

Table 23: Few-shot exemplars for full chain of thought prompt for the coinflip task.

PROMPT FOR COIN FLIP

Q: Q: A coin is heads up. Ka flips the coin. Sherrie flips the coin. Is the coin still heads up?

A: The coin was flipped by Ka and Sherrie. So the coin was flipped 2 times, which is an even number. The coin started heads up, so after an even number of flips, it will still be heads up. So the answer is yes.

Q: A coin is heads up. Jamey flips the coin. Teressa flips the coin. Is the coin still heads up?

A: The coin was flipped by Jamey and Teressa. So the coin was flipped 2 times, which is an even number. The coin started heads up, so after an even number of flips, it will still be heads up. So the answer is yes.

Q: A coin is heads up. Maybelle flips the coin. Shalonda does not flip the coin. Is the coin still heads up?

A: The coin was flipped by Maybelle. So the coin was flipped 1 time, which is an odd number. The coin started heads up, so after an odd number of flips, it will be tails up. So the answer is no.

Q: A coin is heads up. Millicent does not flip the coin. Conception flips the coin. Is the coin still heads up?

A: The coin was flipped by Conception. So the coin was flipped 1 time, which is an odd number. The coin started heads up, so after an odd number of flips, it will be tails up. So the answer is no.

Q: A coin is heads up. Sal flips the coin. Raymond does not flip the coin. Is the coin still heads up?

A: The coin was flipped by Sal. So the coin was flipped 1 time, which is an odd number. The coin started heads up, so after an odd number of flips, it will be tails up. So the answer is no.

Q: A coin is heads up. Conception flips the coin. Kristian does not flip the coin. Is the coin still heads up?

A: The coin was flipped by Conception. So the coin was flipped 1 time, which is an odd number. The coin started heads up, so after an odd number of flips, it will be tails up. So the answer is no.

Q: A coin is heads up. Inga does not flip the coin. Elanor does not flip the coin. Is the coin still heads up?

A: The coin was flipped by no one. So the coin was flipped 0 times. The coin started heads up, and it was not flipped, so it is still heads up. So the answer is yes.

Q: A coin is heads up. Ryan flips the coin. Shaunda flips the coin. Is the coin still heads up?

A: The coin was flipped by Ryan and Shaunda. So the coin was flipped 2 times, which is an even number. The coin started heads up, so after an even number of flips, it will still be heads up. So the answer is yes.

Table 24: Few-shot exemplars for full chain of thought prompt for CSQA. There are newlines between the answer choices that are omitted in the table for space reasons.

PROMPT FOR CSQA
Q: What do people use to absorb extra ink from a fountain pen? Answer Choices: (a) shirt pocket (b) calligrapher's hand (c) inkwell (d) desk drawer (e) blotter
A: The answer must be an item that can absorb ink. Of the above choices, only blotters are used to absorb ink. So the answer is (e).
Q: What home entertainment equipment requires cable? Answer Choices: (a) radio shack (b) substation (c) television (d) cabinet
A: The answer must require cable. Of the above choices, only television requires cable. So the answer is (c).
Q: The fox walked from the city into the forest, what was it looking for? Answer Choices: (a) pretty flowers (b) hen house (c) natural habitat (d) storybook
A: The answer must be something in the forest. Of the above choices, only natural habitat is in the forest. So the answer is (b).
Q: Sammy wanted to go to where the people were. Where might he go? Answer Choices: (a) populated areas (b) race track (c) desert (d) apartment (e) roadblock
A: The answer must be a place with a lot of people. Of the above choices, only populated areas have a lot of people. So the answer is (a).
Q: Where do you put your grapes just before checking out? Answer Choices: (a) mouth (b) grocery cart (c)super market (d) fruit basket (e) fruit market
A: The answer should be the place where grocery items are placed before checking out. Of the above choices, grocery cart makes the most sense for holding grocery items. So the answer is (b).
Q: Google Maps and other highway and street GPS services have replaced what? Answer Choices: (a) united states (b) mexico (c) countryside (d) atlas
A: The answer must be something that used to do what Google Maps and GPS services do, which is to give directions. Of the above choices, only atlases are used to give directions. So the answer is (d).
Q: Before getting a divorce, what did the wife feel who was doing all the work? Answer Choices: (a) harder (b) anguish (c) bitterness (d) tears (e) sadness
A: The answer should be the feeling of someone getting divorced who was doing all the work. Of the above choices, the closest feeling is bitterness. So the answer is (c).

