

Case #1: Jim Springer and Jim Lewis

The twin boys were separated at birth, being adopted by different families. Unknown to each other, both families named the boys Jim. And here the coincidences just begun. Both James grew up not even knowing of the other, yet both sought law-enforcement training, both had abilities in mechanical drawing and carpentry, and each had married women named Linda. They both had sons whom one named James Alan and the other named James Allan. The twin brothers also divorced their wives and married other women – both named Betty. And they both owned dogs which they named Toy. They both liked the same beer and both had a dog they both named Toy. Jim Lewis and Jim Springer finally met in February 9, 1979 after 39 years of being separated.

Case #2: Oskar Stohr and Jack Yufe

When they arrived and met at the airport, Jack and Oskar both wore wire-rimmed glasses, mustaches, and two-pocket shirts with epaulets. Over the course of the week-long study, the two men discovered that they had much more in common than they had thought twenty-five years prior. They both liked spicy foods and sweet liqueurs, dipped buttered toast in their coffee, and flushed the toilet before and after using it. They both excelled at sports, had trouble with math, and had tendencies to fall asleep in front of the television. They even had the same habit of storing rubber bands on their wrists.

They discovered an even more extraordinary similarity one evening when they decided to visit a hypnotist together. The hypnotist, starting his routine, waited for absolute silence in the room before counting backwards to attempt to induce a trance. During this silence, Oskar felt an incredible urge to sneeze, and let it out in a deafening blast. But it wasn't a real sneeze. Oskar faked it. His wife soon explained that it was his idea of a joke. He liked to sneeze during uncomfortable silences. Jack was taken aback—he had the same tendency. Whenever he was in a crowded elevator filled with the air of awkward silence, he felt the same irresistible urge to fake a sneeze. He found it humorous and thoroughly enjoyable, though he knew it was an odd thing to do. And now, he found out, his twin had the exact same oddity.

Use the above two stories to answer the following questions:

1. Do identical twins have inherited or acquired natural physical traits (what they look like)?
2. What physical traits are evidence that twins have the same DNA?
3. What behavioral traits are evidence that twins have the same DNA?
4. Do identical twins always have the same behavioral traits?
5. If they have different traits, are those traits inherited or acquired?
6. What can you infer (assume) about the physical traits offspring of organisms that reproduce ASEXUALLY?
7. What can you infer about the behavioral traits of offspring of organisms that reproduce SEXUALLY?
8. What is an example of a physical trait that you inherited from your parents?
9. What is an example of a physical trait that you acquired while living with your parents?
10. What is an example of a behavioral trait that you inherited from your parents?
11. What is an example of a behavioral trait that you acquired while living with your parents?

