Origami Modulaire un catalogue non exhaustif

Little turtle
Sonobe Unit
Cubes en carte de visite
Tétraèdre en tickets de métro
PHiZZ unit
Bascetta Star module
Penultimate edge unit
Triangle Edge Module



Little Turtle

Nom du module : Little Turtle

Créateur : Tomoko Fuse Ratio de la feuille : 1:1

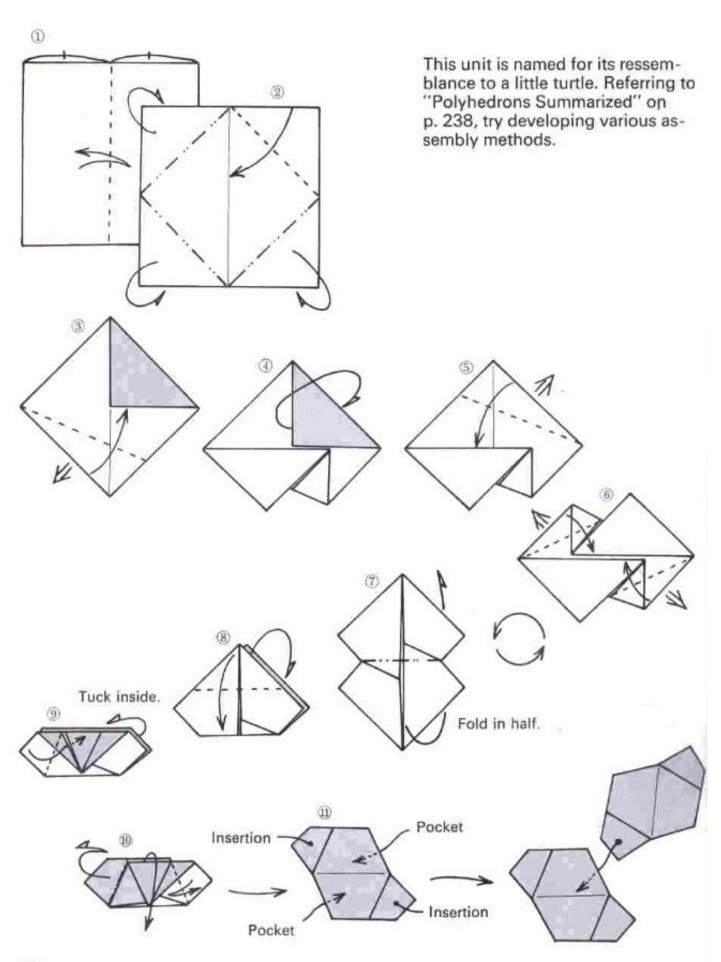


Vidéo : Pliage et montage



Petit rhombicosidodécaèdre (120 modules)

