

Nanotechnology's Natural Connections

Nanotechnology · Answer Key · 5 Questions

1. What natural phenomenon, involving tiny structures, inspires the creation of self-cleaning surfaces in nanotechnology?

- A) The rough texture of tree bark.
- B) The smooth surface of a river stone.
- C) The superhydrophobicity of a lotus leaf.**
- D) The absorbent quality of moss.

2. Which animal's wings, known for their vibrant colors without traditional dyes, inspire nanotechnology in creating structural colors?

- A) The plain wings of a housefly.
- B) The clear wings of a dragonfly.
- C) The colorful wings of a butterfly.**
- D) The feathered wings of an eagle.

3. How can nanotechnology help improve water quality for wildlife and humans?

- A) By making water taste sweeter.
- B) By creating new sources of water.
- C) By filtering out tiny pollutants and contaminants.**
- D) By making water glow in the dark.

4. Nanotechnology can help protect natural habitats by developing tiny sensors to detect what harmful substances?

- A) The presence of beneficial insects.
- B) The growth of native plants.
- C) Pollutants in air and water.**
- D) The direction of the wind.

5. When scientists use nanotechnology to design materials by mimicking structures found in animals and plants, what is this field called?

- A) Bio-engineering.
- B) Geo-processing.
- C) Biomimicry.**
- D) Eco-farming.