Chapter 1 Test Bank

The Power of Critical Thinking

# Multiple Choice Questions

1. In what sense is critical thinking *systematic*?
	1. It leads to better understanding.
	2. It is caused by a state of mind.
	3. It involves distinct procedures and methods.
	4. It has practical implications.
2. When is a belief is worth accepting?
	1. When we have good reasons to accept it
	2. When it has not been proven wrong
	3. When it is accepted by our peers
	4. When it is consistent with our needs
3. Which of the following is true about opinions?
	1. They are all irrational.
	2. They help you make your way through the world.
	3. They cannot be critically evaluated because they are subjective.
	4. They are all equally valid.
4. What is the function of “rational standards”?
	1. To judge beliefs on a purely subjective rationality
	2. To judge beliefs based on culturally sensitive relativism
	3. To judge beliefs based on their emotive contents
	4. To judge beliefs on their reasoned support
5. Which of the following is true about cognitive biases?
	1. They only occur in the case of perception.
	2. They only occur in the case of memory.
	3. They are common errors of reasoning that psychologists have studied.
	4. They are very rare in humans.
6. If you passively accept beliefs that have been handed to you by your culture, then those beliefs are what?
	1. Critically examined
	2. Not really yours
	3. Worthy of rejection
	4. Worthy of acceptance
7. What does the word *critical* in critical thinking refer to?
	1. A fault-finding attitude
	2. Attempts to win an argument
	3. Using careful judgement or judicious evaluation
	4. A lack of respect for other people
8. Which term refers to any assertion that something is or is not the case?
	1. Statement
	2. Predicate
	3. Argument
	4. Premise
9. Which of the following is a statement?
	1. What’s for dinner?
	2. Toronto is the capital city of Canada.
	3. Shut the window!
	4. Passport please.
10. Which of the following is a statement?
	1. Pass the salt, please.
	2. My passport arrived just in time for me to fly to Europe.
	3. Happy Birthday!
	4. Say “Cheese.”
11. Which of the following is true of statements backed by good reasons?
	1. They are deserving of weak acceptance.
	2. They are beyond doubt.
	3. They are to be believed with certainty.
	4. They are worthy of strong acceptance.
12. What is a combination of statements, in which one is the conclusion, and the others are intended to provide reasons for accepting the conclusion, called?
	1. An argument
	2. A premise
	3. An illustration
	4. An explanation
13. When you are unable to assign any substantial weight at all to the reasons for or against a statement, what should you do?
	1. Suspend judgement.
	2. Flip a coin.
	3. Accept it.
	4. Reject it.
14. What term refers to a statement that the premises are intended to support?
	1. An argument
	2. An inference
	3. An explanation
	4. A conclusion
15. What is a statement intended to provide reasons for accepting a conclusion called?
	1. An illustration
	2. An argument
	3. A premise
	4. An inference
16. Which term refers to a group of statements in which some of them (the premises) are intended to support another of them (the conclusion)?
	1. Argument
	2. Chain argument
	3. Claim
	4. Reason
17. Which of the following best defines an argument?
	1. A group of statements that support a conclusion and the conclusion that those statements support
	2. A disagreement about any topic
	3. A statement, based on any information supportive of one position against another
	4. One statement that leads to the acceptance of another statement
18. What is a conclusion?
	1. The end
	2. An opinion
	3. An explanation
	4. A statement that premises are intended to support
19. What is the mental process of reasoning from a premise or premises to a conclusion based on those premises called?
	1. An explanation
	2. An argument
	3. An illustration
	4. An inference
20. What is inference?
	1. The process of validating the truthfulness of premises
	2. The process of evaluating arguments for validity
	3. The process of reasoning from premises to a conclusion
	4. The process of offering up false premises in an argument
21. What is the function of an explanation?
	1. To try to show that a statement is in dispute
	2. To try to prove that a statement is true
	3. To try to show that something is the case
	4. To try to show why or how something is the way it is
22. What is the difference between explanations and arguments?
	1. An argument is successful only if your opponent is convinced, but an explanation can be true even if your opponent does not believe it.
	2. Arguments give us reasons for believing that something is the case, while explanations tell us why or how something is the case.
	3. Explanations are a more reasonable practice.
	4. Arguments take less time.
23. Which term refers to words that frequently accompany arguments and signal that a premise or conclusion is present?
	1. Indicator words
	2. Argument components
	3. Indicator verbs
	4. Premises
24. Which of the following is NOT a series of premise indicators?
	1. For the reason that, in as much as, as indicated by
	2. For, the reason being, since
	3. Because, in view of the fact, given that
	4. As, due to the fact that, therefore
25. Which of the following is a premise indicator?
	1. Since
	2. Consequently
	3. Therefore
	4. Thus
26. Which of the following is NOT a series of conclusion indicators?
	1. It must be that, as a result, which means that
	2. Which implies that, consequently, it follows that
	3. We can conclude that, so, hence
	4. Due to the fact that, therefore, thus
27. Occasionally the conclusion of an argument can be disguised as what?
	1. A cognitive bias
	2. An indicator word
	3. An explanation
	4. A question
28. Which of the following is a conclusion indicator?
	1. Since
	2. Hence
	3. Because
	4. Given that
29. What is the best advice for anyone trying to uncover or dissect arguments?
	1. Paraphrase the argument.
	2. Determine the truth of premises.
	3. Find the conclusion first.
	4. Find the premises first.
30. “Belief” is used in your text as just another word for what?