Little Turtle



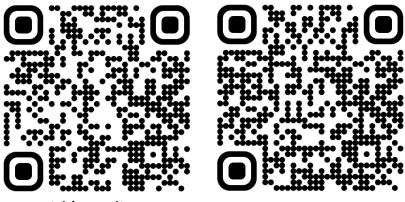
Sonobe Unit

Nom du module : Sonobe Unit

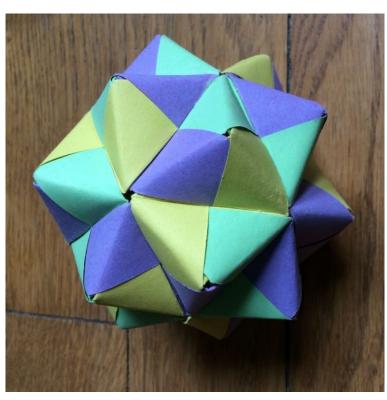
Créateur: Toshie Takahama et Mitsunobu

Sonobe

Ratio de la feuille: 1:1

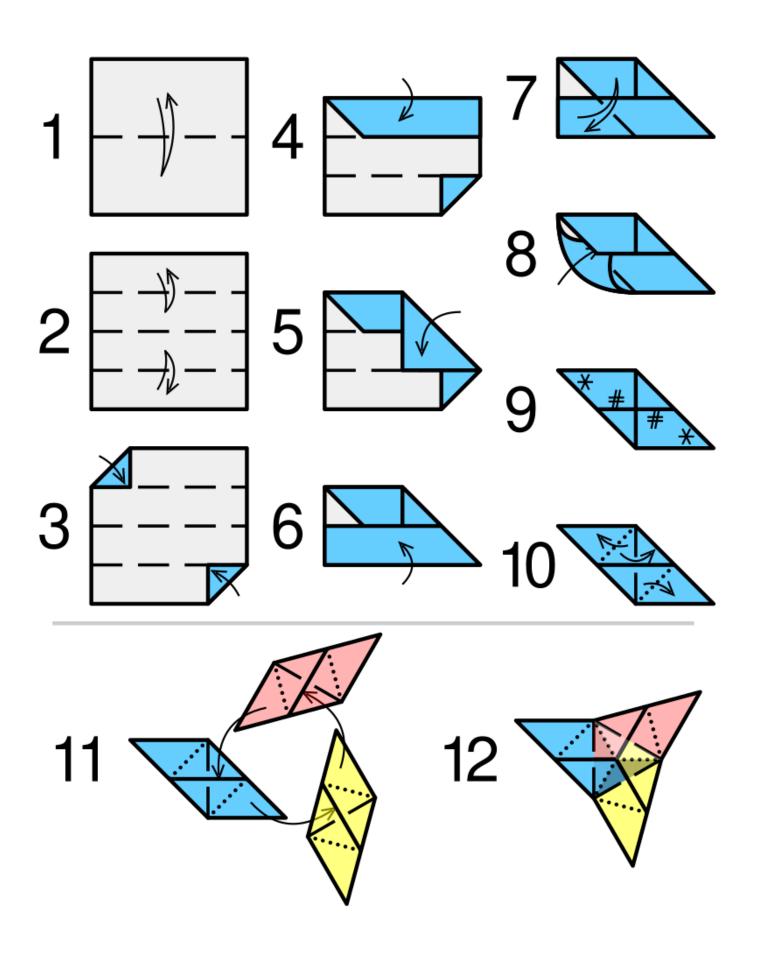


Vidéo : Pliage Vidéo : Assemblage



Icosaèdre (30 modules)

Sonobe Unit



Source: https://en.wikipedia.org/wiki/Sonobe

Cubes en carte de visite

Nom du module : Business card cube unit

Créateur : N/A

Ratio de la feuille : optimale entre 3:2 et 2:1

Remarque: Il faut 6 modules pour faire un

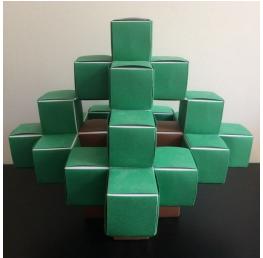
cube et 6 autres pour le recouvrir

entièrement



Vidéo : Pliage et assemblage





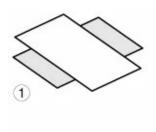


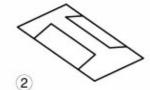


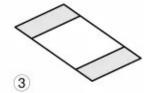
T-rex / arbre / quadripède / formes diverses

Cubes en carte de visite

<u>Pliage</u>

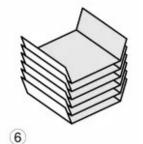








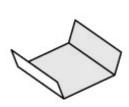


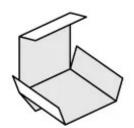


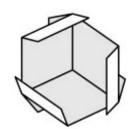


Site web: How to make business card cubes

<u>Assemblage</u>







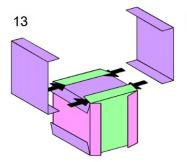




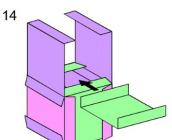




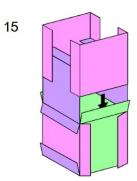
Connection



13. Add two more cards underneath the flaps of the existing cube.

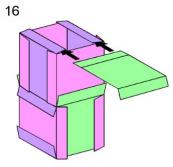


14. Slide the third card into position.



15. Add two more cards like this.

The Business Card Cube



16. Slide the last card into place to complete the second cube.

Tétraèdre en tickets de métro

Nom du module : ??? Créateur : Tomoko Fuse ? Ratio de la feuille : 13:6

Remarque: on peut également réaliser l'octaèdre, l'icosaèdre et le dodécaèdre mais avec les oreilles à l'extérieur ou de quoi coller car la construction n'est pas très stable.



