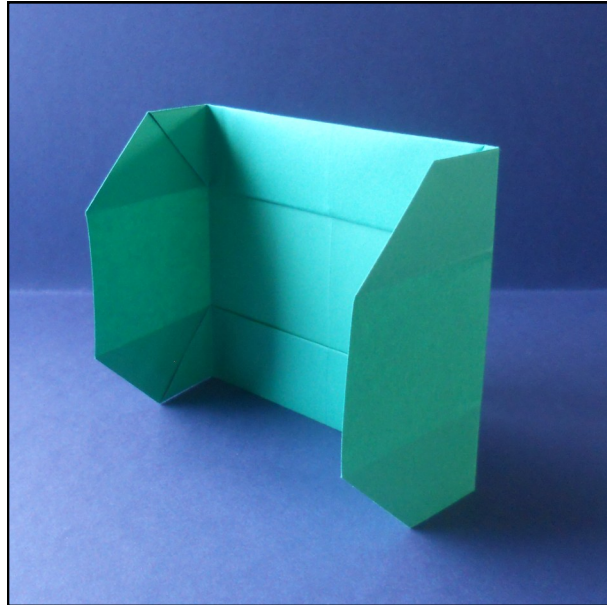# Flick-flack

Designed by David Mitchell

Flick-flack is my version of a famous action origami design by the Japanese paperfolder Seiryo Takegawa, which was originally known (in the UK) as Tarumptytumtum, because of the noise it makes in action, but is now also commonly known as the Acrobat or Tumbler. The original version was folded from a square.

By folding it from A4 paper I have changed the balance of the design and given it an extra rollback action. I imagine this rollback action can also be achieved when the design is folded from US letter paper but I have not experimented to confirm this.

You will need a single sheet of A4 paper for each Flick Flack. If you are using irogami begin with your paper arranged white side up.
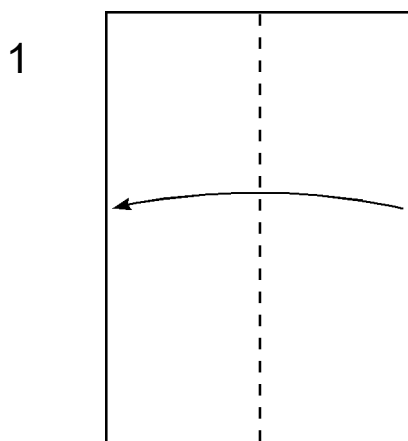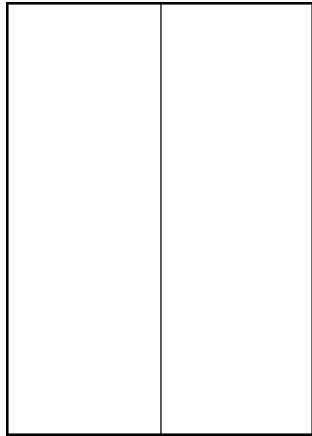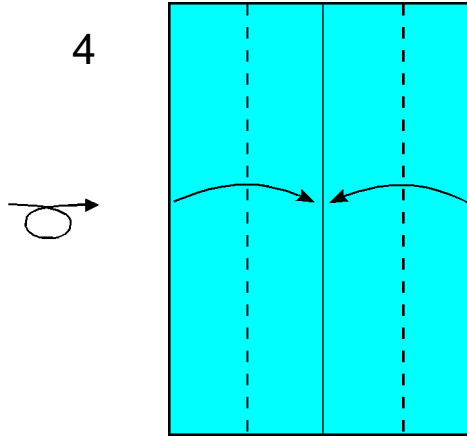
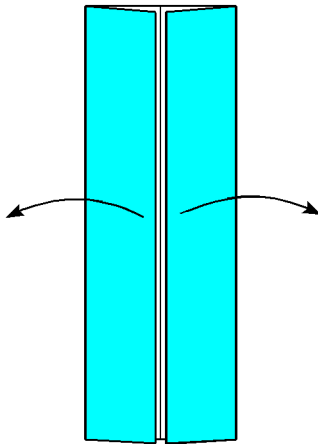1. Fold in half sideways.
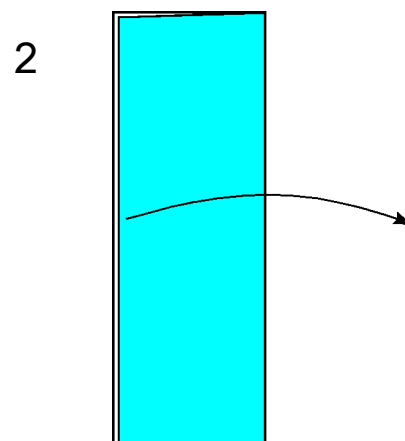
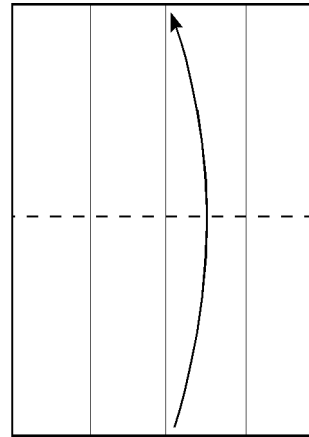2. Unfold.

