

Biomimicry - A Brief Explanation

Nature has had 3.8 billion years to develop practical, efficient and brilliant solutions to life's complex requirements. "Biomimicry" is the recently-emerging discipline that emulates nature's time-tested designs and strategies for our own sustainable innovation and problem-solving.

Here are just a few examples of inspiration borrowed from nature:



- The ingenuity of the lotus leaf design has led to the development of an exterior building paint that cleans itself every time it rains.



- The aerodynamic shape of the kingfisher's beak has helped make a high-speed train quieter and more efficient.



- The structural trick used by butterflies to create the brilliant colors of their wings is the basis of the optical displays we see on our electronic devices.



- The heat-deflecting pleated structure of a barrel cactus re-appears in self-shading buildings.



- The maneuverability of a spider is replicated in a robot that can search through debris for survivors of disasters.