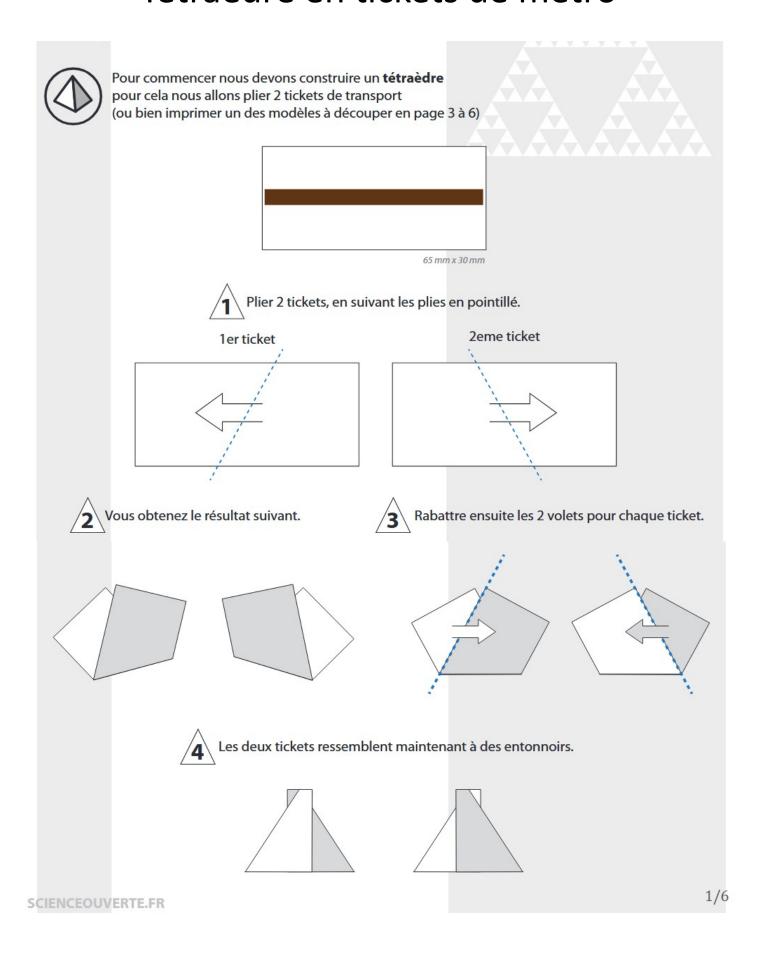
Vidéo : Pliage et montage

TODO change video

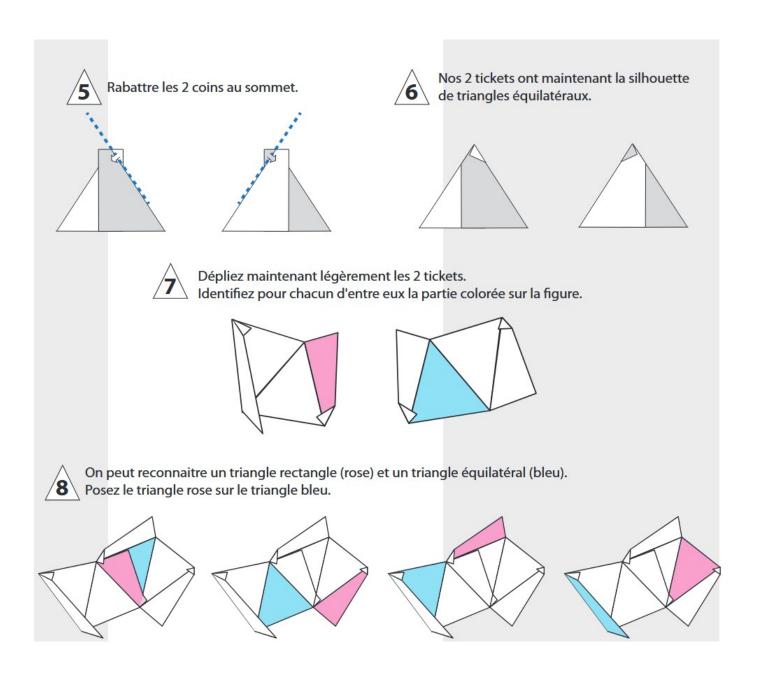


Dodecaedre (30 modules), Icosaèdre (10 modules), Octaèdre (4 modules), Tétraèdre (2 modules)

Tétraèdre en tickets de métro



Tétraèdre en tickets de métro





PDF:
Construction d'un object fractale
LA PYRAMIDE DE SIERPINSKI
Par l'association Scienceouverte.fr

PHiZZ unit

Nom du module : Pentagon-Hexagon Zig-Zag

Créateur : Tom Hull Ratio de la feuille : 1:1

Remarque: A n'utiliser que si la structure ne comporte que des pentagones et des hexagones



Vidéo : Pliage et montage

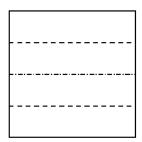


Dodécaèdre (30 modules)



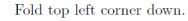
PHiZZ unit



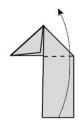


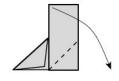


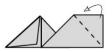
Accordian pleat the paper into fourths.



