1 Natural Language Concepts

List of questions and answers for causal world queries.

1.1 Natural Language Concepts - Real World

| level to rise. Do rising temperatures cause the sea level to rise?" | | | |
|--|--|--|--|
| GPT-4 Yes, rising temperatures cause the sea level to rise. | | | |
| GPT-3 Rising temperatures can cause the sea level to rise if the rising tempera- | | | |
| tures cause the poles to melt. | | | |
| Luminous A: The sea level is rising because of the thermal expansion of the water. | | | |
| The thermal expansion of water is caused by the increase in temperature. | | | |
| $\lceil continued \rceil$ | | | |
| OPT Yes. | | | |
| "If rising temperatures cause people to walk faster and fast walking people cause | | | |
| the sea level to rise. Do rising temperatures cause the sea level to rise?" | | | |
| GPT-4 Yes, according to the given conditions, rising temperatures indirectly | | | |
| cause the sea level to rise. This is because the rising temperatures cause | | | |
| people to walk faster, and fast walking people cause the sea level to rise. | | | |
| Therefore, there is a chain of cause and | | | |
| GPT-3 There is no clear causal link between rising temperatures and the sea | | | |
| level. While rising temperatures may cause people to walk faster, there | | | |
| is no evidence that this would cause the sea level to rise. | | | |
| Luminous A: No, the sea level is rising because of the melting of the ice caps. | | | |
| Q: Is the sea level rising because of the melting of the ice caps? | | | |
| [continued] | | | |
| OPT No, but the rate of rise does. | | | |

"If rising temperatures cause the poles to melt and melting poles cause the sea

"If rising temperatures cause people to walk faster and melting poles cause the sea level to rise. Do rising temperatures cause the sea level to rise?"

GPT-4 Yes, rising temperatures can cause the sea level to rise indirectly. The increase in temperature can cause polar ice caps to melt, which in turn raises the sea level.

GPT-3 Rising temperatures do not cause the sea level to rise.

Luminous A: The sea level is rising because the Earth is warming.

A: The sea level is rising because the Earth is warming. [repeating]

OPT The answer is yes.

The sea level is rising because the oceans are warming. The oceans are warming because the atmosphere is warming. The atmosphere is warming because the Earth is warming. The Earth is warming because the Sun is warming. The Sun is warming because the Earth is orbiting the Sun. The Earth is orbiting the Sun because the Sun is a star. The Sun is a star because it is a nuclear fusion reactor. The Earth is orbiting the Sun becaus [repeating]

"If fast walking people cause the poles to melt and melting poles cause the sea level to rise. Do fast walking people cause the sea level to rise?"

GPT-4 Yes, according to the logic presented, fast walking people would cause the sea level to rise.

GPT-3 No, but they may contribute to it.

Luminous A: No, they don't.

The sea level is determined by the amount of water in the oceans, and the amount of water in the oceans is determined by the amount of water in the atmosphere, and the amount of water in

[repeating]

OPT Yes.

"If rising temperatures cause the poles to melt and melting poles cause people to walk faster. Do rising temperatures cause the sea level to rise?"

GPT-4 The text does not provide information on whether rising temperatures cause the sea level to rise.

GPT-3 There is no direct causal relationship between rising temperatures and the sea level. However, rising temperatures can cause the poles to melt, which would in turn cause the sea level to rise.

Luminous A: The sea level is not rising.

The sea level is not rising.

[continued]

OPT The answer is yes.

The sea level is rising because the polar ice caps are melting. The polar ice caps are melting because the temperature is rising. The temperature is rising because the greenhouse gases are increasing. The greenhouse gases are increasing because the fossil fuels are being burned. The fossil fuels are being burned because the population is increasing. The population is increasing because the fossil fuels are being burned. [continued]

1.2 Natural Language Concepts - Imaginary Concepts

"If Quab causes Blaong and Blaong causes Wahrg. Does Quab cause Wahrg?"

GPT-4 Yes, if Quab causes Blaong and Blaong causes Wahrg, then it can be inferred that Quab indirectly causes Wahrg.

GPT-3 There is no definitive answer to this question as the relationship between Quab and Wahrg is not fully understood. However, it is possible that Quab may play a role in the development of Wahrg.

Luminous A:

The answer is no.

[continued]

OPT I think it's more like Wahrg causes Quab.

| "If Quab causes Blaong and Blaong causes Wahrg. Does Wahrg cause Quab?" | | |
|---|--|--|
| GPT-4 | The information given does not indicate that Wahrg causes Quab. It | |
| | only states that Quab causes Blaong and Blaong causes Wahrg. Unless | |
| | otherwise stated, causality does not necessarily work in reverse. | |
| GPT-3 | There is no definitive answer to this question as the causal relationships | |
| | between Quab, Blaong, and Wahrg are not fully understood. However, it | |
| | is possible that Wahrg could cause Quab, as Wahrg is known to influence | |
| Luminous A: | | |
| | The answer is no. | |
| | [continued] | |
| OPT | I think it's more like Wahrg causes Blaong, Blaong causes Quab, and | |
| | Quab causes Wahrg. | |
| "If Wahrg causes Quab and Quab causes Blaong. Does Wahrg cause Blaong?" | | |
| GPT-4 | Yes, if Wahrg causes Quab and Quab causes Blaong, it can be inferred | |
| | that Wahrg indirectly causes Blaong. | |
| GPT-3 | There is not enough information to determine whether or not Wahrg | |
| | causes Blaong. | |
| Luminous A: | | |
| | The answer is no. | |
| | [continued] | |
| OPT | I think you're on to something here. | |

"If Wahrg causes Quab and Quab causes Blaong. Does Blaong cause Wahrg?"

