

Inferences

"To infer," means to draw reasonable meaning, conclusions, or consequences from information, knowledge, or evidence.

The aim of these exercises is to increase students' abilities to infer. The first part involves brainstorming potential responses. The second part is designed to cultivate students' abilities to create questions that will allow them to reach conclusions from given information. These questions can be used as oral or written exercises, in groups or individually.

As a teacher, you should attempt to measure the student's progress in generating potential answers and questions.

In part 3, each page is designed to be a worksheet. Use one worksheet each day, taking time to go over why each incorrect answer is wrong, and how one arrives at the correct answer. Use the worksheets over the course of the semester to build thinking skills. Keep track of how well students do on these tests so that the students see that practice increases their ability.

Part 1: Generating possible answers.

Give the class the following statement:

Statement: Sharon and Donna talk every day.

Ask the class the following question:

Question: What is their relationship? (In other words, what can we infer about Sharon and Donna's relationship from the fact that they talk every day?)

What are some possible answers? (Students write answers)

- Sharon and Donna are best friends.
- Sharon and Donna are friends.
- Sharon and Donna are related.
- Sharon and Donna work together.
- Sharon and Donna go to school together.

Explain that different answers probably grow out of different experiences. For example, perhaps someone gave the answer, "Sharon and Donna are best friends" because the person who gave that answer talks to her best friend every day.

As students hear answers from other students, they will realize what other answers are possible.

Many possible answers create the need for questions that will help us determine which of the answers is true, or most likely.

What questions could we ask to determine which of the above is likely?

- Are Donna and Sharon close to the same age?
- Do they talk on the phone when they talk, or do they talk in person?
- How long do they talk?
- Do they live in the same city?

Statement: Philip was apprehended driving a stolen vehicle.

Question: Why was Philip driving a stolen vehicle? (In other words, what can we infer about the reasons for Philip driving a stolen vehicle from the fact that he was driving a stolen vehicle?)

What are some possible answers? (Students write answers)

- Philip stole the car and was driving it away.
- Philip was driving the car after buying it from someone else.
- Philip did not know that the car was stolen, even though he was driving it.
- Philip is a police officer who found the car and was driving it to the station.

What questions seem essential to determine if he is guilty of a crime?

- Did he know that the vehicle was stolen?
- What was his reaction when he was apprehended?
- Under what circumstances was he apprehended?
- Did he admit to anything?
- Did he try to escape when he was apprehended?
- Has Philip ever been guilty before of stealing a vehicle?
- Did he steal the vehicle?

Statement: Jerry has lots of books in his house.

Question: Why does he have so many books? (In other words, what can we infer about Jerry and his books from the fact that he has many of them?)

What are some possible answers?

He is a book collector.

He owns a bookstore and brings many books home.

He works at a library and brings home the discards.

His brother works for a publishing house.

He inherited them from a family member.

What questions could you ask to determine which of the above is likely?

Does Jerry work in a library?

Does Jerry spend a lot of money on books?

Does Jerry belong to book clubs?

Does Jerry keep all his books?

Has Jerry had these books for a long time?

Part 2: Inferring from given knowledge.

Circumstance: A patient comes into the office with badly swollen legs. He complains of pain in his joints. What questions might you ask to better determine what is wrong with him?

Possible answers:

How long have his legs been swollen?
Did he notice sudden or gradual swelling?
How long have his joints hurt?
Are there days or times when his joints do not hurt?
Has he gained weight recently?
How long has it been since his last physical?
What medications does he take?
Has he changed medications recently?
Is he allergic to any foods?
Have his eating habits changed since before the legs swelled?

Circumstance: A woman complains to her dentist that her gums are swollen and red. What questions might he ask her to determine what is wrong?

Circumstance: The gate to your patio will not close properly. What might you do to determine what is wrong with the gate?

Circumstance: A man brings his car into your auto shop. He says that there is a funny noise under the hood and that the car has a hard time starting in the mornings, but that it runs fine during the day. What questions might you ask to better determine what is wrong with the car?

Circumstance: A library recently has lost a lot of books. No one can figure out what is happening to the books. What and who might you ask in order to determine why the books are disappearing?

Part 3: Reaching Reasonable Conclusions

Answer Key:

1. B
2. D
3. A
4. B
5. A, B
6. A, C, A
7. B
8. D
9. C
10. D
11. B
12. A
13. C
14. A
15. D
16. C
17. A
18. C
19. A
20. D, A, A

Worksheet 1

1. Circumstance: You drive down a street at 9:00 AM on a Monday. The street is normally very busy, but today there are very few cars on the road.

