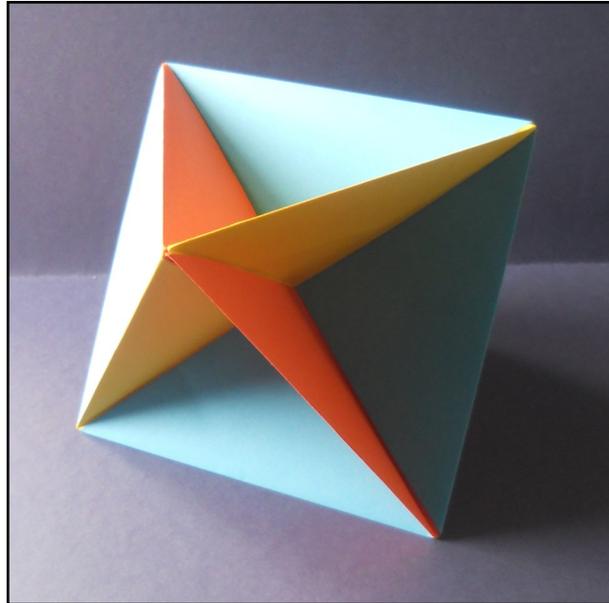


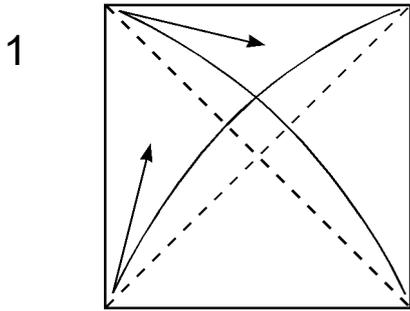
The Robert Neale Octahedron

The Robert Neale Octahedron is a solid or skeletal design composed of three intersecting square planes. It is made by the simple expedient of combining six waterbomb bases in a compact weave.

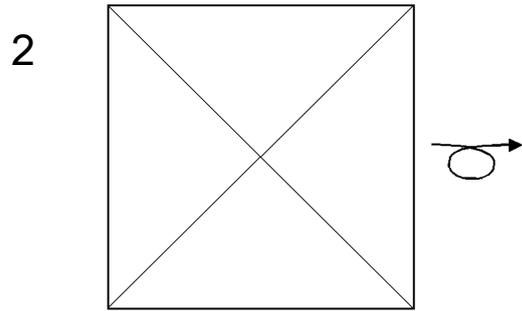


Robert Neale discovered this design in the USA in the mid 1960 's but I cannot find any formal publication of the design until 1977, when it was published in *The Magic of Origami*, edited by Alice Gray & Kunihiko Kasahara. Robert Neale has told me that Kunihiko Kasahara had also discovered the design for himself at an early date. Joe Power also discovered the design for himself in Hawaii sometime in the early to mid 1970 's and it was included in Kenneth Kawamura 's booklet entitled ' *Geometrical Compound Origami - Meditations on a Waterbomb* ' which was also published in 1977. I am sure many other people have also made independent discoveries of the same form, but as far as I know, Robert Neale was the first to find it. Since the module is just a waterbomb base this perhaps illustrates the lack of attention generally given to compound or modular designs in traditional Japanese paperfolding.

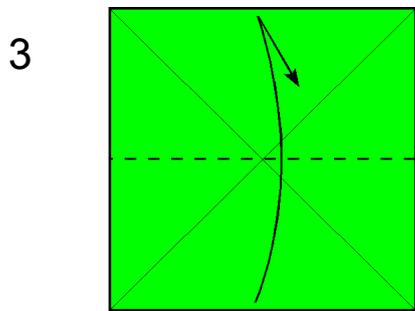
You will need six squares of paper, two in each of three contrasting but complementary colours. If you are using irogami begin with your paper arranged white side up.



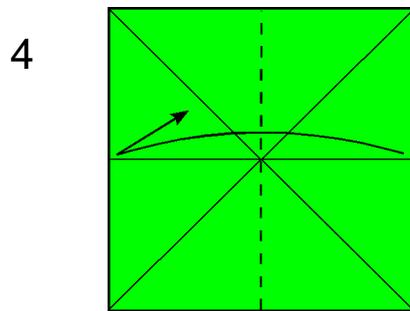
1. Fold in half diagonally, then unfold, in both directions.