	1. Truth
	2. Bias
	3. Knowledge
	4. Statement or claim
31. Which of the following is true about the principles required to succeed in critical thinking?
	1. They are accessible to a logical sense that helps you to reason in everyday life.
	2. They are mere subjective opinions.
	3. They cannot be taught.
	4. They are unsystematic.
32. What should the strength of your beliefs depend on?
	1. How much time they save you
	2. How popular they are in your community
	3. How long you have held them
	4. The strength of the reasons in their favour
33. What is one of the main tasks of the critical evaluator?
	1. Identify the conclusion and premises without getting lost in the maze of words.
	2. Identify the most beliefs.
	3. Defeat the opponent.
	4. Come up with the longest argument.
34. According to the text, what can critical thinking lead to?
	1. Cynicism
	2. Creatively constrained individuals
	3. Cold emotions
	4. Perfecting creativity
35. What is logic?
	1. The study of the relationship between concepts and numbers
	2. The study of the methods of careful scientific observation
	3. The antithesis of creativity, free thought, and spontaneity
	4. The study of good reasoning, or inference, and the rules that govern it
36. Which effect occurs when people who have very weak abilities overestimate those abilities?
	1. Epstein-Barr effect
	2. Creutzfeldt-Jakob effect
	3. Wernham-Hogg effect
	4. Dunning-Kruger effect
37. When are your beliefs truly yours?
	1. When you critically examine them for yourself and decide that they are supported by good reasons
	2. When they bring you happiness and a sense of self-affirmation
	3. When you can identify their cause
	4. When nobody else holds those exact beliefs
38. What did Scottish philosopher David Hume mean when he asserted that “reason is, and ought only to be the slave of the passions”?
	1. All reason is a form of passion.
	2. We have good reason to be passionate.
	3. The passions should replace reason when reason doesn’t provide definite answers.
	4. Reason is best thought of as serving emotion.
39. In what areas is critical thinking used?
	1. In the “hard sciences” but not the “soft sciences”
	2. In mathematics and geometry but not in the empirical sciences
	3. In all the sciences
	4. Only in politics and courtrooms
40. “*The Globe and Mail’s* *Report on Business* says that people should invest heavily in gold. Therefore, investing in gold is a smart move.” What is the passage in quotation marks?
	1. An argument
	2. An explanation
	3. Two inferences
	4. Three statements
41. What is a premise?
	1. A question, an order, or an assertion
	2. A statement given in support of another statement
	3. A statement that is accompanied by at least one other premise
	4. A statement that is sometimes not used to support a conclusion
42. What is the most natural way to read “Adam stole the money because he needed it to buy food”?
	1. An argument
	2. An explanation
	3. Both an argument and an explanation
	4. A disguised question
43. What is sometimes required to distinguish an argument from an explanation?
	1. The presence of a statement or statements
	2. A command or question
	3. Knowledge of context
	4. Certainty that the argument is compelling or the explanation is correct
44. What is a difference between an argument and an explanation?
	1. Arguments always contain the word “because,” and explanations never do.
	2. Arguments try to prove that something is the case. Explanations do not.
	3. Arguments are either good or bad. Explanations are neither.
	4. Arguments are contentious. Explanations are not.
45. What do you need to have in order to learn the principles of critical thinking or logic?
	1. A logical sense that helps you to reason in everyday life
	2. Prior coursework in critical or logical reasoning
	3. All necessary data to prove or disprove a theory
	4. Experience in formal debates and arguments
46. What is the central task of critical thinking?
	1. To tell you how society has influenced your moral views
	2. To describe how your emotions cause you to cling to certain opinions
	3. To tell you whether any given belief is worth accepting
	4. To reveal that most of your beliefs have been unconsciously absorbed from your parents
47. What has a recent re-examination of the Dunning-Kruger effect revealed?
	1. That the existence of the Dunning-Kruger effect is in doubt
	2. That Dunning and Kruger suffered from the Dunning-Kruger effect
	3. That those who display the Dunning-Kruger effect enjoy positive psychological outcomes
	4. That the Dunning-Kruger effect is, properly understood, a cause as opposed to an effect
48. Why does the dominance of media (both old fashioned and social media) make critical thinking especially relevant these days?
	1. Critical thinking allows you to see that the profit motive behind mainstream media renders the mainstream media systematically untrustworthy.
	2. Critical thinking gives you the tools to evaluate a wide range of media voices that are motivated by different purposes.
	3. Critical thinking empowers citizen journalists to use social media to uncover the existence of powerful cabals that manufacture fake environmental and epidemiological crises to consolidate power.
	4. Critical thinking teaches us that the only way to engage with complex scientific issues is to ignore journalists and to do our own research.
49. According to Scott Paeth (Professor of Religious Studies, Peace, Justice and Conflict Studies at DePaul University), what is faith?
50. Belief without proof
51. Desire for certainty
52. Trusting without reservation
53. The foundation of any argument
54. What does de-personalizing an argument *not* involve?
55. Accepting that an argument is a thing that exists independently of the person who put it forward
56. Accepting that a criticism of an argument is not a criticism of the person who made it
57. Accepting that an argument can be rejected without rejecting the person who made it
58. Accepting that all arguments are good relative to someone’s point of view

# True or False Questions

The fundamental concern of critical thinking is the cause of your beliefs.

