

Getting familiar with . . . informal experiments

A. For each of the following informal experiments, explain which of Mill's Methods is being used.

1. You get sick after eating lobster for the first time and conclude that it probably was the lobster.

2. "Why in the heck are there dead worms on the front porch for the past three weeks I have taken out the trash for trash collection on Monday mornings," you think to yourself as you step over a dead worm to place the trash in the bin located in your driveway. Then, you remember that it had rained heavily for the past three Sunday nights, which you figure brought out many worms, that subsequently died on the porch because they could not get back to the soil.

3. Susan has to weigh her cat at the vet, but the cat won't sit still on the scale by herself. So, the nurse records Susan's weight first, which is 120 pounds. Then she has Susan and her cat step on the scale, notes that the scale now reads 130 pounds, and records the cat's weight as ten pounds. Which of Mill's methods did the nurse utilize?

4. Al, Ben, and Courtney go out to eat for dinner and have the following:
 - a. Al: chicken soup, spinach salad, soufflé, ice cream sundae
 - b. Ben: chicken soup, mushroom soup, ice cream sundae, coffee
 - c. Courtney: Soufflé, pie, teaAl and Courtney both get sick and vomit all night long. Why do you think so? And which of Mill's methods did you use to arrive at the conclusion?

5. Zoe sneezed every time she went into the basement. Her parents tried to figure out what was causing it by vacuuming, dusting, and scrubbing the floors, in various combinations, and having her go in the basement afterward. Zoe still sneezed, no matter if the basement was: vacuumed, but not dusted or scrubbed; dusted, but not vacuumed or scrubbed; scrubbed but not vacuumed or dusted; vacuumed and dusted, but not scrubbed; vacuumed and scrubbed, but not dusted; dusted and scrubbed, but not vacuumed; vacuumed, dusted, *and* scrubbed. One thing that stayed the same throughout the vacuuming, dusting, and scrubbing events, however, was that the fabric softener sheets (which gave off a strong lilac smell) were present every time Zoe went into the basement. Zoe's parents then removed the fabric softener sheets and sent Zoe into the basement. Finally, she stopped sneezing! They put the fabric softener sheets back, and guess what happened? She sneezed again. They have since stopped using the fabric softener sheets and Zoe no longer sneezes when she goes into the basement. So, from this whole ordeal, Zoe and her parents reasoned that the fabric softener sheets were what caused the sneezing.

Getting familiar with . . . informal experiments

B. Set up one of Mill's Methods to identify the cause of each of the following observations.

1. "I suddenly feel sick after eating at that restaurant. How could I tell if it was something I ate?"
2. "I think one of my medications is making me dizzy. How can I tell which one?"
3. "There are at least four reasons for my headaches: stress, allergies, head injury, and brain tumors. How can I tell which one?"
4. "The longer I listen to Dr. Arp, the more tired I become. How can I tell whether it is his lecture-style that's making me sleepy?"
5. "When I visit some people, I get really hungry, when I visit others I don't. What might cause that?"