

# Series of 3D paper crafts Biohistory New Emaki<sup>\*</sup>

\* 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 New Emaki?



Illustrated by Makoto Wada

Biohistory New Emaki represents the history of life and the earth from the beginning of the earth to today. According to the timescale on the left edge the bottom of the picture is 4.6 billion years ago and up to today. The circles on the right edge are images of the earth of the time changing their continents with time. The blue lines show ice ages that impacted the earth and damaged the living creatures. The five great extinction events occurred from the end of Ordovician to the end of Cretaceous that drove many creatures to extinction. Although those natural catastrophes on the earth had damaged life, great variety of organisms adopted to form ecosystem today. The size of organisms on the picture shows number of the species. Insects are the largest group in animals.

#### Make your own 3D paper craft of Biohistory New Emaki

Change of sea depth in the earth history and extinct marine organisms in the great extinctions are denoted on the left side. The great extinction events are positioned on Biohistory New Emaki compared on the both sides. The pie charts show the proportions of the species of all of the present organisms and animals.



Changes in temperature and amount of rainfall in the earth history and extinct land organisms in the great extinctions are denoted on the right side.







#### **Biohistory New 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. Hill Fold Cut Cut Glue Valley Fold \* Α В Glue 3 and 4 to both sides. Glue (1) to the reverse side of (2)so that the outline aligns. 2 4 Fold all fold lines sufficiently before applying glue. С D Glue 5 to the top step. Glue 6 to the next step. Glue the central long tab first, Glue in alphabetical order. then both sides on the inward side so that the edge aligns. Ε F Glue 7 and 8 in the same way. Close the stairs with 9. Design : Keisuke Saka

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