In critical thinking, beliefs are evaluated by how well they are supported by reasons.

Rational standards give us a basis to judge beliefs on the support offered by reasoning.

Critical thinking is systematic because it involves methods and procedures.

Critical thinking is the study of whether a particular belief is worth believing.

Logic is the study of good reasoning.

How issues are framed has little effect on how people will judge them.

People tend to underestimate how common dramatic events are and overestimate how common boring events are.

Each of us uses critical thinking to some degree in our lives.

Critical thinking makes you cynical and unimaginative.

Critical thinking can complement creative thinking because it is needed to assess and enhance the creation.

Critical thinking has the negative side effect of stifling creative thinking.

Thinking critically leads one to become cold and unemotional.

Statements or claims can be true, false, or neutral.

In the language of critical thinking, the following is a statement: “A right triangle is a triangle with an angle of 90 degrees.”

Reasons provide support for a statement.

In critical thinking, argument refers to a quarrel or debate.

Statements given in support of another statement are called premises.

In critical thinking, an argument is a disagreement between competing points of view on a subject.

The following is an example of a conclusion: “Consequently, you should consider working for a charitable organization.”

The process of validating premises and conclusions is called an *inference*.

A declaration of beliefs can sometimes constitute an argument.

If one has clearly stated one’s beliefs on a subject, then one has given an argument.

In good arguments, premises are always explicit.

The word *since* is a premise indicator.

The word *so* is a premise indicator.

The word *as* is a premise indicator.

*Given that* is a conclusion indicator.

*Because* is a premise indictor.

*Seeing that* is a conclusion indicator.

Common conclusion indicators include *for*, *given that*, and *for the reason that*.

The word *for* is a conclusion indicator.

A conclusion is a statement that premises are used to support.

Critical thinking is the systematic evaluation of formulation of beliefs, or statements, by rational standards.

A loss of personal freedom is a consequence of not thinking critically.

Critical thinking constrains creativity.

Critical thinking leads necessarily to cynicism.

The strength of your belief should not depend on the strength of the reasons in its favour.

Arguments usually appear neatly labelled for identification.

The better the reasons for supporting a belief, the more likely that belief is to be true.

The human brain has no limitations.

A statement never ends with an exclamation mark.

A mathematical claim may be a statement.

Some arguments do not contain premises.

All arguments contain at least one conclusion.

In critical thinking, an argument requires at least two people.

In an argument, at least one premise is inferred from the conclusion.

A conclusion always follows the word *so*.

A premise can follow the word *because*.

Arguments can be put forth without the use of any indicator words.

Scientists and philosophers are immune to cognitive biases.

‘Logic’ is synonymous with ‘critical thinking.’

If a sentence is either true or false, but we cannot tell which, it is still a statement.

A statement can end with an exclamation point.

In explanations, one part is used to prove that the other part is true.

# Chapter Knowledge Questions

1. How does logic differ from critical thinking?
2. What is a cognitive bias?
3. Why is it important to critically examine your beliefs?
4. How do critical thinking and emotions complement one another?
5. What is the difference between sentences that do and do not express statements?
6. What is the role of reasons in critical thinking?
7. What should you do when you are unable to assign any substantial weight at all to the reasons for or against a statement?
8. What are the essential components of an argument?
9. What is the logical link that distinguishes arguments from all other kinds of discourse?
10. How does an explanation differ from an argument?
11. What are indicator words, and how can they help you identify an argument?
12. Can an argument have more than one premise?
13. When trying to evaluate an argument, what should you find first? What is the rationale behind this first step?
14. What effect can framing have on how we judge an issue? Give an example.
15. What is the connection between critical thinking and freedom?
16. What is the nature of the relationship between critical thinking and creativity?
17. The word “critical” in critical thinking doesn’t mean “negative” or “whiny” or “picky.” What does it mean?
18. Historically, critical thinking has played a major role in the great achievements of humankind. But can its *absence* be cited as a cause of key historical events?
19. What does it mean to say that critical thinking encourages us to ‘de-personalize’ arguments?

# Statement Identification Exercises

Identify whether the following are statements or non-statements.

1. There are pears and blue cheese in the salad.
2. Do you like blue cheese?
3. Let’s go to the party on Saturday.
4. If the Canadian government does not honour the Kyoto Accord, the public will turn against it.
5. I love you.
6. Do you love me?
7. On 24 March 1957, France, West Germany, Italy, Belgium, the Netherlands, and Luxembourg signed the Treaty of Rome, establishing the European Economic Community which with the signing of the Maastricht Treaty in 1992 became the European Union.
8. U2 is the greatest rock band ever.
9. Please shut the window.
10. To be, or not to be, that is the question.
11. Hey, now!
12. I was told there would be free drinks!
13. I’m so lazy that I can’t be bothered to complete my

# Argument Identification Exercises

Identify whether the following are arguments or non-arguments. Explain your answer.