Fold the right edge of the strip down to meet the folded edge.





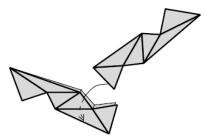


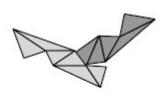
Fold the strip up, making the bottom flush.

Fold the strip down to the right.

Fold the upper right corner down behind the unit.



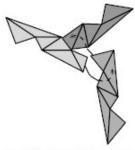


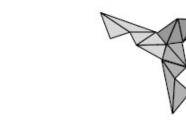


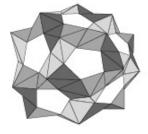
The completed unit.

Insert one unit into the other one from the side so that the creases overlap.

The two units are joined.







Insert a third unit into the second unit in the same manner. Tuck the first unit into the third unit.

The completed group of three units.

30 PHiZZ units make a dodecahedron. You can also use PHiZZ units to make larger buckyballs, tori, and other surfaces

Bascetta Star module

Nom du module : Bascetta Star module

Créateur : Paolo Bascetta Ratio de la feuille : 1:1

Remarque: Mon préféré



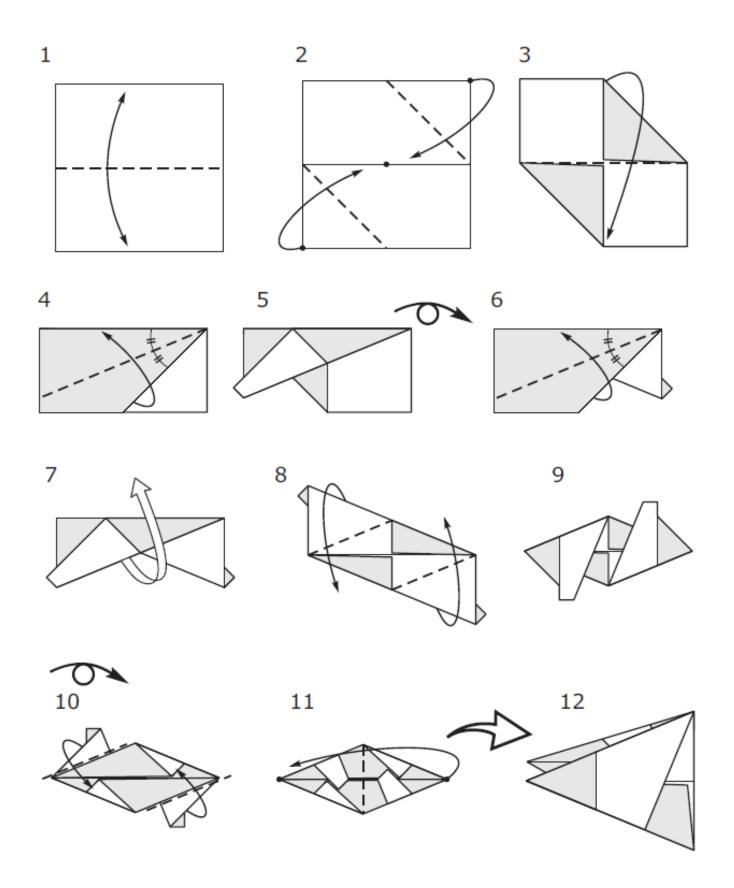
Vidéo : Pliage et montage

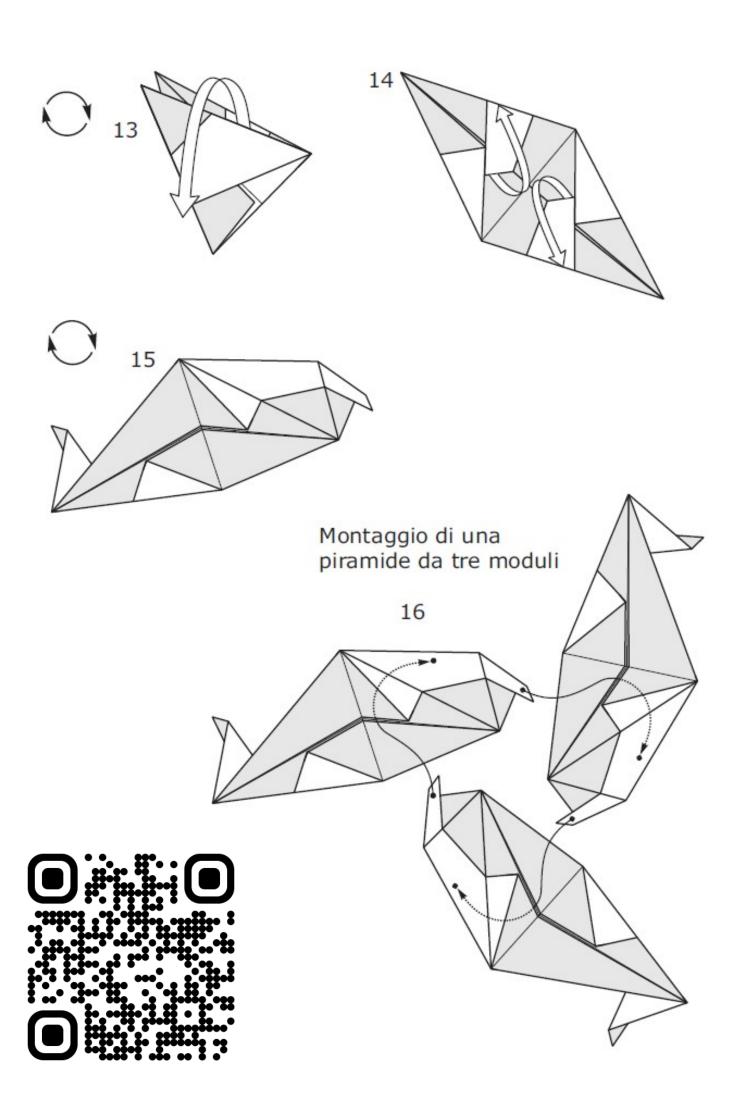


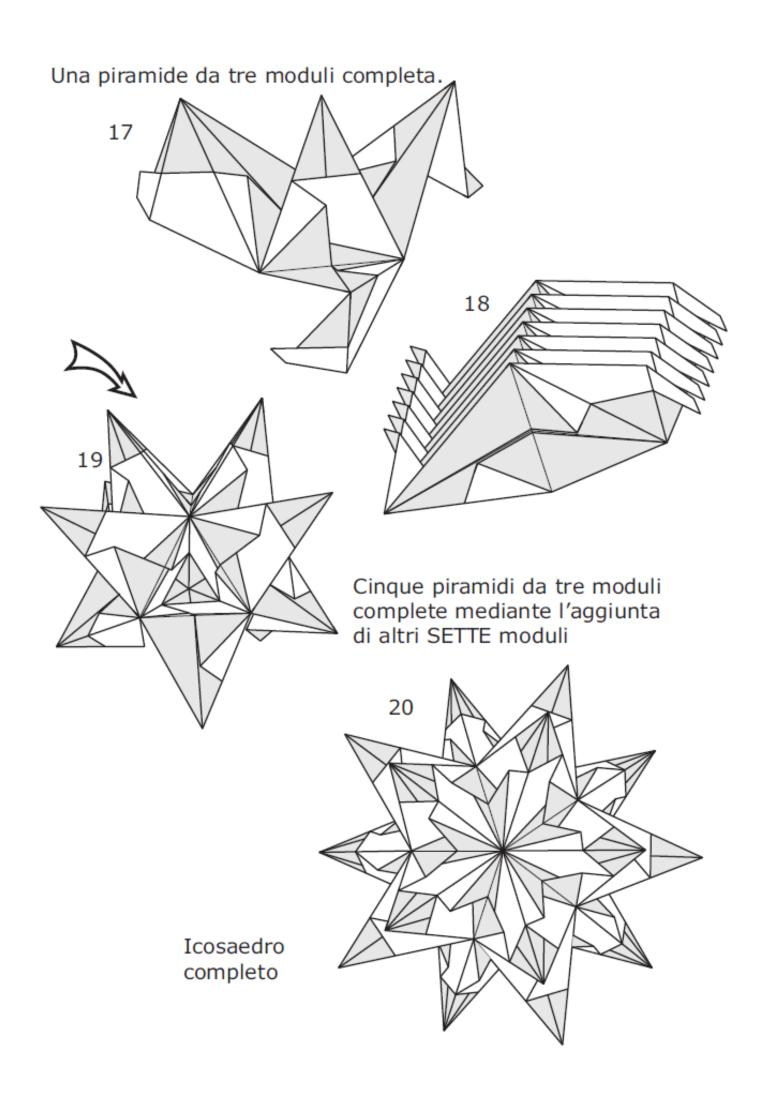
Solides de Platon / Archimède / Rhomboèdre / Johnson (Coronas)

