

The Fallacy Detective

A study guide

To accompany the book by:
Nathaniel Bluedorn & Hans Bluedorn

2009 edition

38 Lessons on How to
Recognize Bad Reasoning

Brought to you by
Amy Shepley
Of SixMoreSummers.com

How To Use This Study Guide

This study guide is for use with: *The Fallacy Detective 2009 Edition: Thirty-Eight Lessons on How to Recognize Bad Reasoning*, by Nathaniel Bluedorn and Hans Bluedorn

Should you wish to purchase this book, or any of the other books written by Nathaniel Bluedorn and Hans Bluedorn, please visit fallacydetective.com

The lessons in the book are simple, and can probably be done 2 at a time. The answers for the study guide are fairly self-explanatory, or are subjective based on the student completing them. For this reason, there is no answer key specific to the study guide.

The answers to the exercises can be found in the back of *The Fallacy Detective* book.

Logic is best learned in a group, or at least in pairs, so learn along with your student or students and encourage discussion and respectful debate when answering questions. Not all things are black and white, and so, in some cases, there may be more than one correct answer.

Read the lessons aloud, or have your student read them aloud. This will deepen your student's understanding of the material.

As a method of keeping track of the many definitions and terms in the book, there are pages at the end of the guide which can be filled in after most lessons. These will be handy for your student to continue to refer to as they attempt to answer the exercise questions.

If you have feedback, concerns, or suggestions, please email Amy@sixmoresummers.com

Lesson 1: Exercise Your Mind

Chapter Summary: _____

Do you regularly exercise your mind? Do you do it willingly? _____

How can you apply what you learned to everyday life? _____

Exercises

a) doesn't want to exercise his mind b) has an inquiring mind c) none of the above

- | | | | |
|---------|---------|---------|---------|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| 5. ____ | 6. ____ | 7. ____ | 8. ____ |

Lesson 2: Love To Listen

Chapter Summary: _____

Write an example of a specific time when you were a poor listener, like Bob. How could skills learned in this chapter have helped you in this situation?

If you show humility, what aspects of your life, and your relationships could improve? _____

Exercises

- a) showing that they love to listen b) showing that they don't love to listen
- c) neither

- 1. ____ 2. ____ 3. ____ 4. ____
- 5. ____ 6. ____ 7. ____

Lesson 3: Opposing Viewpoints

Chapter Summary: _____

In your own words, explain the benefits of gathering many opinions before making a decision. _____

Listening to other view points, and actually seeking them out, shows that you have an _____.

It's important to seek counsel, but is all counsel equal? What should we take into consideration when we hear other people's opinions? _____

Exercises

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

Lesson 4: Red Herring Fallacy

Chapter Summary: _____

Explain what a red herring is, and how it is used to train dogs. How is it relevant in communication? _____

Exercises

Write 'yes' if the example is a red herring. Write 'no' if the example is not.

- | | | | |
|----------|----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ | 4. _____ |
| 5. _____ | 6. _____ | 7. _____ | 8. _____ |

Chapter 5: Recognizing Red Herrings

Chapter Summary: _____

Exercises

First, rephrase the question being asked. Then, write whether or not a red herring is introduced.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____
- 11. _____

Lesson 6: Special Pleading

Chapter Summary: _____

Have you ever used special pleading, or been the victim of a double standard?

Give a specific example. _____

Exercises

Write whether the example is a red herring, special pleading, or neither

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | | |

Lesson 7: Ad Hominem Attack

An *ad hominem* attack is _____

It is Latin for _____

When is an argument *not* ad hominem, even though it does direct the argument back to the opponent? _____

Exercises

What form of bad reasoning, if any, do you find in the following examples? Use all the examples of bad reasoning you have learned so far.

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | | |

Lesson 8: Genetic Fallacy

In a genetic fallacy, 'genetic' is referring to _____

Exercises

What form of bad reasoning, if any, do you find in the following examples? Use all the examples of bad reasoning you have learned so far.

- | | | |
|-----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | | |

Lesson 9: Tu Quoque

Tu quoque is Latin for _____

In your own words, what is tu quoque? _____

This fallacy is also used when someone claims that _____

Exercises

What form of bad reasoning, if any, do you find in the following examples? Use all the examples of bad reasoning you have learned so far.

