orientation of the triangles are different on opposite sides of the pieces.





#### T Cube

Puzzle Goal:

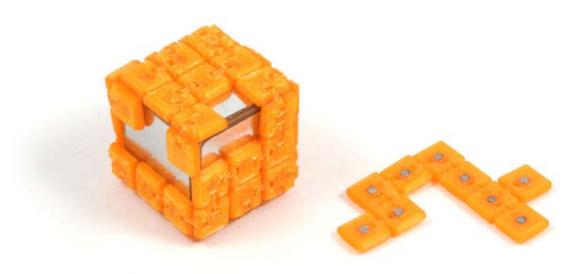
Arrange the hinged parts on the magnetic cube so that they will completely cover it.

Materials:

3D printed PETG, magnets, steel plate

Classification:

ASS-STRA





#### The Tao

Puzzle Goal: Move various sections of the box in the correct sequence until a piece can be removed to open

the box.

Materials: Resin infused douglas fir, brass inlay with bois de rose

Classification: Slocum 2 Take-apart





## 10 Balls 1 Cup

Puzzle Goal: Completely fit all 10 balls into the cup so that no balls are above the top surface of cup

(demonstrate this by then turning the cup upside-down on flat surface showing it is stable and

does not teeter on the three supports).

Materials: Delrin and ABS plastic, and nylon rope

Classification: ASS-OTH

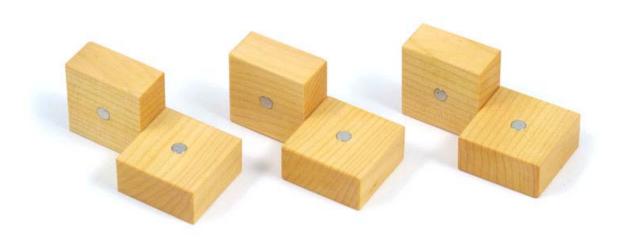


#### **Three Cubes**

Puzzle Goal: Construct three cubes with three pieces.

Materials: Nutmeg wood, magnets

Classification: Put-Together



#### **TicTac's Tactics**

Puzzle Goal:

Arrange the hinged tiles into a 3x3 square to form each of the four possible winning tic-tac-toe configurations:

Gold X's

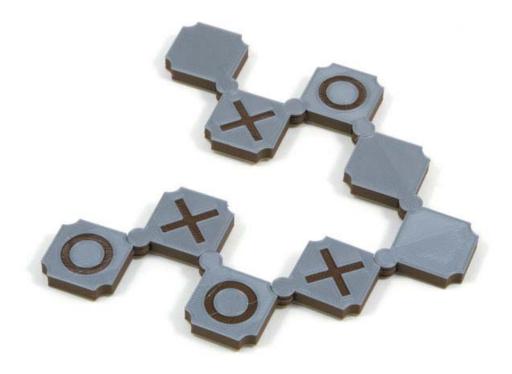
Silver X's

Gold O's

Silver O's

Materials: 3D-printed PLA plastic

Classification: Hinged, manipulation





## **Transpa Color Wheel**

Puzzle Goal: Slide the pieces to transform the puzzle between two states:

1. All four petals of each circle are of the same color

2. All four petals of each circle are of different colors.

Materials: Transparent and colored acrylic

Classification: 5.3 3D sliding piece



# **Trinity**

Puzzle Goal:

Take apart and reassemble. Each each piece interlocks with two other pieces via an organic

design.

Materials:

Zinc alloy

Classification:

Take-apart

Notes:

There are numerous ways of assembling.



#### **TriQuad**

Puzzle Goal: Mix up and restore the puzzle to the solved state. In the solved state each face is a solid color.

There should also be two complete circles formed from cutouts in the tiles on each face (except

for white). These circles allow the puzzle to be super solved.

Materials:

ABS (FDM)

Classification:

Sequential Movement - 5.4 Rotating piece puzzles



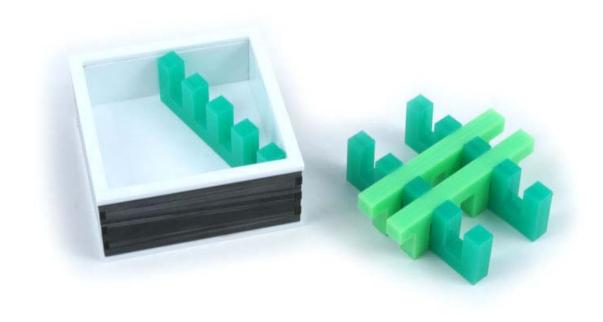


## **Turf in Box**

Puzzle Goal: Pack the five pieces into the box.

Materials: Acrylic, MDF

Classification: Put-together





## **Unicum**

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

Materials: Pink ivory

Classification: 2D assembly





# **Wasp Coaster**

Puzzle Goal:

Assemble the six interlocking bands into a coaster where all six bands lie flat on the table.

Materials:

Polished brass

Classification:

1.3 Miscellaneous put-together



#### **Wavelinks**

Puzzle Goal: Take apart the linked rings into four identical pieces, then put them back together.

Materials: 3D-printed nylon plastic

Classification: 3.6



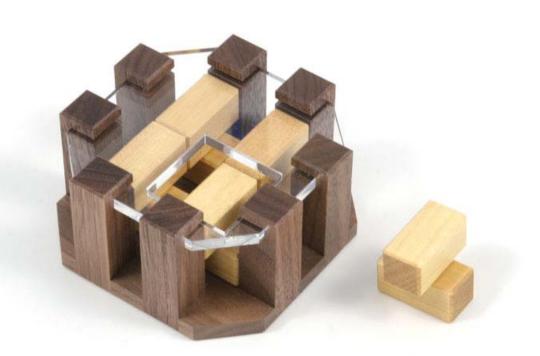


# X Cage

Puzzle Goal: Pack the five X-shaped pieces inside the cage.

Materials: Wood, acrylic

Classification: Put-together





#### XOteric 2×2×2

Puzzle Goal: Mix up and restore the cube to the solved state. In the solved state each face is a solid color

aside from the super-stickers/aches indicating the color of the adjacent face neighboring each

circle piece.

Materials: Polyamide (SLS), ABS (FDM), laser-cut acrylic

Classification: Sequential Movement - 5.4 rotating pieces