GPT-4 Not necessarily. The relationship between Wahrg, Quab, and Blaong as given suggests a one-way causal chain (Wahrg -¿ Quab -¿ Blaong). It does not imply that Blaong causes Wahrg. However,

GPT-3 There is no definitive answer to this question as the relationship between Wahrg, Quab, and Blaong is not fully understood. However, it is possible that Blaong does cause Wahrg, as the two seem to be linked

Luminous A:

The answer is no.

[continued]

OPT I think it's more like: Wahrg causes Quab and Quab causes Blaong. Blaong causes Wahrg. Wahrg causes Blaong. Blaong causes Wahrg. Wahrg causes Quab. Quab causes Blaong. Blaong causes Wahrg. Quab causes Quab. Quab causes Blaong. Blaong causes Wahrg. Wahrg causes Quab.

I think you're right.

[repeating]

"If Blaong causes Wahrg and Wahrg causes Quab. Does Blaong cause Quab?"

GPT-4 Yes, if Blaong causes Wahrg and Wahrg causes Quab, it can be inferred that Blaong indirectly causes Quab.

GPT-3 There is no definitive answer to this question as the relationship between Blaong, Wahrg, and Quab is not fully understood. However, it is possible that Blaong may play a role in the development of Quab.

Luminous A:

The answer is no.

[continued]

OPT I think you mean Blaong causes Wahrg and Wahrg causes Quab. I think you mean Blaong causes Wahrg and Wahrg causes Quab. [repeating]

"If Blaong causes Wahrg and Wahrg causes Quab. Does Quab cause Blaong?" GPT-4 The information given does not indicate that Quab causes Blaong. It only states that Blaong causes Wahrg and Wahrg causes Quab. Unless further information is provided, we cannot assume that Quab causes Blaong. GPT-3 There is no definitive answer to this question as the causal relationships between Blaong, Wahrg, and Quab are not fully understood. It is possible that Quab does cause Blaong, but further research is needed to confirm this Luminous A: The answer is no. [continued] OPT I think you mean Blaong causes Wahrg and Wahrg causes Quab. I think you mean Blaong causes Wahrg and Wahrg causes Blaong. [repeating]

1.3 Natural Language Concepts - Mixed Concepts

"If Quab causes Blaong and Blaong causes the sea level to rise. Does Quab cause the sea level to rise?"

GPT-4 Yes, if Quab causes Blaong and Blaong causes the sea level to rise, then it can be inferred that Quab indirectly causes the sea level to rise.

GPT-3 There is no definitive answer to this question as the relationship between Quab and the sea level is not fully understood. It is possible that Quab could contribute to the sea level rising, but it is not certain.

Luminous A:

The answer is no.

[continued]

OPT Yes.

"If Quab causes Blaong and Aiftan causes the sea level to rise. Does Quab cause the sea level to rise?"

GPT-4 The text does not provide information that Quab causes the sea level to rise.

GPT-3 There is no direct causal relationship between Quab and the sea level. Aiftan's causing the sea level to rise could be due to a number of factors, including the release of greenhouse gases into the atmosphere, which could in turn cause

Luminous A:

The answer is no.

[continued]

OPT I think it's more like if you put a bucket of water in a room and then take it out, the room will be a little bit wetter.

"If rising temperatures cause Quab and Quab causes the sea level to rise. Do rising temperatures cause the sea level to rise?"

GPT-4 Yes, rising temperatures cause the sea level to rise.

GPT-3 There is evidence that rising temperatures are causing the sea level to rise.

Luminous A: The sea level is rising because of the thermal expansion of the water. The thermal expansion of water is caused by the increase in temperature. [continued]

OPT Yes.

| "If rising temperatures cause Quab and Aiftan causes the sea level to rise. Does | | |
|---|---|--|
| rising temperatures cause the sea level to rise?" | | |
| GPT-4 | The text suggests that rising temperatures cause Quab, and Quab in turn causes Aiftan, which causes the sea level to rise. Therefore, it can | |
| GPT-3 | be inferred that rising temperatures indirectly cause the sea level to rise. There is evidence that rising temperatures can cause the sea level to rise, as warmer water takes up more space than cooler water. Additionally, | |
| melting ice caps and glaciers can also contribute to rising sea levels. Luminous A: The sea level is not rising. The sea level is not rising. | | |
| | [continued] | |
| ОРТ | The sea level is rising because of the melting of the ice caps and glaciers. The melting of the ice caps and glaciers is caused by the rising temperatures. | |
| | The sea level is rising because of the melting of the ice caps and glaciers. The melting of the ice caps and glaciers is caused by the rising temper- | |
| | atures. [repeating] | |