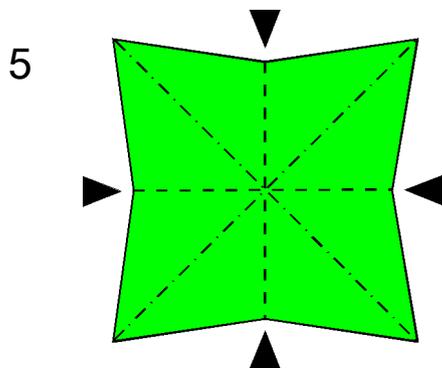
2. Turn over sideways.



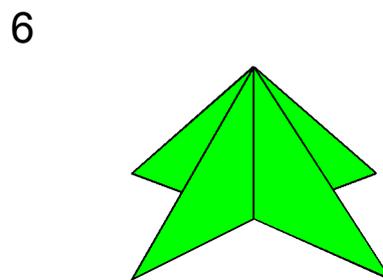
3. Fold in half downwards, then unfold.



4. Fold in half from right to left, then unfold.

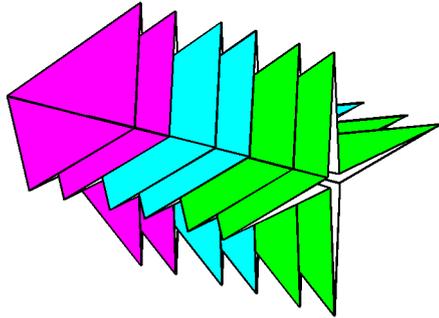


5. Collapse using the existing creases so that the centre moves towards you.



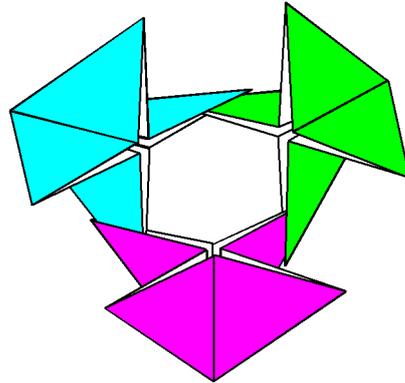
6. The finished module should look like this.

7



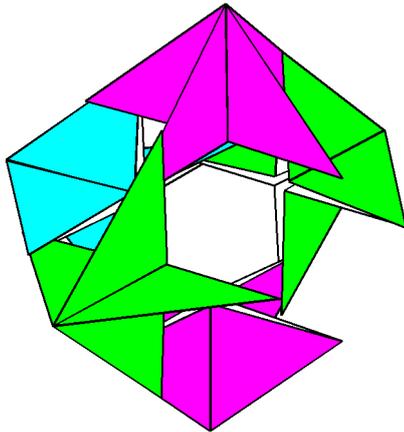
7. Make 6.

8



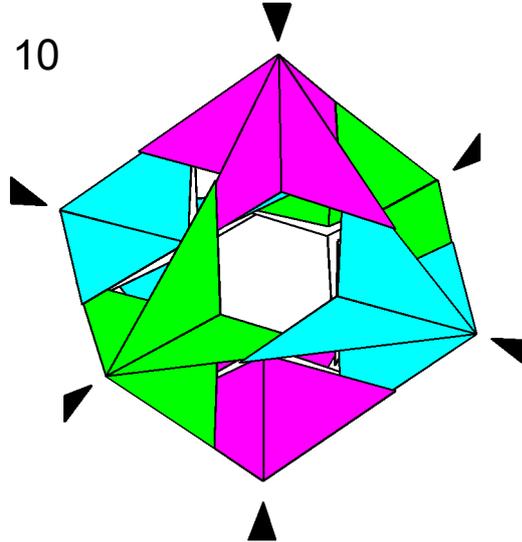
8. The first three modules go together like this.

9



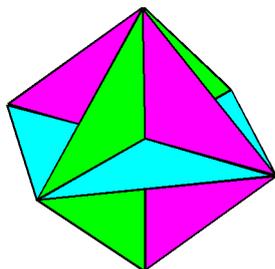
9. The fourth and fifth are added like this ...

10



10. ... and the last one like this. Gently nudge the modules together by opposite corners and opposite edges until the modules settle firmly into place and there is no longer a hole at the centre.

11



11. When it is finished the Robert Neale Octahedron should look like this.

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