1. According to Plato, the key characteristic about the world around us is that it constantly changes, but what is *really* real never changes. What is true is always true. Therefore, whatever is relative and always changing cannot be true.
2. If we want our children to grow up with the traits of character we admire—honesty, integrity, compassion, courage—then we need to teach them what those traits are, and why they deserve admiration. Of course, we do want children to have those traits, so it is very important that we teach them while they are young.
3. Legendary jazz trumpeter Louis Armstrong was born in New Orleans on 4 August 1901. He won a Grammy in 1965 as Best Male Vocal Performance for Hello Dolly, a Lifetime Achievement Grammy in 1972, and is inducted into the Rock and Roll Hall of Fame in 1990 as a forefather of rock music.
4. Fifty years ago this month, *The* *Globe and Mail* reported that the West proposed in London that world peace inspectors roam the Soviet Union, Canada, the United States, and most of Europe by plane and ground to guard against a sneak H-bomb account. That was a long time ago!
5. Where in frozen Siberia did Russians learn how to swing a racket? Svetlana Kuznetsova took the China Open. Dmitry Tursunov beat the best American player, Andy Roddick, to knock the United States out of the Davis Cup. The glamorously teenaged Maria Sharapova swept past Belgium’s best, Justine Henin-Hardenne, to win the United States Open. And so it goes, the extraordinary invasion of pro tennis, and especially women’s tennis by players from a country that shouldn’t be playing tennis at all. . . (From Serge Schmemann, *New York Times*, October 1, 2006)
6. Objection 2: All natural things can be reduced to one principle, which is nature; and all things that happen intentionally can be reduced to one principle, which is human reason, or will. Therefore, there is no reason to suppose God’s existence. (Aquinas, considering objections to existence of God)
7. If God exists, there would be no evil in the world. But there is evil in the world. Therefore, God does not exist.
8. You should not be late for your lecture. It is rude and it disrupts the professor and the concentration of other students. Moreover, it is a well-documented fact that students who are late for class are more likely to fail.
9. Alana was late for class this morning because she stayed up too late last night and couldn’t get up on time.
10. What makes an action right or wrong is that it produces the greatest happiness for the greatest number of people.
11. Most mornings, Park Chang Woo arrives at a train station in central Seoul, South Korea’s capital. But he is not commuter. He is unemployed and goes there to kill time. Around him, dozens of jobless people pass their days drinking soju, a local version of vodka. For the moment, middle-aged Mr. Park would rather read a newspaper. He used to be a brick layer for a small construction company in Pusan, a southern port city. But three years ago, the country’s financial crisis cost him that job, so he came to Seoul, leaving his wife and two children behind. Still looking for work, he has little hope of going home any time soon. (From *The Economist*, November 25, 2000)
12. For a long time, astronomers suspected that Europa, one of Jupiter’s many moons, might harbour a watery ocean beneath its ice-covered surface. They were right. Now the technique used earlier this year to demonstrate the existence of the European ocean has been employed to detect an ocean on another Jovian satellite, Ganymede, according to work announced at the recent American Geo-physical Union meeting in San Francisco. (From *The Economist*, December 16, 2000)
13. All of Russia’s problems of human rights and democracy come back to three things: the legislature, the executive, and the judiciary. None works as well as it should. Parliament passes laws in a hurry, and has neither the ability nor the will to call high officials to account. State officials abuse human rights (either on their own, or on orders from on high) and work with remarkable slowness and disorganization. The courts almost completely fail in their role as the ultimate safeguard of freedom and order. (From *The Economist*, November 25, 2000)
14. Espresso is a unique method of coffee brewing in which hot water is forced through finely ground espresso coffee. Popular in Europe, it is a far richer and more full-bodied brew than regular American coffee. Because of its richness, espresso is usually served in 1 1/2 to 2 ounce portions, in demitasse cups. (From operating instructions for an espresso machine)
15. Thirty years ago, most of these men handily out-earned their wives. But the situation has reversed. Could this be the future? Very likely. At every age and income level, women are more likely than ever before to be the major or sole breadwinner in the family. The reason is not that more women are working, but that fewer men are. Three-quarters of the people who lost their jobs in the US recession were men, and the hardest-hit sectors were the male worlds of construction, manufacturing, and finance. Many of those jobs aren’t coming back. In the city of Hamilton—once known as Steeltown—just 2 per cent of the population still works in steel. In Sudbury, the town that nickel built, Inco’s unionized labour force has shrunk from 12,000 to around 3,300 souls, who are currently locked in a futile long-term strike with their foreign owner. (From *The Globe and Mail*, June 11, 2010)
16. Two heterosexual couples, both with kids, showed up in [immigration lawyer, Julie Taub’s] office hoping to claim refugee status. Both couples, from a South American country, claimed they were gay and would be persecuted if they went home. “I looked at them and I was just astounded,” says Taub, former member of the Immigration and Refugee Board. “I said, ‘but you’re married with children!’ They said, ‘we go both ways.’” (From *Calgary* *Sun*, June 13, 2010)
17. No matter how many high-flying words economist Roslyn Kunin uses to try to justify the HST tax grab, the fact is nobody will pass on any savings. She must be living in dreamland. I have to redo my roof and the cost is $8,694. In July it will be $9,273.36. So tell me again how good the HST will be? (From *The* *Province*, June 11, 2010)
18. In the fetus, however, hormones do more than just orchestrate activity. They perform complex developmental tasks, tasks that require precise dosage and exquisite timing. They tell tissues whether they should become female or male reproductive organs, nerve cells, muscle cells, or even eyelash cells. (From *Discover*, September 1996)
19. Obviously, growth cannot occur in a closed system [i.e., a system for the total amount of energy within it remains constant]; the Second Law is in fact defined in terms of [i.e., applies only to] a closed system. However, this criterion is really redundant, because in the real world closed systems do not even exist! (From Henry M. Morris, *The Troubled Waters of Evolution*, 1974, p. 124)
20. **Thrasymachus:** . . . [justice] is nothing else than the advantage of the stronger. [. . .] You are a buffoon, Socrates.