3

3. Turn over sideways.
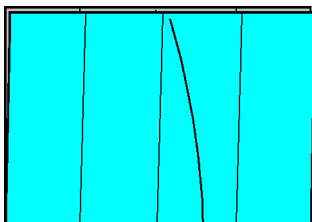
4

4. Fold both outside edges onto the horizontal centre crease.

5

5. Open out.

6

6. Fold in half upwards.

7

7. Open out.
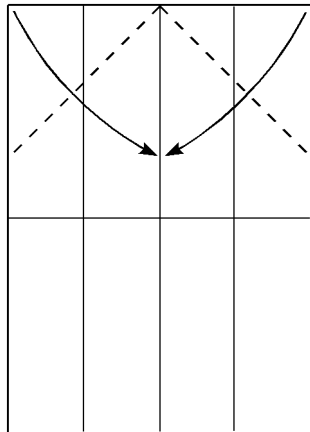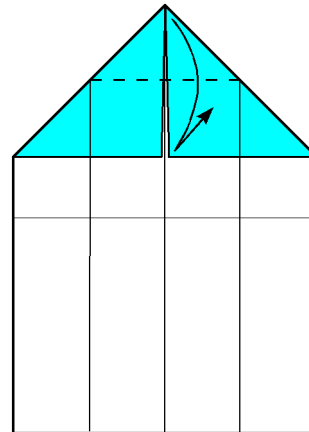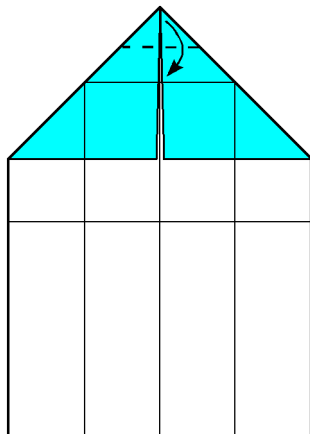
David Mitchell / Flick Flack

8

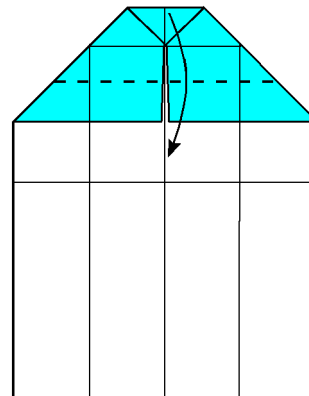8. Fold both the top corners inwards like this.

9

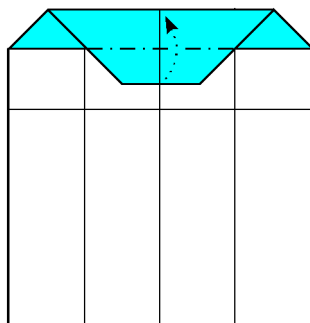9. Fold the top corner downwards like this, then unfold.