- | | | |
|-----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | | |

Lesson 10: Faulty Appeal To Authority

An *authority* is _____

What are 3 ways we can make a faulty appeal to authority? _____

When a topic is controversial, we are best to use _____
to verify our claims.

Exercises

A. Which of the following appeals to authority are good and which ones are faulty?

- | | | |
|----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | |

B. What form of bad reasoning, if any, do you find in the following examples?
Use all the examples of bad reasoning you have learned so far.

- | | | |
|-----------|-----------|-----------|
| 9. _____ | 10. _____ | 11. _____ |
| 12. _____ | 13. _____ | 14. _____ |
| 15. _____ | | |

Lesson 11: Appeal to the People

Committing the *appeal to the people* fallacy is when _____

Write your own appeal to the people fallacy. _____

Exercises

What form of bad reasoning, if any, do you find in the following examples? Use all the examples of bad reasoning you have learned so far.

- | | | |
|-----------|-----------|----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | |

Lesson 12: Straw Man

In your own words, what is a straw man argument? _____

Exercises

What form of bad reasoning, if any, do you find in the following examples? Use all the examples of bad reasoning you have learned so far.

- | | | |
|-----------|-----------|----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | |

Lesson 13: The Story of Aroup Goupta

Exercises

Read the following statements, and indicate whether (a) you think the statement is true, or (b) you don't know if the statement is true. In your answers, stick to what you know was said in the story. As you answer each exercise, check your answer. You can look back at the story if you need to.

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | 14. _____ | 15. _____ |
| 16. _____ | 17. _____ | 18. _____ |
| 19. _____ | 20. _____ | 21. _____ |
| 22. _____ | | |

Lesson 14: Assumptions

Which letter did you presume to be most different from the others? _____

Why? _____

Would you change your mind after reading the rest of this section? _____

What are the 3 ways we can try to be more objective?

1. _____

2. _____

3. _____

Exercises

A. Brent: Mom, if you buy that expensive toaster, we won't be able to go out for ice cream after lunch. It's my birthday, and I want to have ice cream.

Based on the paragraph above, Brent is probably assuming which of the following: (write yes or no if it is an assumption)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

B. Answer the following riddles. See if you can catch the hidden assumptions.

7. _____

8. _____

9. Answer each of these riddles:

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

G. _____

H. _____

I. _____

Lesson 15: Circular Reasoning

Circular reason allows people to switch their words around, and never _____

Write your own example of circular reasoning. _____

Exercises

A. Which of the following examples contain the fallacy of circular reasoning?

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____
- 11. _____

B. What fallacy, if any, do you find in the following examples? Use all the examples of bad reasoning you have learned so far.

- 12. _____
- 13. _____
- 14. _____

C. Is there an example of circular reasoning in the following dialogue? If so, what is it? _____

Lesson 16: Equivocation

Equivocation means to _____

Exercises

A. What are the terms which have changed their meanings in these examples?

- 1. _____
- 2. _____

3. _____

4. _____

What fallacy, if any, is committed in the following examples?

5. _____ 6. _____ 7. _____

8. _____ 9. _____ 10. _____

11. _____ 12. _____ 13. _____

14. _____

Lesson 17: Loaded Question

Loaded questions contain _____

What is the purpose of a loaded question? _____

How can you combat a loaded question? _____

A. Which of the following arguments contain a loaded question? If an argument contains a loaded question, explain what the unstated question is.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

B. What fallacy, if any, is committed in the following examples?

10. _____ 11. _____ 12. _____

13. _____ 14. _____ 15. _____

Lesson 18: Slippery Slope

Why should we resist the slippery slope fallacy? _____

Exercises

What form of bad reasoning, if any, do you find in the following examples? Use all the examples of bad reasoning you have learned so far.

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

7. _____ 8. _____ 9. _____

10. _____ 11. _____ 12. _____

13. _____

Lesson 19: Part-to-Whole

In your own words, explain the part-to-whole fallacy. _____

Exercises

A. Which of the following arguments contain a part-to-whole fallacy?

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

7. _____ 8. _____ 9. _____

B. What form of bad reasoning, if any, do you find in the following examples?

Use all the examples of bad reasoning you have learned so far.

10. _____ 11. _____ 12. _____

13. _____ 14. _____ 15. _____

16. _____ 17. _____ 18. _____

Lesson 20: Whole-to-Part

In your own words, explain the whole-to-part fallacy. _____

How can you tell the difference between a whole-to-part, and a part-to-whole fallacy? _____

Exercises

A. Which of the following examples contain a part-to-whole fallacy, a whole-to-part fallacy, or neither?

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____
 7. _____ 8. _____

B. What fallacy, if any, is committed in the following examples? Use all the examples of bad reasoning you have learned so far.

