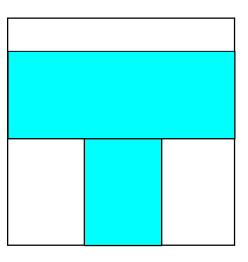# T-Time

Designed by David Mitchell

T-Time is a simple paperfolding puzzle made from two squares of paper that I designed in 1997. It was included in the first edition of my book Paperfolding Puzzles but omitted from the second.

The two pieces of paper are folded and assembled, and optionally glued together, to create a puzzle that, in the starting position, shows a coloured T on a white background on both sides.

The challenge is to manipulate the puzzle to change the design on both sides to a coloured T on a white background.

The challenge is not difficult to solve but the manipulation from one position to another is a very satisfying one.
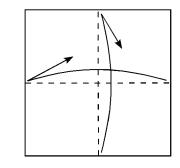
This puzzle is a variation of my Modular Two-Way Tube which is in turn a development of Robert Neale ' s single sheet Two-Way Tube design.

You will need two squares of irogami of the same colour. Both are folded in the same way but one is folded starting white side up while the other is folded starting coloured side up.
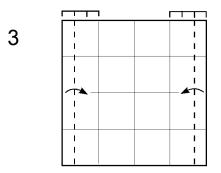
The puzzle can be made without using glue but glueing the pieces together means that it cannot accidentally come apart while being manipulated.
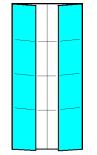
Folding sheet 1

1

1. Fold in half edge to edge, then unfold, in both directions.

2

2. Fold all four edges into the centre, then unfold, in turn.
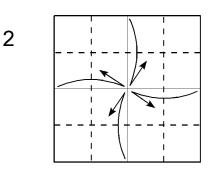
3

3. Fold both the right and left edges inwards as shown. The creases should form one third the way across the width of the outside columns of squares, Try to make this division as accurately as you can.
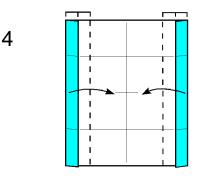
4

4. Fold both the right and left edges inwards again using the existing creases.

5

5. The result will look like this. If you made the folds in step 3 correctly each of the three regions should be the same width.

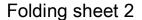David Mitchell / T-Time

Folding sheet 2

6

6. Fold in half edge to edge, then unfold, in both directions.

7

7. Fold all four edges into the centre, then unfold, in turn.

8

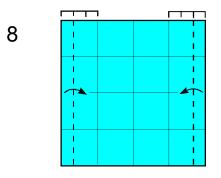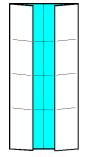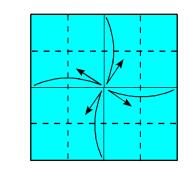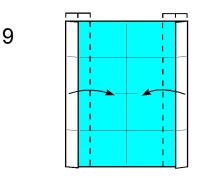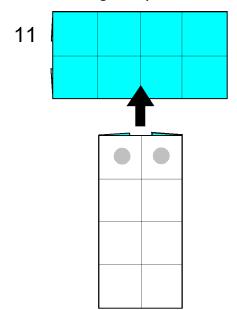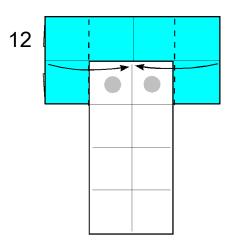8. Fold both the right and left edges inwards as shown. The creases should form one third the way across the width of the outside columns of squares, Try to make this division as accurately as you can.

9

9. Fold both the right and left edges inwards again using the existing creases.

10

10. The result will look like this. If you made the folds in step 3 correctly each of the three regions should be the same width.
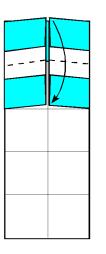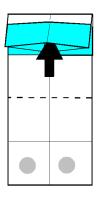
Assembling the pieces

11

12

11. Turn both pieces over and arrange them like this. If you are gluing your puzzle together add glue to the areas marked by the grey dots. Slide one piece on top of the other.

12. The result should look like this. Fold both outside edges of the back piece inwards as shown using the existing creases.
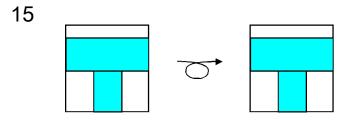
13

14

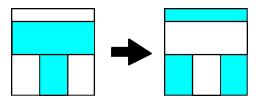13. Fold the top edge downwards using the existing crease.

14. If you are gluing your puzzle together add glue to the areas marked by the grey dots. Fold the bottom edge upwards and insert it inside the pocket at the top.

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15

15. This is the result. Turn over sideways to find the other coloured T. T-Time is finished.

16

16. The challenge is to change the coloured Ts to white T ' s without taking the pieces apart.