**Socrates:** Have we not agreed that the rulers in giving orders to the ruled sometimes mistake their own advantage, and that whatever the rulers enjoin it is just for the subjects to perform? Was that not admitted?

**Thrasymachus:** I think it was.

**Socrates:** Then you will have to think that to do what is disadvantageous to the rulers and the stronger has been admitted by you to be just in the case when the rulers unwittingly enjoin what is bad for themselves, while you affirm that it is just for the others to do what they enjoined. In that way does not this conclusion inevitably follow, my most sapient Thrasymachus, that it is just to do the very opposite of what you say? (From Plato, *The Republic*, Book I, 338c,d; 339d-e)

1. In this chapter we have to ask ourselves whether, in any sense at all, there is such a thing as matter. Is there a table which has a certain intrinsic nature, and continues to exist when I am not looking, or is the table merely a product of my imagination, a dream-table in a very prolonged dream? This question is of the greatest importance. (From Bertrand Russell, *The Problems of Philosophy*, 1912, p. 17)
2. The intrusion of the economic motive into sex is always in a greater or less degree disastrous. Sexual relations should be a mutual delight, entered into solely from the spontaneous impulse of both parties. Where this is not the case, everything that is valuable is absent. To use another person in so intimate a manner is to be lacking in that respect for the human being as such, out of which all true morality must spring. [. . .] This applies, of course, not only prostitution, but to marriage, Marriage is for women the commonest mode of livelihood, and the total amount of undesired sex endured by women is probably greater in marriage than in prostitution. (From Bertrand Russell, *Marriage and Morals*, 1929, p. 103)
3. To exclude the Church, founded by God Himself, from life, from laws, from the education of youth, from domestic society, is a grave and fatal error. A state from which religion is banished can never be well regulated. (Leo XIII, Nov. 1, 1885)
4. It would be impossible to go tomorrow. We owe Mrs. Jennings much more than civility, and civility of the commonest kind must prevent such a hasty removal as that. (From Jane Austen, *Sense and Sensibility*)
5. In the experiment described in the figure, rats were selected for increased or decreased susceptibility to dental caries on a controlled diet. As the graph shows, the rats could be successfully selected to grow better or worse teeth. Evolutionary change can therefore be generated artificially. (From Mark Ridley, *Evolution*, Second Edition, 1996, p. 44)
6. I like coffee because it gives me a sense of purpose in an otherwise purposeless universe.
7. Money can’t buy you happiness. But it can buy me happiness. Therefore, you should give me all your money.
8. “The fact that some geniuses were laughed at does not imply that all who are laughed at are geniuses. They laughed at Columbus, and they laughed at Fulton. They laughed at the Wright Brothers. But they also laughed at Bozo the Clown.” (From Carl Sagan, *Broca’s Brain*, 1979)
9. The invasion of Ukraine happened because Putin is convinced that Ukraine has always belonged to Russia.
10. The invasion of Ukraine definitely happened because the story was on the front page of every newspaper in the world!
11. The invasion-of-Ukraine-story was on the front page of every newspaper in the world because the invasion of Ukraine happened.

# Supporting Premise Exercises

Provide at least two premises in support of the following claims.

1. The latest *Avengers* movie is awful.
2. The latest *Avengers* movie is very entertaining.
3. The next step will be to outlaw smoking in all Canadian National Parks.
4. The government should not be concerned with whether or not people smoke.
5. The death penalty should be reinstated in Canada once and for all.
6. The death penalty is unconstitutional and should not be brought back in Canada.
7. Longer parental leave for mothers and fathers is mistake and will be bad for the economy.
8. Longer parental leave is a welcome option for both mothers and fathers.
9. Canadian troops should withdraw from Iraq by the end of this year.
10. Canadian troops should not withdraw from Iraq until the political situation there is stable.