10

10. Fold the top corner downwards again, then unfold.
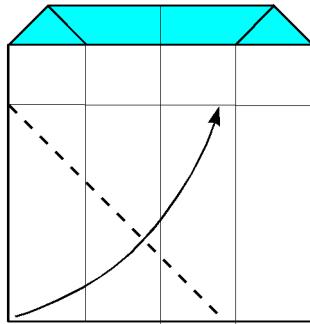
11

11.Fold the top edge downwards so that the crease made in step 9 lies along the line of the bottom edge of the layers. beneath it.
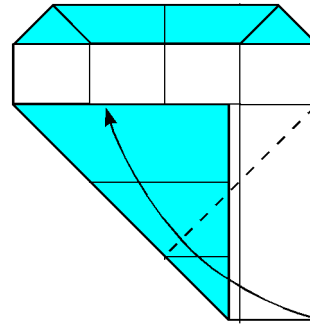
12

12. Fold this flap backwards inside the layers using the crease made in step 9.
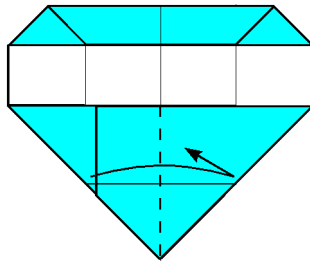
13

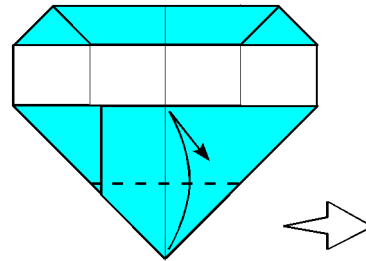13. Fold the bottom left corner inwards as shown.

14

14. Fold the bottom right corner inwards in the same way so that the top edges line up.

15

15. Fold the left edge of the front flap to the right, then unfold, to create a vertical crease that begins at the bottom point. This crease is made in order to create a location point for fold 17.

16

16. Fold the bottom point upwards like this, then unfold.

17
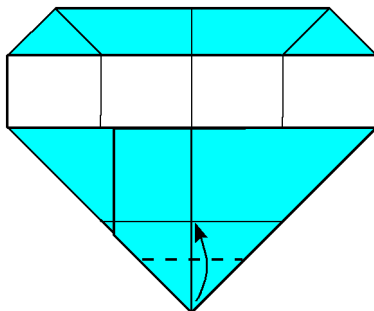
17. Fold the bottom point upwards again so that it lies on the point where the creases made in steps 15 and 16 cross.

18

18. Fold the bottom edge upwards so that the crease made in step 16 lies along the line of the top edge of the layers of paper beneath it.

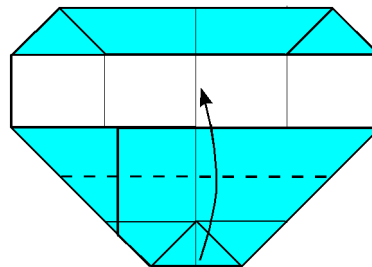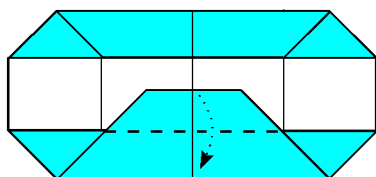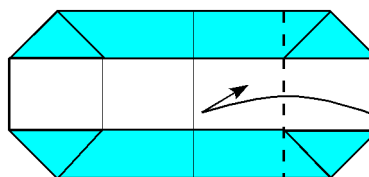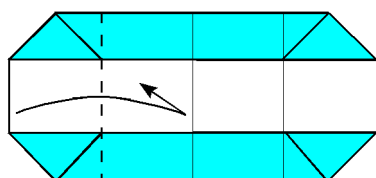**19**

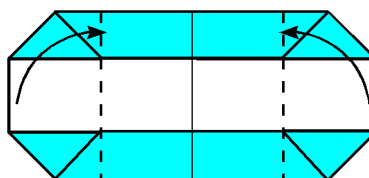19. Fold this flap inside the model using the existing crease to lock the layers together.

