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| Causation vs. Correlation: What's the Difference? Read the definitions and examples carefully to understand the difference between causation and correlation.    Definitions:    Causation: When one event causes another event to happen. There is a cause-and-effect relationship. Example: Eating lots of sugary snacks causes cavities. Correlation: When two events happen at the same time or in a similar pattern but one does not necessarily cause the other. Example: Ice cream sales and drowning incidents both increase in the summer, but eating ice cream does not cause drowning. |

### Decide if the sentence is an example of causation or correlation

###### **When there is more sunlight, plants tend to grow faster.**

correlation causation

###### **As the temperature increases, the number of people swimming at the beach also increases.**

causation correlation

###### **Deforestation leads to a decrease in the number of animal species in an area.**

correlation causation

###### **Areas with higher levels of air pollution have higher rates of respiratory diseases.**

correlation causation

###### **The more time spent outside, the more likely a person is to have a sunburn.**

causation correlation

###### **Regions with higher rainfall have more lush vegetation.**

correlation causation

###### **During full moon, there is an increase in the number of animal attacks reported.**

causation correlation

###### **The presence of certain types of fungi in soil is associated with the growth of healthier plants.**

causation correlation

Explain why the sentence 'As the temperature increases, the number of people swimming at the beach also increases' is an example of correlation.

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Describe why the sentence 'Deforestation leads to a decrease in the number of animal species in an area' is an example of causation.

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Explain why the sentence 'The presence of certain types of fungi in soil is associated with the growth of healthier plants' is an example of causation.

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## Your turn to use causation and correlation

### Write a short story that includes both a causal relationship and a correlation.

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### Create a comic strip for your short story

Panel 1...

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