Table 25: Few-shot exemplars for full chain of thought prompt for StrategyQA.

PROMPT FOR STRATEGYQA
Q: Do hamsters provide food for any animals?
A: Hamsters are prey animals. Prey are food for predators. Thus, hamsters provide food for some animals. So the answer is yes.
Q: Could Brooke Shields succeed at University of Pennsylvania?
A: Brooke Shields went to Princeton University. Princeton University is about as academically rigorous as the University of Pennsylvania. Thus, Brooke Shields could also succeed at the University of Pennsylvania. So the answer is yes.
Q: Yes or no: Hydrogen's atomic number squared exceeds number of Spice Girls?
A: Hydrogen has an atomic number of 1. 1 squared is 1. There are 5 Spice Girls. Thus, Hydrogen's atomic number squared is less than 5. So the answer is no.
Q: Yes or no: Is it common to see frost during some college commencements?
A: College commencement ceremonies can happen in December, May, and June. December is in the winter, so there can be frost. Thus, there could be frost at some commencements. So the answer is yes.
Q: Yes or no: Could a llama birth twice during War in Vietnam (1945-46)?
A: The War in Vietnam was 6 months. The gestation period for a llama is 11 months, which is more than 6 months. Thus, a llama could not give birth twice during the War in Vietnam. So the answer is no.
Q: Yes or no: Would a pear sink in water?
A: The density of a pear is about $0.6g/cm^3$, which is less than water. Objects less dense than water float. Thus, a pear would float. So the answer is no.

Table 26: Few-shot exemplars for full chain of thought prompt for Date Understanding.

PROMPT FOR DATE UNDERSTANDING
Q: 2015 is coming in 36 hours. What is the date one week from today in MM/DD/YYYY?
A: If 2015 is coming in 36 hours, then it is coming in 2 days. 2 days before 01/01/2015 is 12/30/2014, so today is 12/30/2014. So one week from today will be 01/05/2015. So the answer is 01/05/2015.
Q: The first day of 2019 is a Tuesday, and today is the first Monday of 2019. What is the date today in MM/DD/YYYY?
A: If the first day of 2019 was Tuesday, then 01/01/2019 was a Tuesday. Today is the first monday, would be six days later. So today is 01/07/2019. So the answer is 01/07/2019.
Q: The concert was scheduled to be on 06/01/1943, but was delayed by one day to today. What is the date 10 days ago in MM/DD/YYYY?
A: One day after 06/01/1943 is 06/02/1943, so today is 06/02/1943. 10 days before today is 05/23/1943. So the answer is 05/23/1943.
Q: It is 4/19/1969 today. What is the date 24 hours later in MM/DD/YYYY?
A: Today is 04/19/1969. 24 hours later is one day after today, which would be 04/20/1969. So the answer is 04/20/1969.
Q: Jane thought today is 3/11/2002, but today is in fact Mar 12, which is 1 day later. What is the date 24 hours later in MM/DD/YYYY?
A: Today is 03/12/2002. So the date 24 hours later will be 03/13/2002. So the answer is 03/13/2002.
Q: Jane was born on the last day of February in 2001. Today is her 16-year-old birthday. What is the date yesterday in MM/DD/YYYY?
A: The last day of February is the 28th, so Jane was born on 02/28/2001. Today is her 16-year old birthday, so today is 02/28/2017. So yesterday was 02/27/2017. So the answer is 02/27/2017.