

Mixed Knowledge Type:

The following problems were found to require more than one instance of commonsense knowledge. The required instances belong to any one of the 12 categories mentioned in this work.

1. Tom threw his schoolbag down to Ray after he reached the bottom of the stairs. Who reached the bottom of the stairs?

Correct Answer: Ray.

Knowledge Instances:

E [instance_of: reach bottom, agent: X [instance_of: entity]]

causes

P [instance_of: at bottom, is_trait_of: Y [instance_of: entity]]

implies

X=Y

P [instance_of: at bottom, is_trait_of: X [instance_of: entity]]

causes

E [instance_of: throw down, destination: Y [instance_of: entity]]

implies

X=Y

2. The dog chased the cat, which ran up a tree. It waited at the top. Which waited at the top?

Correct Answer: The cat.

Knowledge Instances:

E [instance_of: run up, agent: X [instance_of: entity]]

causes

P [instance_of: at top, is_trait_of: Y [instance_of: entity]]

implies

X=Y

P [instance_of: at top, is_trait_of: X [instance_of: entity]]

causes

E [instance_of: wait at top, theme: Y [instance_of: entity]]

implies

X=Y

Similarly, following are the other examples which require more than one knowledge instance for correct disambiguation

3. Mary tucked her daughter Anne into bed, so that she could work. Who is going to work?

Correct Answer: Mary.

4. Bob paid for Charlie's college education, but now Charlie acts as though it never happened. He is very hurt. Who is hurt?

Correct Answer: Bob

5. Adam can't leave work here until Bob arrives to replace him. If Bob had left home for work on time, he would be gone by this time. Who would be gone?

Correct Answer: Adam

6. Ann asked Mary what time the library closes, but she had forgotten. Who had forgotten?

Correct Answer: Mary.

7. Billy cried because Toby wouldn't share his toy. Who owned the toy?

Correct Answer: Toby

8. Billy cried because Toby wouldn't accept his toy. Who owned the toy?

Correct Answer: Billy

9. There are too many deer in the park, so the park service brought in a small pack of wolves. The population should decrease over the next few years. Which population will decrease?

Correct Answer: the deer.

10. Fred was supposed to run the dishwasher, but he put it off, because he wanted to watch TV. But the show turned out to be boring, so he changed his mind and turned it on. What did Fred turn on?

Correct Answer: The dishwasher.

11. They broadcast an announcement, but a subway came into the station and I couldn't hear it. What couldn't I hear?

Correct Answer: the announcement.

12. The sun was covered by a thick cloud all morning, but luckily, by the time the picnic started, it was out. What was out?

Correct Answer: the sun.

13. As Andrea in the crop duster passed over Susan, she could see the landing gear. Who could see the landing gear?

Correct Answer: Susan

14. They broadcast an announcement, but a subway came into the station and I couldn't hear over it. What couldn't I hear over?

Correct Answer: the subway.

15. We had hoped to place copies of our newsletter on all the chairs in the auditorium, but there were simply not enough of them. There are not enough of what?

Correct Answer: copies of the newsletter.

16. The sun was covered by a thick cloud all morning, but luckily, by the time the picnic started, it was gone. What was gone?

Correct Answer: The cloud.

17. Bob was playing cards with Adam and was way ahead. If Adam hadn't had a sudden run of good luck, he would have won. Who would have won?

Correct Answer: Bob.

18. Look! There is a shark swimming right below that duck! It had better get away to safety fast! What needs to get away to safety?

Correct Answer: The duck.

19. Look! There is a minnow swimming right below that duck! It had better get away to safety fast! What needs to get away to safety?

Correct Answer: The minnow.

20. Fred is the only man still alive who remembers my great-grandfather. He was a remarkable man. Who was a remarkable man?

Correct Answer: my great-grandfather.