

BIOMIMICRY – TECHNOLOGY INSPIRED BY NATURE

Video: *Biomimicry: when technology is inspired by nature* | ACCIONA

Part 1: Vocabulary Match (20 pts)

Draw a line to match the word with its meaning.

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| 1. Biomimicry | A. A very fast bird that dives into water. |
| 2. Engineer | B. Learning from nature to make new technology. |
| 3. Kingfisher | C. To copy or follow someone else's idea. |
| 4. Imitate | D. A person who designs or builds machines. |
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Part 2: True or False? (16 pts)

Circle T for True or F for False.

1. Birds taught humans how to fly. (T / F)
 2. Velcro was inspired by a walk with a dog. (T / F)
 3. The kingfisher's beak helped make trains louder. (T / F)
 4. Dolphins use ultrasound to communicate. (T / F)
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Part 3: Multiple Choice (18 pts)

Circle the correct answer.

1. **Which plant inspired the invention of Velcro?**
a) Rose b) Burdock c) Sunflower
 2. **Why was the Japanese bullet train redesigned?**
a) It was too slow. b) It was too noisy (sonic boom). c) It was too small.
 3. **In the city of Lavasa, building foundations are like:**
a) Tree roots b) Fish scales c) Bird nests
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Part 4: Cloze Test (Fill in the Blanks) (16 pts)

Use the words in the box to complete the sentences:

beak | hooks | water | nature

1. Nature has worked for millions of years to find simple solutions in _____.
 2. Burdock burrs have tiny _____ that stick to clothes.
 3. A kingfisher can dive into the _____ very quickly.
 4. The front of the bullet train looks like a bird's _____.
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Part 5: Open-Ended Questions (20 pts)

Answer the questions in 1-2 sentences.

1. What are the three types of biomimicry mentioned in the video?
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2. How can biomimicry help the Earth?
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Part 6: Design Challenge! (10 pts)

Think of a problem: (Example: How to keep your feet dry in the rain).

Look at nature: (Example: A duck's feathers or a lotus leaf).

Your Invention: Draw or describe a new idea inspired by an animal or a plant!
