

What's Going On???

1. Your friends just called and invited you to go mountain biking. You accepted their invitation, though it has been a long time since you have ridden your bicycle. Your friends pick you up in their car; as you are driving to the biking trails, you begin to wonder what the chances are that your bike will break down as you are riding.

Question: How would you assess the possibility that your bicycle might fail during the bike ride?



2. Your company has recently developed a new pesticide. Before the regulatory authorities can allow it on the market, it must be tested for any toxic effects on humans and on species the pesticide was not intended to control.

Question: How would you begin to assess the toxicity of the new pesticide?



3. You have been going to school in the same building for the past five years. Over time you have noticed that more and more students are coming to class with inhalers in case they have an asthma attack. You begin to wonder if this trend is connected to something in the school environment.

Question: How would you begin to assess whether or not there is a possible relationship between spending time in your school building and having asthma?



4. After you finished washing the dishes last night, you noticed that you couldn't turn the water completely off and that there was a steady drip coming from the faucet. You intended to inform your parents but forgot to do so before going to bed, as well as before leaving the house this morning for your week-long family vacation. The more you think about it, the more you wonder if the sink will overflow before you return from your trip.

Question: How would you assess the probability that the leaky faucet will result in the sink overflowing and flooding the kitchen?