# Short Essay Questions

1. Identify the conclusion of the following argument, and provide the indicator you used to identify the conclusion:

*If the Leafs trade Matthews, then they will make the playoffs.*

*But the Leafs will not trade Matthews.*

*So, the Leafs will not make the playoffs.*

1. Identify the premises of the following argument:

*Given that all whales are mammals, and since all mammals are animals, it follows that all whales are animals.*

1. Identify the conclusion of the following argument:

*Ron Maclean says that the Edmonton Oilers will win the Stanley Cup within 2–4 years. It follows that the Edmonton Oilers will win the Stanley Cup within 2–4 years.*

1. Identify the premises and the conclusion of the following argument:

*Either Miley Cyrus will win the Music Video Award, or Taylor Swift will win the Music Video Award. But, since Miley Cyrus will not win the Music Video Award, it follows that Taylor Swift will win the Music Video Award.*

1. Identify the premise indicator and the conclusion indicator that occur in this argument:

*Either Miley Cyrus will win the Music Video Award, or Taylor Swift will win the Music Video Award. But, since Miley Cyrus will not win the Music Video Award, it follows that Taylor Swift will win the Music Video Award.*

1. The word *since* often occurs within a passage as a premise indicator, but sometimes it does not indicate a premise but simply indicates the passage of time. Write a short passage in which the word *since* is functioning as a premise indicator, and follow that up by writing another short passage in which the word *since* functions merely to indicate the passage of time and so does not indicate any premise.
2. Identify any and all premise indicators that occur in the following argument, along with any and all conclusion indicators that occur in the following argument:

*Given that all whales are mammals, and since all mammals are animals, it follows that all whales are animals.*

1. Identify the premises and conclusion of the following argument:

*Huey, Dewey, and Louie are nephews of Donald Duck. Inasmuch as they are all Disney characters, accordingly most Disney characters are nephews of Donald Duck.*

1. Identify any and all premise indicators that occur in the following argument, along with any and all conclusion indicators that occur in the following argument:

*Huey, Dewey, and Louie are nephews of Donald Duck. Inasmuch as they are all Disney characters, accordingly most Disney characters are nephews of Donald Duck.*

1. Identify the conclusion of the following argument, and provide the indicator you used to identify the conclusion:

*Dogs are warm-blooded, nurse their young, and give birth to puppies. Humans are warm-blooded and nurse their young. Therefore, humans give birth to puppies, too.*

1. Identify the premise(s) and the conclusion of the following argument.

*When you’re a child, they try to make you feel better by saying “when the world gives you lemons, make lemonade,” but the reality is the world only ever sells you lemons, and they’re not cheap, and you’re lucky if you can afford them. Thus, the phrase “when the world gives you lemons, make lemonade,” sets up false expectations and we should stop saying it.*

1. Identify the premise(s) and the conclusion of the following argument.

*When writers are intentionally obscure, they are just trying to hide the fact that they have nothing interesting or smart to say. This example of an argument intentionally obfuscates to such a magnitude that the consequences are unequivocally deleterious, and anyone who is cognizant of the adverse effects of this utilization of inaccessible semantics, is indubitably capable of ascertaining the prior contention. Thus, the writer of this argument is just trying to hide the fact that they have nothing interesting or smart to say.*

Chapter 1 Answer Key

# Multiple Choice Questions

1. c (§1)
2. a (§1)
3. b (§1)
4. d (§1)
5. c (§1)
6. b (§1.1)
7. c (§1.1)
8. a (§1.2.1)
9. b (§1.2.1)
10. b (§1.2.1)
11. d (§1.2.1)
12. a (§1.2.2)
13. a (§1.2.1)
14. d (§1.2.2)
15. c (§1.2.2)
16. a (§1.2.2)
17. a (§1.2.2)
18. d (§1.2.2)
19. d (§1.2.2)
20. c (§1.2.2)
21. d (§1.2.2)
22. b (§1.2.2)
23. a (§1.2.2)
24. d (§1.2.2)
25. a (§1.2.2)
26. d (§1.2.2)
27. d (§1.2.2)
28. b (§1.2.2)
29. c (§1.2.2)
30. d (Summary)
31. a (Summary)
32. d (Summary)
33. a (Summary)
34. d (Summary)
35. d (§1)
36. d (§1.1)
37. a (§1.1)
38. d (§1.1)
39. c (§1.1)
40. a (§1.2.2)
41. b (§1.2.2)
42. b (§1.2.2)
43. c (§1.2.2)
44. b (§1.2.2)
45. a (§1.2.3)
46. c (§1)
47. a (§1.1)
48. b (§1.1)
49. c (§1.2.1)
50. d (§1.2.3)

