## Basic Solutions to Puzzles

(Complete instructions to most puzzleboxes are impractical without illustrations, but basic solutions are provided here because they add additional dimensions to the mechanical aspects of the boxes previously listed.)

No. 1 Puzzlebox: Sections of side panels can be slid open, allowing an internal block to be pushed back to forth. The position of this internal block affects the relationship of internal drawers to each other, so that the closing of one drawer will open another.

No. 2 Puzzlebox: Tabs used to unlock the lid are found on both sides and moving them up and down allows its progression. Sliding the lid, in turn, also allows the side tabs to slide up or down again, which permits the end of the box to progressively telescope open. Moves of the side tabs should always be identical on both sides to progress. An additional secret is that once open, a square wooden cup can be removed, after which two middle drawers can be accessed. With the wooden cup removed, the same series of steps can also be reversed to the beginning, after which the lid will then slide in the opposite direction to reveal the last compartment.

No. 3 Puzzlebox: Work the first drawer open by turning the dial in different directions. This manipulates the gear assembly to engage different mechanisms and reposition internal stopping blocks. A locking bar in the middle of the puzzle will lock the gear assembly in place when it becomes necessary to turn the knob without engaging any new gears. The drawer advances or retreats with each new position, and this allows other positions of internal blocks to be manipulated. Once open, a wooden bar inside the drawer must be pulled out to allow the mechanism to operate backwards to access the second compartment.

No. 4 Puzzlebox: Manipulate special wooden tiles so that the size of their inlayed dots line up with identical sized inlayed dots on one end of the puzzle. It is wise to move any double long tiles to positions on the opposite end before starting this, being sure not to trap any special tiles behind them. Once all special tiles are in place, push against the special tile with the smallest dot inlay to push the drawer open. A tab on the side will allow the lid of the drawer to open. The same process will accomplish access to the drawer on the opposite end.

No. 5 Puzzlebox: Bloodwood pieces on the top and bottom of the puzzle can be maneuvered into positions that visually unlock the top and base of the puzzle from the sides. Pieces on the side of the puzzle can then be manipulated in a series of steps so that the bottom of the puzzle can slide, after which reversing these steps will allow the lid to slide open. One last move of the sidepieces allows a center bar to be removed and the puzzle to come apart into panels. Great care should be given not to mix up reciprocal pieces if these panels are entirely taken apart.

No. 6 Puzzlebox: Use the sliding right panel of the box to rotate its gear assembly. Gear rotation always moves the short clock hand, but not always the long hand. The sliding panel on the base of the clock will engage and disengage additional gears that allow the second hand of the clock to move. Clock hands must be worked into a position of 10:00 and 2:00 and have them move in opposite directions to both reach 12:00 together. The top of the puzzle will then slide forward, allowing the bottom drawer to pull out.

No. 7 Puzzlebox: While exact solutions vary, the trick is to work toward maneuvering a single drawer in the opposite direction of the notch found on one end. The retaining pin that intersects the drawer maze will eventually exit there, allowing a drawer to come out. This puzzle is amazing as each successive drawer becomes easier to manipulate as more drawers are removed.

No. 8 Puzzlebox: Slide the base panel to allow one end panel to move. The top of the box will slide back and forth, but each third time it will either lock or unlock one end panel or the other. Moving one of these end panels will reveal a drawer. The other panel locks or unlocks the drawer from moving every third time. Manipulate these panels so that the drawer pulls partially, unscrew its knob so that its panel door can close, then move the other end panel up and down three times. This will position the internal mechanics so that when the drawer knob is reattached, it can pull the drawer out entirely.

No. 9 Puzzlebox: No instruction books or set of instructions were available for these puzzles.
No. 10 Puzzlebox: Sliding bars on the left and right side have to be moved at the same time in one direction until they stop. Moving them in tandem, pinches and moves an internal peg, but moving them one at a time allows this peg to shift to one side or the other internally. An end panel unlocked in this manner can be slid down, allowing its corresponding lid to slide open. Sliding the same bars in tandem in the opposite direction will allow the second lid to open.