What is most likely the reason for this?

- a) Your clock is wrong.
- b) It is a holiday.
- c) There is something terribly wrong.
- d) Lots of people stayed home from work.

2. Circumstance: You come home during the middle of the day and find that your front door is wide open. You live alone. You live in a large apartment building with many neighbors.

What is most likely the reason for your door being open?

- a) Someone is burglarizing your apartment.
- b) The apartment manager opened the door to fix something.
- c) Someone you know opened your door.
- d) You left the door open accidentally.

3. Circumstance: You are a girl, and you meet a new guy that you like. He is 28 years old, and very good-looking. When you ask him what he does for a living, he says that he is a carpenter, but that he is "between jobs" right now. You talk on the phone a few times; sometimes he calls you, and sometimes you call him. He usually calls you during the day. On your first date, he picks you up in a beautiful new BMW 525i. He takes you to a wonderful restaurant, where you order expensive meals and wine, which he pays for with a credit card, leaving a large tip.

What would be reasonable to think about the man?

- a) He is probably not a carpenter.
- b) He has inherited a lot of money.
- c) He really likes you a lot.
- d) He seems like a great guy to date.

4. Circumstance: The gate to your patio will not close properly.

What is the most important thing to do?

- a) Determine why it will not close properly.
- b) Fix it so that it closes.
- c) Find out who broke it.
- d) Close it.

Worksheet 2

5. Circumstance: In 2001, Ecuador converted its currency to the dollar. Since that time, Ecuador's economy has been more stable than ever before.

Which one of the following is most likely to be true?

- a) Ecuador's economy is more stable because it converted its currency to the dollar.
- b) The dollar is the strongest currency in the world.
- c) Other countries invested in Ecuador once it converted its currency.
- d) Ecuador's international loans were forgiven because of the conversion.

Which one of the following is probably false?

- a) Ecuador's economy is also more prosperous.
- b) Ecuador converted because Chile converted.
- c) Other countries will now invest more in Ecuador.
- d) Ecuador's economy was less stable before converting to the dollar.

6. Circumstance: A friend develops shortness of breath while jogging that does not get better once she stops.

Which of the following should you probably do?

- a) Call 911 from your cell phone.
- b) Tell her to calm down and breathe deeply.
- c) Call her husband and ask him to come get her.
- d) Ask her to wait for you on a nearby bench while you finish jogging, and then return for her once she has a chance to rest.

What is probably the worst thing that could be happening to her?

- a) She is really tired.
- b) She is pregnant.
- c) She is having a heart attack.
- d) She forgot to take her medication.

What should you probably not do?

- a) Tell her to keep jogging.
- b) Tell her to breathe deeply.
- c) Tell her to sit down and rest.
- d) Tell her to lie down on the grass.

Worksheet 3

7. Circumstance: A patient enters a doctor's office with a bruised eye, a bloody nose, and a cut on the forehead.

What would be the most reasonable thing to think?

- a) He was in a fight.
- b) He was probably in a fight.
- c) He was drinking.
- d) He was probably drinking.

8. Circumstance: In 1937, there were a huge number of political arrests in the Soviet Union. Many thousands of people were arrested, tried for treason, and executed or sentenced to prison terms. Historians have noted that the arrests followed shortly after an important governmental official named Kirov was murdered.

What is the most likely explanation for the large number of arrests?

- a) The arrests were reprisals for Kirov's murder.
- b) The USSR's leaders were trying to scare the populace into obedience.
- c) There was a civil war going on at the time.
- d) There is not enough information to draw a conclusion.

9. Circumstance: Someone says to you: "It's impossible to get a job with that company." Suppose that you knew ten people who tried to get a job with the company in question, and none of them were successful.

Which of the following statements is most reasonable?

- a) The company is not hiring.
- b) You can't get a job at the company, either.
- c) It is difficult to get a job with the company.
- d) The company is an international leader in textile production, and the textile market is slowing at this time of year.

10. Circumstance: You find someone by the road, bleeding badly. He is unconscious.

What are probably the best things to do?