9. _____ 10. _____ 11. _____
 12. _____ 13. _____ 14. _____
 15. _____ 16. _____ 17. _____
 18. _____

Lesson 21: Either-Or

What is the definition of manipulative? _____

A. Identify which of the following arguments use either-or reasoning and which do not.

1. _____ 2. _____ 3. _____
 4. _____ 5. _____ 6. _____
 7. _____ 8. _____ 9. _____
 10. _____ 11. _____

B. What fallacies, if any, are committed in the following examples?

12. _____ 13. _____ 14. _____
 15. _____ 16. _____ 17. _____
 18. _____ 19. _____ 20. _____
 21. _____ 22. _____

C. Which of the following is correct to say: _____

Lesson 22: What Is a Generalization?

Why can generalization be useful? _____

A *class* is _____

If the class is all the players on the New York Yankees, what would a sample be? _____

Write a generalization about the New York Yankees _____

What would you have to do to make absolutely certain that your generalization is truthful? _____

Exercises

A. Decide whether the following examples are generalizations. Assume the speaker is telling the truth about his findings.

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | 14. _____ | |

B. Bonus: Find an example of a generalization in the newspaper or on television.

Lesson 23: Hasty Generalization

What makes a statement a 'hasty generalization?' _____

Explain in your own words the 2 ways we can make a hasty generalization.

1. _____

2. _____

Exercises

A. In the following exercises, answer these questions: (a) Is it a generalization? (b) If so, how large is the sample which is being taken? (c) In your opinion, is the generalization strong or hasty? Why? Assume the speaker is telling the truth about his findings.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

B. Evaluate these conclusions. Based upon your own knowledge of the subject, decide whether the conclusion is probably true or probably false. If you don't know enough about the subject to decide, then determine what you would need to know before you could draw a conclusion.

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

C. Find an example of a hasty generalization in the newspaper or television. Look for broad statements and see how well these statements are supported.

Lesson 24: What Is an Analogy?

Look up the definition of *analogy* in a dictionary, then rewrite the definition in your own words. _____

In order to reason with an analogy, our items must be _____

An analogy cannot be proven truthful, only _____ or _____

A strong analogy is one which is likely to be _____

When we use, or someone else uses an analogy in an argument, we must think about not only how the objects are similar, but _____

Exercises

A. Are these examples analogies, generalization, or neither?

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

7. _____ 8. _____ 9. _____

10. _____ 11. _____ 12. _____

B. Turn these analogies into generalizations.

13. _____

14. _____

15. _____

Lesson 25: Weak Analogy

In your own words, how can you tell if an analogy is strong or weak? _____

Exercises

A. Here are some analogies with relevant or irrelevant evidence below each analogy. Does the added evidence strengthen, weaken, or do nothing for the analogy?

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | 14. _____ | 15. _____ |
| 16. _____ | | |

B. Decide whether the following analogies are, in your opinion, strong or weak.

- | | | |
|-----------|-----------|-----------|
| 17. _____ | 18. _____ | 19. _____ |
| 20. _____ | 21. _____ | 22. _____ |
| 23. _____ | 24. _____ | 25. _____ |

C. Read the following examples and answer the questions listed below it.

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

Lesson 26: Post Hoc Ergo Propter Hoc

Post hoc ergo propter hoc translates to _____
_____ which means _____

Can a *post hoc ergo propter hoc* argument ever be true? _____

Exercises

A. For these examples of *post hoc ergo propter hoc*, give some other, possibly overlooked, causes for the events in question.

1. _____

2. _____

B. Name the faulty reasoning, if any, in the following examples.

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

Lesson 27: Post Hoc Ergo Propter Hoc is Statistics

What could be the real reason Stonehenge grads make more money? _____

Exercises

A. What form of faulty reasoning, if any, is being used in the following examples?

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____
- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____

Lesson 28: Proof by Lack of Evidence

Evidence is _____

The burden of proof (the responsibility of acquiring proof) should be placed on _____ and not on _____

How does our juridical system protect citizens from 'proof by lack of evidence'? _____

Exercises

A. Which attorney is committing the proof by lack of evidence fallacy?

- 1. _____

B. What form of faulty reasoning, if any, is used in the following examples?

- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____
- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____
- 16. _____
- 17. _____
- 18. _____
- 19. _____

- 20. _____
- 21. _____
- 22. _____
- 23. _____
- 24. _____
- 25. _____

Lesson 29: What is Propaganda?