20

20. Make this crease firmly through all layers. Undo but don't flatten.

21

21. Make this crease firmly through all layers. Undo but don't flatten.

22

22. Stand the left and right hand flaps up at right angles to the rest of the model.

23
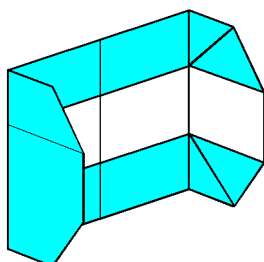
23. Flick-flack is finished. Flick-flack will stand on either end in the way shown here. Make sure the arms are at right angles to the body.

24
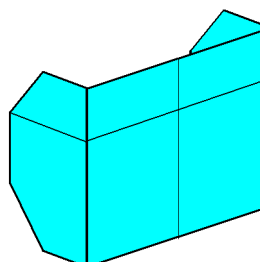
24. One end of Flick-flack is much heavier than the other. You can easily identify the heavier end by looking for the horizontal crease. Stand Flick-flack up like this with the heavier end upwards.

25

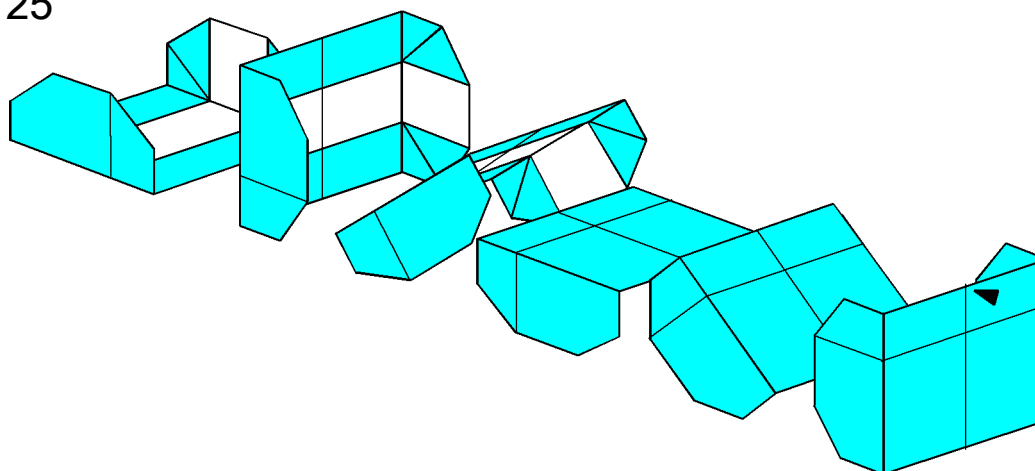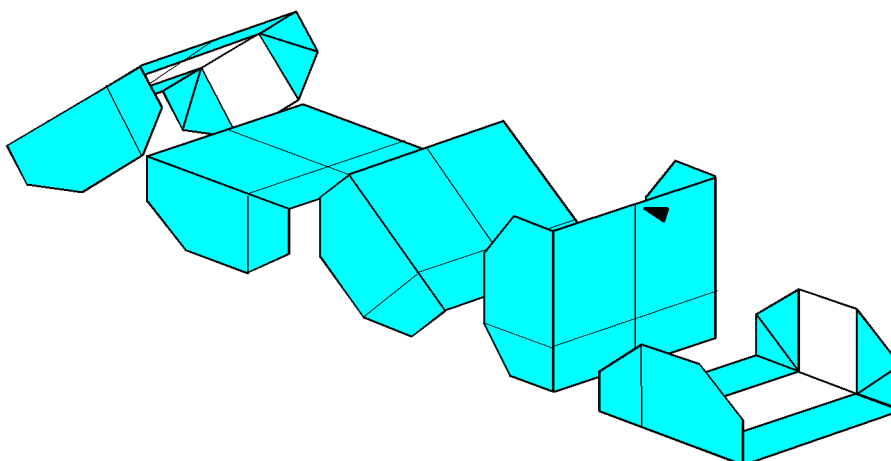25. If you gently tip the heavier end forwards Flick-flack will tumble away from you in the way illustrated here. You will discover that, however gently you push, Flick-Flack never finishes standing on the opposite end, but always tumbles all the way over. This is the classic action of Seiryo Takegawa 's original toy.