No. 11 Puzzlebox: Sliding one particular lid will alter the fulcrum of a lever, allowing the second lid to be opened. The opening of the second lid alters another fulcrum lever, which allows the first lid to continue to open.

No. 12 Puzzlebox: A special wooden block has inlay dots on it, and also has an embedded magnet. Line up this block with an inlay dot on the corner of the puzzle to open the drawer. While the drawer remains open, manipulate this block to line up with the middle inlayed dot on the puzzle cage, then continue to pull out the drawer to access the compartment behind it.

No. 13 Puzzlebox: Slide down and up the side panel on the open-hole side and the first chopstick will pop out. Remove the chopstick, then slide same panel back down, followed by the panel on the opposite side to make the second chopstick jump to the open-end side. Slide the first panel up to make the second chopstick pop up.

No. 14 Puzzlebox: White - Line up the inlay dot on the rotating section of the puzzle with the black inlay dot on the base. Rotate the top counter-clockwise 90 degrees and then back - repeat until the black queen moves into place. Continue counter-clockwise an additional 90 degrees, then go back and forth 90 degrees until the white queen moves into place. Follow this same process for the black bishop and white rook until checkmate is achieved and end up with this inlay dot above the white inlay dot on base. Push in the drawer lock on the base and open the first drawer.

Black - Line up the inlay dot on the rotating section of puzzle with the white inlay dot on the base. Rotate top clockwise 90 degrees and then back until the black bishop moves into place. Continue clockwise an additional 90 degrees, then go back and forth 90 degrees until the white queen moves into place. Repeat this same process for the black queen and the white rook until checkmate is achieved and this inlay dot ends up above the black inlay dot on the base. Push in the drawer lock on base and open the second drawer.

No. 15 Puzzlebox: Arrange the tiles to form a picture according to the picture on the base. The top will slide open. Remove the secret drawer, and a tab on the side will allow it to be pulled into replace the previous drawer.

No. 16 Puzzlebox: Manipulate the dominoes until they are in new positions leaving half-spaces directly under the orange blocks in the two corners on the top lid. This allows a side panel to move down and the lid to slide open.

No. 17 Puzzlebox: Work the short frame fully to the left so that the right lid can slide open. Then close the lid and work the short frame fully to the right so that the left lid can slide open.

No. 18 Puzzlebox: Pinch ball's shell so that one circle becomes off-center from the rest of the sphere. This maneuver will allow the pegs on the inner ball to rotate into a few of the quadrants that do not have notches for them. A particular part of the sphere has a rounded edge and does not fully interlock with the rest of the sphere. This is the northern hemisphere and lining up the two halves of the inner ball with the equator will allow half of the ball to be removed along with this rounded edge piece.

No. 19 Puzzlebox: Tiles will only fit on the top of the box squarely in one configuration. This reveals the code required for all sides of the puzzle. Tiles must be placed on each panel in a manner where the decorative inlays on the side of the tiles facing out have no aspect of similarity with decorative inlays on the side panel. One of the four sides will become freed to slide if tiles are arranged properly. This allows the side panel next to it to slide as tiles are placed correctly there, until the last panel can open entirely.

No. 20 Puzzlebox: Twist threaded dowel on top down into the puzzle so that the very top of the puzzle will come free. Twist this dowel in the opposite direction to remove from the puzzle, and an additional top piece also becomes free. Then on the base, find a portion of the slate rock that will push in, allowing it to be pulled from the base on the other side. This allows a rock on the top to be removed, which in turn allows a second piece of thin slate rock to slide into the base. This frees the top section of the slate rock to pull free from the lighthouse so it can be freed.