Bascetta Star

Modello di Paolo Bascetta Diagrammi di Francesco Decio







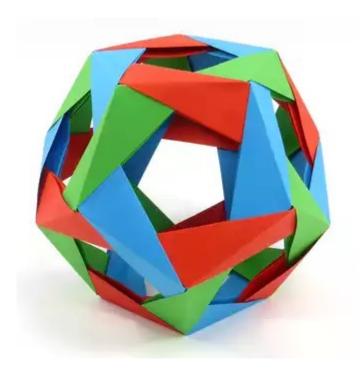
Nom du module : Penultimate edge unit

Créateur : Robert Neale Ratio de la feuille: 4:3

Remarque : C'est une famille de modules en fonction de la face à créer.



Vidéo: Pliage et montage



Dodécaèdre (30 modules)

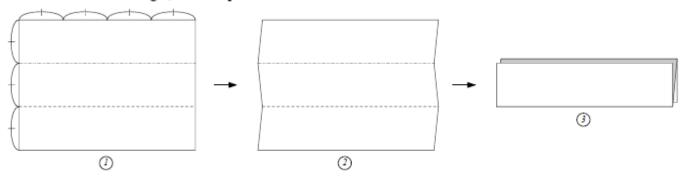


Cube (12 modules)



Pentagon Module (108 Degrees)

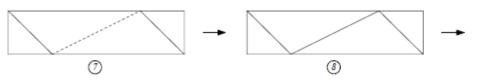
Start with a 4x3 rectangle, and collapse like an accordian:



Fold opposite corners in -- use only the top layer -- and unfold



Fold along the dotted line and unfold

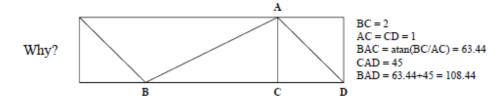


Re-fold the corners, this time folding all layers



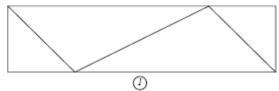
The final piece:



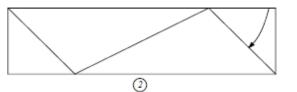


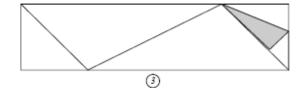
Hexagon Module (120 Degrees)

Get to step 8 of the Pentagon module:

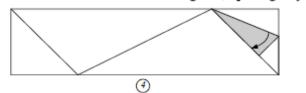


Fold the top to the diagonal line (Fold the top layer only):



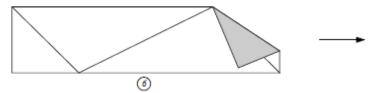


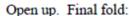
Fold this new crease to the diagonal, opening as you fold:

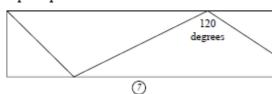




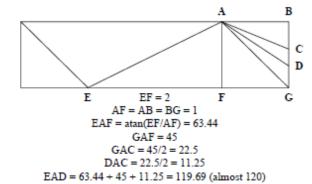
Fold all layers along this new crease:





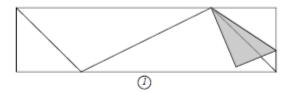


Why?