Propaganda is _____

Why do people or companies use propaganda? _____

What is manipulative propaganda? _____

Exercises

A. Answer the following questions:

- 1. _____

- 2. _____

- 3. _____

- 4. _____

- 5. _____

- 6. _____

B. Which of the following advertisements are using manipulative and emotional propaganda techniques? Answer yes or no.

- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____
- 16. _____

Lesson 30: Appeal to Fear

Appeal to fear is a _____ technique used to _____

The problem with an appeal to fear technique is that _____

Not an Appeal to Fear is different because _____

Exercises

Which of the following examples are an appeal to fear? Answer yes or no.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____

Lesson 31: Appeal to Pity

In your own words, explain "appeal to pity" _____

Write your own appeal to pity as a conversation between you and your mom or dad. _____

Exercises

What form of propaganda, if any, is being used in the following examples?

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |

Lesson 32: Bandwagon

A bandwagon technique encourages _____

What should we consider when we feel bandwagon (peer) pressure? _____

Exercises

What form of propaganda, if any, is being used in the following examples?

- | | | |
|-----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | | |

Lesson 33: Exigency

What is a seller's motive for using exigency? _____

Exercises

What form of propaganda, if any, is being used in the following examples?

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | | |

Lesson 34: Repetition

Why does repetition as a form of advertisement work? _____

How does a politician use repetition to convince voters to vote for him/her?

Exercises

What form of propaganda, if any, is being used in the following examples?

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | | |

Lesson 35: Transfer

How can *feelings* be transferred? _____

What kinds of things do politicians do so we transfer negative or positive feelings? _____

What kinds of things do advertisers do so we transfer negative or positive feelings? _____

When is an advertisement considered *not transfer*? _____

Exercises

What form of propaganda, if any, is being used in the following examples?

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

7. _____ 8. _____ 9. _____

10. _____ 11. _____ 12. _____

13. _____ 14. _____

Lesson 36: Snob Appeal

Snob Appeal is the opposite of _____ and is used to _____

Why does snob appeal work at getting people to buy an item or an idea? _____

Exercises

What form of propaganda, if any, is being used?

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | 14. _____ | 15. _____ |
| 16. _____ | 17. _____ | |

Lesson 37: Appeal to Tradition and Appeal to Hi-Tech

What type of feelings does an *appeal to tradition* use to get us to buy things?

Write your own slogan for a product using appeal to tradition. _____

What type of feelings does an *appeal to hi-tech* use to get us to buy things? _

Write your own slogan for a product using appeal to hi-tech. _____

Exercises

What form of propaganda, if any, is being used?

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 2. _____ | 3. _____ |
| 4. _____ | 5. _____ | 6. _____ |
| 7. _____ | 8. _____ | 9. _____ |
| 10. _____ | 11. _____ | 12. _____ |
| 13. _____ | 14. _____ | 15. _____ |
| 16. _____ | 17. _____ | 18. _____ |

Lesson 38: Find Some Propaganda on Your Own

A. Some of the following examples of propaganda use methods not covered in this book. Identify the emotion being appealed to in each.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

B. 10. Take a current magazine – like *National Geographic*, *Time*, or *Reader's Digest* – and look through all the advertisements in it. Find as many propaganda techniques as you can in the advertisements. You could do the same thing with television commercials.

List of Fallacies and Definitions

Fallacy

Red Herring Fallacy

Special Pleasing

Ad Hominem Attack

Genetic Fallacy

Tu Quoque

Faulty Appeal to Authority

Appeal to the People

Straw Man

Assumption

Circular Reasoning

Equivocation

Loaded Question

Slippery Slope

Part-to-Whole

Whole-to-Part

Either-Or

Generalization

Hasty Generalization

Reasoning by Analogy

Weak Analogy

Post Hoc Ergo Propter Hoc

Proof by Lack of Evidence

Propaganda

Manipulative Propaganda

Appeal to Fear

Appeal to Pity

Bandwagon

Exigency

Repetition

Transfer

Snob Appeal

Appeal to Tradition

Appeal to Hi-Tech
