

Lesson 02 Biomimetics

バイオミメティクス

Part 1

Nature helps us 1) c new technologies. These technologies are called biomimetics.

Lotus plants grow in muddy 2) p. However, their leaves are always dry and clean. Why? The surface of a lotus leaf is covered with tiny, rough 3) b. When water falls on the leaf, the drops run down and 4) g as one. At the same time, the water drops carry away mud and dust. In this way, lotus leaves never stay wet or dirty.

This self-cleaning ability of lotus leaves is known as the “lotus effect.” One food company uses this effect to make 5) y lids. The lids have a bumpy surface, so they are always 6) c.

Part 2

Another example of biomimetics comes from cats. Cats 1) g themselves with their tongues. They swallow the 2) f and cough up furballs. One electronics company uses this same mechanism for its vacuum cleaners. Their fan blades are 3) r, like the tongue of a cat. The blades press the dust together like a furball. This makes the dust more 4) c. As a result, we do not have to 5) e our vacuum cleaners so often.

Nature is full of 6) i for a better life. Take a look around you

and find other examples of biomimetics.

解答

Part 1

1) create 2) ponds 3) bumps 4) gather 5) yogurt 6) clean

Part 2

1) groom 2) fur 3) rough 4) compact 5) empty 6) ideas