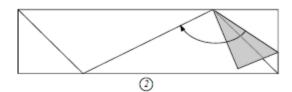


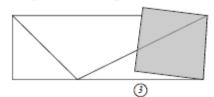
Triangle Module (60 Degrees)

Get to step 5 of the Hexagon module:

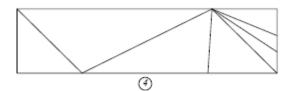


Fold the entire module so that this newly created crease matches up with the large crease:

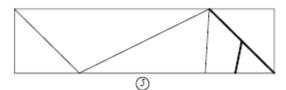




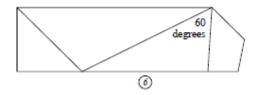
Unfold back to the rectangle:



Cut along the thick lines (one of them is not along any crease lines)



The final piece:



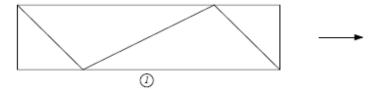
Why?



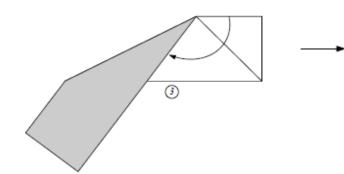
CAB = 119.69 degrees (from the Hexagon module) CAD = CAB/2 = 59.85 (almost 60)

Square Module (90 Degrees)

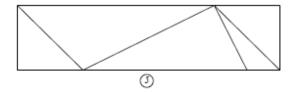
Get to step 8 of the Pentagon module, and fold along the long crease



Fold the entire piece as indicated:

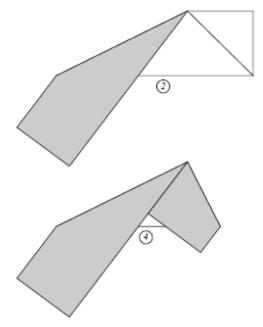


Unfold back to the rectangle:

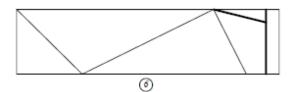


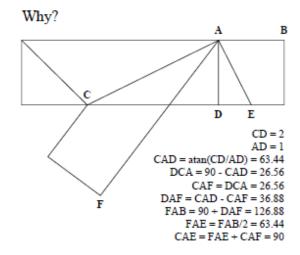
The final piece:





Cut along the thick lines (these are not along any crease lines)





Triangle Edge Module

Nom du module : Triangle Edge Module Créateur : Lewis Simon & Bennet Arnstein

Ratio de la feuille : 2:1

Remarque : ne fonctionne que pour des faces

triangulaires donc pour des deltaèdres



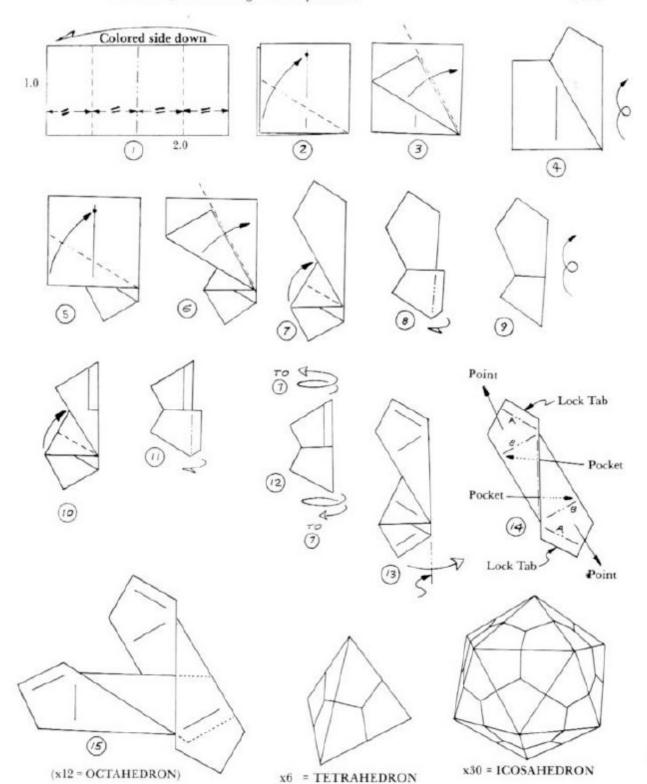
Vidéo : Pliage et montage



Icosaèdre (30 modules)

Triangle Edge Module by Lewis Simon and Bennett Arnstein

Unfold mountain crease made in FIG. 1. Crease A on entering module lines up with crease B on receiving module. Crease B on entering module lines up with mountain crease along diagonal seam on receiving module. This module makes polyhedra with flat equilateral triangle faces. The module corresponds to an edge of the polyhedron. Most polyhedra will require the use of the lock tab. If it is not needed, fold it flat against the point tab.



References

https://origami.kosmulski.org