Kabuto or Samurai Helmet / Traditional Goldfish / Coy Carp

The Kabuto, also known as the Samurai Helmet and the Japanese Goldfish, which can be developed from it using two small cuts, are both traditional Japanese designs. The Coy Carp is my own original discovery.

It was not unusual for traditional Japanese designs to make use of cuts.

These designs can equally well be folded from irogami, paper that is white on one side and a single colour on the other, or from paper that is the same colour on both sides. For the sake of clarity the diagrams have been drawn as if you were using irogami. The result of using homogeneous paper is shown at the end of each section.

Folding the Kabuto
You will need a single square of paper. If you are using irogami begin with your paper arranged white side up.

1. Fold in half diagonally, then unfold.
2. Fold in half downwards.

3. Fold both outside corners to the bottom. The next picture is on a larger scale.

4. Fold both front flaps in half upwards.

5. Fold both front flaps in half outwards, then unfold. These creases are used to locate the folds to be made in step 6.

6. Fold both front flaps outwards as shown, using the creases made in step 5 to locate the folds.

7. There are two layers at the bottom. Fold the front layer upwards as shown.
8. Fold the bottom edge of the front layers upwards again.

9. Turn over sideways.

10. Fold the bottom point upwards.

11. Turn over sideways.

12. Squeeze the design so that the centre opens up in front and behind.

13. This is the most basic version of the Kabuto. Steps 14 through 19 show you how to improve it.
14. Squeeze the left and right corners together until they meet in the centre. The result should look like picture 15.

15. Fold the point of the front layers upwards as shown.

16. Turn over sideways.

17. Repeat fold 15 on this side of the design.

18. Squeeze the left and right corners together so that the centre opens up in front and behind. Continue squeezing until the corners meet in the centre. The result should look like picture 19.

19. The improved Kabuto is finished.
20. This is what the improved Kabuto would look like if you folded it from paper that was the same colour both sides.

Folding the Japanese Goldfish
Begin by folding to step 11 of the Kabuto.

21. Swing the front layer downwards.

22. Squeeze the left and right hand corners towards each other so that the centre opens up in front and behind. Continue squeezing until the corners meet in the centre. The result should look like picture 23.

23. Fold the right hand point inwards and upwards using the existing crease.

24. Fold the right hand point into the centre.
25. Undo the fold made in step 24.

26. Undo the fold made in step 23.

27. Squeeze the left and right hand corners towards each other so that the centre opens up in front and behind.

28. Cut along the creases marked with a thick black line. Make sure you only cut through the front layer of the paper.

29. Squeeze the left and right corners towards each other so that the centre opens up in front and behind. Continue squeezing until the corners meet in the centre. The result should look like picture 30.

30. Separate the front and back layers then gently push the area of the paper shown shaded grey here completely inside out. As you do this the right hand point will flip upwards.
31. The Japanese Goldfish is finished. The dotted line shows the position of the darker shaded area of paper shown shaded grey in picture 30 after the manoeuvre has been completed.

32. This is what the Japanese Goldfish would look like if you folded it from paper that was the same colour both sides.

Folding the Coy Carp

Begin by folding the Japanese Goldfish

33. With your left hand take hold of the Japanese Goldfish at the point marked with a circle. Now use your right hand to turn the tail completely inside out between the other layers. This can be done in one smooth move.

34. Voilà! The Coy Carp is finished.

35. This is what the Coy Carp would look like if you folded it from paper that was the same colour both sides.