# True or False Questions

1. F (§1)
2. T (§1)
3. T (§1)
4. T (§1)
5. T (§1)
6. T (§1)
7. F (§1)
8. F (§1)
9. T (§1.1)
10. F (§1.1)
11. T (§1.1)
12. F (§1.1)
13. F (§1.1)
14. F (§1.2.1)
15. T (§1.2.1)
16. T (§1.2.2)
17. F (§1.2.2)
18. T (§1.2.2)
19. F (§1.2.2)
20. T (§1.2.2)
21. F (§1.2.2)
22. F (§1.2.2)
23. F (§1.2.2)
24. F (§1.2.3)
25. T (§1.2.2)
26. F (§1.2.2)
27. T (§1.2.2)
28. F (§1.2.2)
29. T (§1.2.2)
30. F (§1.2.2)
31. F (§1.2.2)
32. F (§1.2.2)
33. T (§1.2.3)
34. T (Summary)
35. T (Summary)
36. F (Summary)
37. F (Summary)
38. F (Summary)
39. F (Summary)
40. T (§1)
41. F (§1)
42. F (§1.2.1)
43. T (§1.2.1)
44. F (§1.2.2)
45. T (§1.2.2)
46. F (§1.2.2)
47. F (§1.2.2)
48. F (§1.2.2)
49. T (§1.2.2)
50. T (§1.2.2)
51. F (§1)
52. F (§1)
53. T (§1.2.1)
54. T (§1.2.1)
55. F (§1.2.2)

# Chapter Knowledge Questions

1. Logic is the study of good reasoning or inference and the rules that govern it. Critical thinking is the systematic evaluation or formulation of beliefs, or statements by rational standards. Critical thinking is broader than logic because it involves not only logic but also the truth or falsity of statements. (§1)
2. Cognitive biases are errors of reasoning that are more common than others. Evidence suggests that some of them are nearly universal. (§1)
3. Answers may vary and can be much longer: (1) If you haven’t critically examined your beliefs they are not really yours. (2) To examine beliefs is to examine your life. (3) Critical examination of beliefs involves determining what we are justified in believing, being open to new perspectives, and fairly assessing the views of others. (§1.1)
4. Part of thinking critically is ensuring that we do not let our emotions distort our judgements. But, critical thinking can also help us clarify our feelings and deal with them more effectively. Emotions often need the guidance of reason and our reasoning needs our emotions. (§1.1)
5. Statements assert that something is or is not the case; they are either true or false. (§1.2.1)
6. Reasons provide support for a statement. They provide us with grounds for believing that a statement is true. A statement expressing a reason or reasons is used to show that another statement is true or likely to be true. This combination of statements—a statement or statements supposedly providing reasons for accepting another statement—is called an argument. Arguments are the main focus of critical thinking. (§1.2.2)
7. When this happens, good critical thinkers do not arbitrarily choose to accept or reject a statement. They suspend judgement until there is enough evidence to make an intelligent decision. (§1.2.1)
8. The essential components of an argument are reasons (premises) and a conclusion. (§1.2.2)
9. Reasons (the premises) are offered to support or prove a claim (the conclusion). This mental process of reasoning from a premise or premises to a conclusion based on those premises is called inference. (§1.2.2)
10. An argument gives us reasons for believing *that something is the case*—that a claim is true or at least probably true. An explanation, though, tells us *why or how something is the case.* Arguments have something to prove; explanations do not. (§1.2.2)
11. Indicator words signal that a premise or conclusion is present. (§1.2.2)
12. Yes, an argument can have any number of premises. (§1.2.2)
13. When trying to uncover or dissect arguments, *find the conclusion first.* Once you know what claim someone is trying to prove, it becomes much easier to isolate the premises. Ask yourself, “What claim is this writer or speaker trying to persuade me to believe?” If the writer or speaker is not trying to convince you of anything, there is no argument to examine. (§1.2.2)
14. We tend to judge facts differently depending on just how they are stated, or “framed.” For example, we might react quite positively to an announcement that a struggling company had been able to “save” 300 jobs (out of 1000) but quite negatively to an announcement that the company was “laying off” 700 people (out of 1000)—even though the result is exactly the same. Framing the issue in terms of jobs saved—which sounds like a good thing—makes us think more positively about the whole scenario. (§1)
15. A consequence of a failure to think critically is a loss of personal freedom. If you passively accept beliefs that have been handed to you by your parents, your culture, your teachers, or social media, then those beliefs are *not really yours.* You just happened to be in a certain place and time when they were handed out. If they are not really yours and if you still let them guide your choices and actions, then they—not you—are in charge of your life. Your beliefs are yours only if you critically examine them for yourself and decide that they are supported by good reasons. (§1.1)
16. Critical thinking and creative thinking are not opposed to one another. Good critical thinkers can let their imaginations run free, just like anyone else. They can create and enjoy poetry, music, art, literature, and plain old fun in the same way and to the same degree as the rest of the world. Critical thinking can complement creative thinking because it is needed to assess and enhance the creation. (§1.1)
17. The *critical* in critical thinking is used in the sense of “exercising or involving careful judgement or judicious evaluation.” (§1.1)
18. Yes. Many of the great tragedies of history—including wars, massacres, holocausts, tyrannies, bigotries, epidemics, and witch hunts—grew out of famines of the mind where clear, careful thinking was much too scarce. (§1.1)
19. It means that we view an argument as a thing that exists independently of the person who put it forward. If I make a bad argument, but make it clearly, then you and I can both sit back and examine its parts, and its logic. If the argument is weak, we can both identify its weaknesses. If you find an error in my argument, that’s a criticism of the argument, not a criticism of me. In principle, we should both be able to separate the argument (a set of premises and a conclusion) from me (the human being who put it forward). If an argument you put forward contains errors, then I’m not going to accept it, but I can still accept you as a person, as a friend, and as a colleague. Likewise if an argument I put forward contains errors, I can let you point that out to me, without taking it as an attack on me as a person. (§1.2.3)

