Three symbolic images of Biohistory

Series of 3D paper crafts

Biohistory Emaki*

* Emaki is a traditional form of Japanese painting, particularly suited for narrative art.

What's Biohistory?

A new form of knowledge that observes the livingness of many forms of life, including humans, and asks, "How shall we live?"

Biohistory looks at how life has evolved and diversified since the emergence of the first living organisms in the seas 3.8 billion years ago. All living creatures contain DNA (genomes), the history of which can be traced back to that ancient event, making DNA (and genomes) an enormous historical archive. By reading that history, we can learn more about life, humanity and nature, and harness that knowledge toward building our society.

What's Biohistory Emaki?

Original idea by Keiko Nakamura with consultation of Marina Dan
Illustrated by Ritsuko Hashimoto

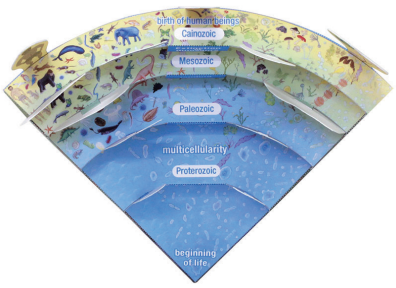
The center of the fan denotes the birth of life on earth 3.8 billion years ago. Since that time, evolution has given rise to diverse species, and edges of the fan represent the limits of the living world in the present day. The many milestone events of biological history, including the emergence of eukaryotes, the advent of multicellular life, the transition of marine life to terrestrial habitats, and species explosions, can be read as an exciting and dramatic story. This project is an attempt to show how each species is positioned in that history and how species relate to each other. As can be seen from our position within the fan, we humans are also part of the same biohistory that began 3.8 billion years ago.

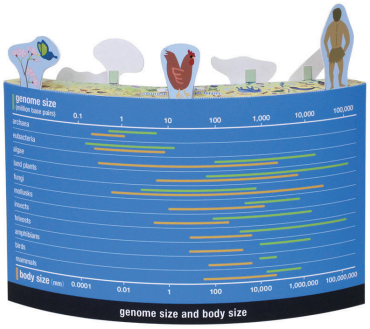
Make your own 3D paper craft of Biohistory Emaki

On the top the five epochs of the history of evolution of life are mapped on the Emaki.

The first appearance of the organisms by DNA estimation and fossils discovery can be compared on the both sides.

The figure on the backside shows the sizes of genomes and bodies in groups of organisms.





BRH

Biohistory Emaki
assembling instructions

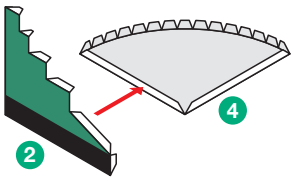
- Cut each part out carefully with a craft knife or scissors.
- Score along the fold lines several times with a stylus (or dried ball-point pen) along a ruler. Scoring helps create a sharp fold.
- Fold parts sufficiently before applying glue.
- White PVA-type craft glue is suited. Put a little glue on a scrap of paper, then apply glue thinly and evenly with a toothpick.
- A pair of tweezers is very handy to build small parts or inner parts into which your fingers cannot reach.

Cut ——— Cut In ——— Hill Fold .....

Valley Fold – – – – – – – Glue *

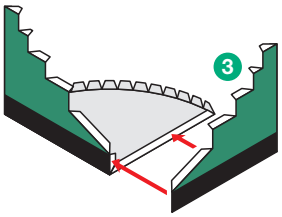
A

Glue 2 to the left side of 4. Check the orientation.



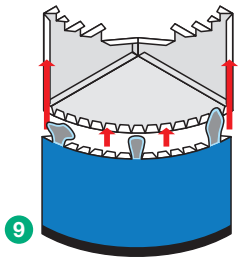
B

Glue 3 to 4 and 2.



C

Glue 9 to the back of B.

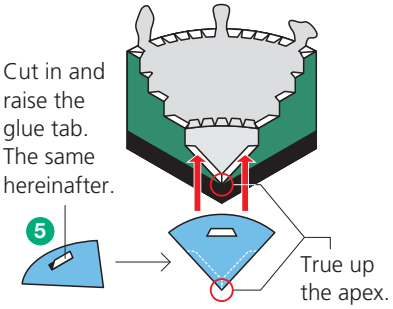


Make the part round slightly, then glue from end to end.

D

Glue 5 to the bottom step.

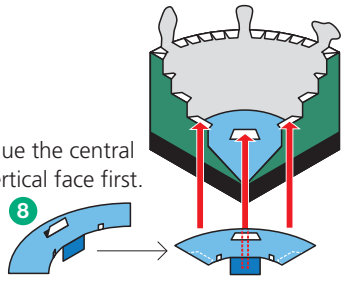
Cut in and raise the glue tab. The same hereinafter.



E

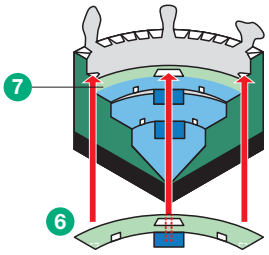
Glue 8 to the second step.

Glue the central vertical face first.



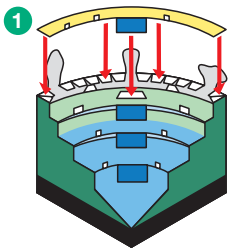
F

Glue 6 and 7 in the same way.



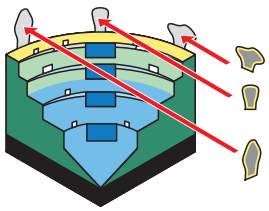
G

Glue 1 on the top.



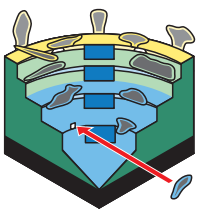
H

Glue "Modern life" to the reverse side so that the outline aligns.



I

Raise tiny tabs, then glue "gigantic meteorite" and other organisms. Refer to the complete photograph above.



Design : Keisuke Saka

BRH