- a) Administer mouth-to-mouth resuscitation, call 911, and then stop the bleeding.
- b) Stop the bleeding, call 911, and then administer mouth-to-mouth resuscitation.
- c) Stop the bleeding, and then call 911.
- d) Call 911, and then stop the bleeding.

Worksheet 4

11. Circumstance: Country "A" notices that a neighboring country has massive troop buildups along the border between the two countries. "A" also sees many planes from country "B" in its airspace daily. Country "A" receives information that country "B" has established large supply depots immediately behind the troops on the border.

What could country "A" reasonably conclude from this evidence?

- a) Country "B" is going to attack.
- b) Country "B" is likely to attack.
- c) Country "B" is worried that country "A" will attack.
- d) Country "B" is preparing to attack another country (not country "A").

12. Circumstance: You see a commercial in which a wealthy, beautiful couple is driving a beautiful car.

What would it be reasonable to conclude about the car?

- a) Absolutely nothing.
- b) Wealthy people probably drive this kind of car.
- c) Wealthy people prefer well-made cars.
- d) It would be fun to own a car like the one in the commercial.

13. Circumstance: You see lipstick on your boyfriend's shirt.

What can you probably conclude from this?

- a) He is probably having an affair.
- b) He probably was visiting with his mother.
- c) He probably had some contact with a woman.
- d) He was probably buying you something special.

14. Circumstance: Someone you know has gained a lot of weight in the past year.

What is most likely the reason for this?

- a) He has been eating too much and exercising too little.
- b) He has a thyroid problem.
- c) He is under a lot of stress.
- d) He lost his job and spends a lot of time sitting around.

Worksheet 5

15. Circumstance: You overhear two people speaking a language that you do not understand. They are making lots of gestures with their hands and speaking very loudly.

What is probably true of these people?

- a) They don't know how to speak English.
- b) They aren't from the United States.
- c) They are up to no good.
- d) Their culture is different from yours.

16. Circumstance: You read a long article about the dangers of traveling to Western Europe. The author says that many European tourist locations are prime targets for terrorist attacks. He mentions the bombing in the train station in Madrid, a plot to poison people in a London subway, and the fact that millions of people visit Rome during the summer.

What should you do?

- a) Ignore his warnings.
- b) Avoid Europe at all costs.
- c) Consider carefully where you go, and how much danger you think there really is.
- d) Consider traveling to Asia, which is much safer than Europe because there have been no terrorist attacks in China or Japan.

17. Circumstance: A scientist working in the high mountains in Bolivia noticed that a certain village almost never had any fires, despite the fact that the houses were made of wood and thatch, and there were many thunderstorms.

What might it be reasonable for the scientist to conclude?

- a) There is so little oxygen at high altitudes that it is difficult for things to catch on fire.
- b) The town is a very religious town, and God protects it from serious hazards, such as fire.
- c) The people in the town are so backwards that they do not know how to work with fire.
- d) The wood used in the houses comes from special trees that have resin that resists fires.

Worksheet 6

18. Circumstance: You have taken five quizzes in History class and failed every quiz. Other people in the class seem to be doing well on the quizzes.

What might be reasonable to conclude about this situation?

- a) You are probably not very smart.
- b) You are probably not studying the right material.
- c) You are probably not studying long enough.
- d) You will probably do well on the next quiz.

19. Circumstance: At your work, someone was fired for coming in late to work.

What might it be reasonable to conclude about this situation?

- a) If you come in late, you might be fired as well.
- b) The person who was fired had been late a lot of times.
- c) The boss was trying to get rid of the person who was fired, and his being late was a convenient excuse.
- d) The company is not doing very well and needs to cut back employees.

20. Circumstance: Your boss makes the following statement: "Our company is about to enter a new age. We're becoming more competitive than ever before. There are new challenges and new opportunities on the horizon. Those people who step up to the plate and accept the challenge will be the leaders of this company for years to come."

What would it be reasonable to conclude about your boss' speech?

- a) Your boss is about to lose his job and needs to inspire the workers.
- b) The company is about to become a world leader in its market.
- c) The company needs leaders for the future.
- d) Your boss is trying to inspire people to work harder.

What is your boss probably not saying?

- a) There will be layoffs very soon.
- b) The company is looking for people to work hard and become leaders.
- c) There have been recent changes in the company.
- d) People in the company will have opportunities for promotion.

Where is this company probably located?

- a) There is no way to know from this passage.
- b) In the United States.
- c) Outside the United States.
- d) In Great Britain.