26

26. If, alternatively, you stand Flick-flack up so that the heavier end is at the bottom and gently flick the centre of the top to send Flick-flack tumbling away from you, you will discover that it is possible to make Flick-flack come to a temporary halt three-quarters of the way through the tumble sequence and then tumble all the way back towards you again to end up flat on its back.

This action works best on a slightly springy surface like a short-pile carpet and requires practice to master. If you have difficulty achieving this rollback action check that Flick-flack's legs are still set at right-angles to the body and have not been allowed to spread.

27
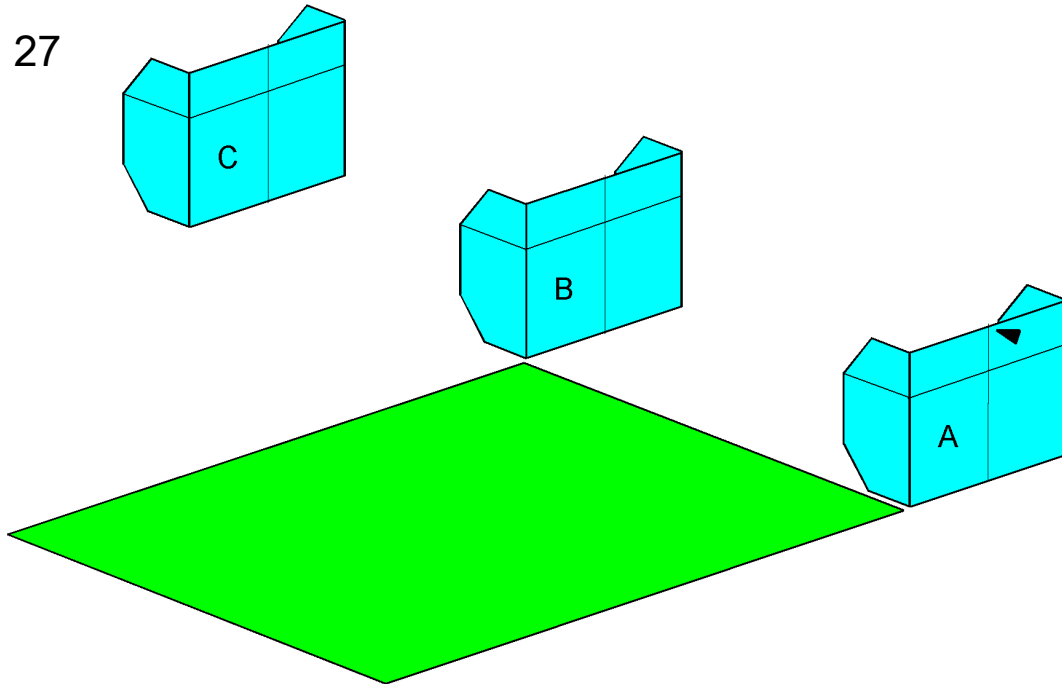
27. I learned from Mick Guy that if you make several Tarumptytumtums you will be able to arrange them like dominoes so that A tumbles to hit B and sets it rolling until it hits C and sets it rolling etc. The same thing applies to Flick-flacks. You can use the short side of a piece of A4 paper as a template to help you set each pair of Flick-flacks correctly. You can also set them up so that each Flick-flack knocks a pair of Flick-flacks into motion.