Rotate the dial down the shaft of the box, being careful not to cross any threads. When the dial reaches the bottom and hits the stopping pegs, continue to turn it and one of the box panels will begin to move. Continue moving the top panel until the spaces between threads line up with spaces on the two sides adjacent to it. This provides a space for the dial (when it is returned to the top) to turn freely but still allow its rotation to slide a panel on the opposite side of the box. By maneuvering panels on each side of the puzzle to points where the dial can turn freely while still manipulating opposite sides, the first compartment will reveal itself. Internally, there is also a pin that will not allow certain panels to slide too far without having to stop, which ensures that there can be no cheating. Care should be taken not to force the dial when a side reaches one of these internal stops for fear of shearing off a thread.

No. 21 Puzzlebox: Solution varies upon the starting position of puzzle and direction of the drawer within its sleeve, and no formal solution to these is provided, as it is part of the Apothecary Puzzle Chest project.

No. 22 Puzzlebox: Manipulate exterior pieces until two parts of the puzzle are removed. Combine these to form a key. Continue manipulating exterior pieces to reveal a keyhole and unlock the puzzle. The lid will come off attached to the key.

No. 23 Puzzlebox: Manipulating dials on both ends will reposition drawers to different heights internally within the box. These drawers restrict and free moves of the sliding side panels upon their hinges. A bit of random manipulation is required to get side panels to a point where a small restricting knob on one of the hinge dowels emerges from a slot in the hinge joint. This dowel can then be turned and unlocked from the hinge joints and eventually worked entirely free from the box. Continuing to manipulate panels and end dials will allow one successive panel after the other to come free from the box while still remaining connected to each other on their hinges. Further manipulation will allow internal drawers to come out.

No. 24 Puzzlebox: Removing the ears of the elephant will allow a side panel to slide down. This in turn allows a piece in the but to be pressed in, followed by the trunk lowering into the box, and a piece next to the trunk to be pushed in. The lid can then slide forward allowing the back right leg of the elephant to be lifted out and removed. A secondary piece near the trunk can then be pressed in and removed from the butt end, which allows the elephant to come apart with the exception of the legs, which are still embedded in the box. Manipulation of the lid and sides of the box will allow these to come free, after which the box will open. Removal of the center tile of the box will allow it to fall apart as well.

No. 25 Puzzlebox: Pushing against the inner book will allow the bottom side of the puzzle to indent. This in turn frees a portion of the frame that is connected to the spine to come free and rotate as a handle. Rotating this handle turns the spine of the book causing all of the mechanics to engage. The solution from this point depends on the position of mechanical parts, but pins in the two latches must line up with notches in the mechanics before they can be pulled out. On the top latch, notches in both the large gear and inner spindle must also line up at the same time. An elusive free mounted gear can be moved on its axle to disconnect one portion of the mechanism from the rest so that all the grooves can line up.

Stickman Mahogany Chest: Front panels pull out to reveal two hidden drawers and a small storage space. Pulling out these drawers removes the bottom plate of the internal back cubbyholes on each side, revealing a hidden space underneath. All other drawers and compartments exist in plain view.

Magic Tile: Figure out the unique combination by examining tile decorations, then arrange accordingly. Each decoration and combination is unique. Once determined, slide the front latch and lift the lid.

Pirate's Puzzle Chest: Solution pending as the last portion of this puzzle is yet to be formally solved.
Ambidextrous Hexduos: Find the sides where boxes magnetically attract. Rotate one box clockwise for 5 complete turns. One of these boxes will open when fingers are placed on the correct panels and pulled apart. Then rotate the same box counter clockwise for 5 complete turns to open the other.

Gearbox: Twist knob.
Holiday Lock Box: Use the template on dials to set the appropriate date, pull the latch and lift lid.
Teabox Puzzle: Grasp both sides of the tag string, apply tension and pull on the left side of the string while allowing the right side to go into the box. Then slap the box against your palm while facing the tag side away from your hand and the lid will slide open.