# Statement Identification Exercises

1. Statement (§1.2.1)
2. Non-statement (§1.2.1)
3. Non-statement (§1.2.1)
4. Statement (§1.2.1)
5. Statement (§1.2.1)
6. Non-statement (§1.2.1)
7. Statement (§1.2.1)
8. Statement (§1.2.1)
9. Non-statement (§1.2.1)
10. Statement (§1.2.1)
11. Non-statement (§1.2.1)
12. Statement (§1.2.1)
13. Non-statement (§1.2.1)

# Argument Identification Exercises

1. Report of argument (§1.2.2)
2. Argument (§1.2.2)
3. Non-argument (§1.2.2)
4. Non-argument (§1.2.2)
5. Non-argument (§1.2.2)
6. Report of argument (§1.2.2)
7. Argument (§1.2.2)
8. Argument (§1.2.2)
9. Non-argument, explanation (§1.2.2)
10. Non-argument (§1.2.2)
11. Non-argument (§1.2.2)
12. Non-argument (§1.2.2)
13. Argument (§1.2.2)
14. Non-argument (§1.2.2)
15. Argument (§1.2.2)
16. Non-argument (§1.2.2)
17. Argument (§1.2.2)
18. Non-argument (§1.2.2)
19. Non-argument (§1.2.2)
20. Argument (§1.2.2)
21. Non-argument (§1.2.2)
22. Argument (§1.2.2)
23. Argument (§1.2.2)
24. Argument (§1.2.2)
25. Argument (§1.2.2)
26. Non-argument, explanation (§1.2.2)
27. Argument (§1.2.2)
28. Argument (§1.2.2)
29. Non-argument, explanation (§1.2.2)
30. Argument (§1.2.2)
31. Non-argument, explanation (§1.2.2)

# Supporting Premise Exercises

1. Individual student responses required. (§1.2.2)
2. Individual student responses required. (§1.2.2)
3. Individual student responses required. (§1.2.2)
4. Individual student responses required. (§1.2.2)
5. Individual student responses required. (§1.2.2)
6. Individual student responses required. (§1.2.2)
7. Individual student responses required. (§1.2.2)
8. Individual student responses required. (§1.2.2)
9. Individual student responses required. (§1.2.2)
10. Individual student responses required. (§1.2.2)

# Short Essay Questions

1. Conclusion: The Leafs will not make the playoffs. Conclusion indicator: So. (§1.2.2)
2. All whales are mammals. All mammals are animals. (§1.2.2)
3. The Edmonton Oilers will win the Stanley Cup within 2–4 years. (§1.2.2)
4. Premises: Either Miley Cyrus will win the Music Video Award, or Taylor Swift will win the Music Video Award. Miley Cyrus will not win the Music Video Award.

Conclusion: Taylor Swift will win the Music Video Award. (§1.2.2)

1. Premise indicator: Since. Conclusion indicator: It follows that. (§1.2.2)
2. “Since I want to take a vacation this summer, it follows that I should carefully manage my budget over the next few months.” (Here, *since* indicates a premise.)

“I’ve been under the weather since Boxing Day.” (Here, *since* merely indicates the passage of time.) (§1.2.2)

1. Premise indicators: Given that, since. Conclusion indicator: it follows that. (§1.2.2)
2. Premises: Huey, Dewey, and Louie are nephews of Donald Duck. Huey, Dewey, and Louie are each Disney characters. Conclusion: Most Disney characters are nephews of Donald Duck. (§1.2.2)
3. Premise indicators: inasmuch as. Conclusion indicators: accordingly. (§1.2.2)
4. Conclusion: Humans give birth to puppies, too. Conclusion indicator: Therefore. (§1.2.2)
5. Premise: When you’re a child, they try to make you feel better by saying “when the world gives you lemons, make lemonade,” but the reality is the world only ever sells you lemons, and they’re not cheap, and you’re lucky if you can afford them. Conclusion: Thus, the phrase “when the world gives you lemons, make lemonade,” sets up false expectations and we should stop saying it. (§1.2.2)
6. Premise: When writers are intentionally obscure, they are just trying to hide the fact that they have nothing interesting or smart to say. Premise: This example of an argument intentionally obfuscates to such a magnitude that the consequences are unequivocally deleterious, and anyone who is cognizant of the adverse effects of this utilization of inaccessible semantics, is indubitably capable of ascertaining the prior contention. Conclusion: Thus, the writer of this argument is just trying to hide the fact that they have nothing interesting or smart to say. (§1.2.2)