

The Thinking Book

BASED ON THE WORKS OF L. RON HUBBARD

Name _____ Date _____

PURPOSE

Learn how to think logically, how to tell when situations in life don't make sense, and what to do about it.

HOW TO DO THIS COURSE: Do the steps in order. Write your initials and the date on the sign-off line when you finish a step. Two lines means you get the step checked and signed off by another student, or sometimes by your academic supervisor. Turn your written work in to your supervisor.

ESTIMATED TIME: 35 hours.

BOOK:

The Thinking Book, Heron Books

NOTE:

Attached to the back of this learning guide is an answer sheet for certain activities. You will be using it to check your work before turning it in to your supervisor. Don't change your answers; just mark them right or wrong. Of course, only look up the answers to activities you have completed, not those you haven't done yet.

A. THINKING

1. READ: *The Thinking Book* (TB), pp. 1–7. _____
2. ACTIVITY: In the book, it says, “*Thinking* is observing things and comparing them to what you’ve seen or gotten answers about before, so you can decide what to do now or in the future.” Use objects to demonstrate how someone thinks when he or she does each of these things:
 - a) decides what clothes to put on in the morning ____
 - b) plans a swimming trip ____
 - c) decides whether to buy “Bloopers Brand” breakfast food or not ____ _____

B. DATA

1. READ: TB, pp. 9–15. _____

2. ACTIVITY: Choose a subject. Find at least eight data about your subject by asking questions, reading a book and using your senses. Write down each datum and how you got the datum. _____

C. THINKING WITH DATA

1. READ: TB, pp. 17–22. _____

2. ACTIVITY: Find a person or thing in the room and then find a different person or thing. Write down how the second is different from the first. Do this two more times. _____

3. READ: TB, pp. 23–26. _____

4. ACTIVITY: Find something in the room, then find something else that is similar. Write down the ways in which the two things are similar but not completely the same. Do this two more times. _____

5. READ: TB, pp. 27–30. _____

6. ACTIVITY: Find three pairs of identical things in the room and show them to another student. _____

7. READ: TB, pp. 31–37. _____

8. ACTIVITY: Use clay to demonstrate this sentence: “Sanity is the ability to recognize differences, similarities and identities.” You can use one of these activities to help show this, or choose your own:

- making or building something
- playing a game
- studying something
- riding a bike

Supervisor pass. _____

D. KINDS OF THOUGHT

1. READ: TB, pp. 39–46. _____
2. ACTIVITY: Write down five facts and five opinions you have heard or read recently. For each fact tell another student how you know it is a fact. For each opinion tell why it's an opinion and not a fact. _____
3. ACTIVITY: Underline the opinions in the three paragraphs below. (Some but not all of the sentences are partly fact and partly opinion.)
 - a) The king cobra grows to a length of 12 to 18 feet and is the longest poisonous snake in the world. Some cobras spit their venom to blind their prey, which is a pretty odd thing for a snake to do. When the cobra is disturbed, it lifts up and flattens its neck into a hood, and it is a strangely beautiful sight. Snake charmers get cobras to “dance” (sway back and forth) by swaying as they play their flutes. Since cobras are deaf they're probably not “dancing” because they love flute music, but possibly they follow the motion of the flute player so they can spit venom at him. They are so dangerous to people and there are so many of them that it would be good if governments offered rewards for killing them.
 - b) The Olympic Games are athletic games, which are held in a different country every four years for athletes from all over the world. The symbol of the Olympics is five linked circles, which stand for the continents. The games represent the highest excellence in sports, and it should be a great honor for an athlete to be able to compete in the Olympics. The first Olympic games were held in Ancient Greece, but ended hundreds of years ago. The games were started again in Athens, Greece, in 1896 when 285 athletes participated. In 2016, over 11,000 athletes competed. This is a great improvement, but it would be better if more people from smaller countries were in the games.
 - c) At one time people in many places didn't know that being dirty and having old food around could help cause sickness. They were not very smart because they did not take baths very often, and they left old food around or threw it into the street. There were many rats and insects in the cities. This made the cities very ugly. No one would want to go there. Sometimes the people were dirty enough that small insects called lice lived on their bodies, which was quite unpleasant. Sometimes there would be a lot of sickness in these

cities, and many, many people would die from these sicknesses. Even though the country was much nicer than the cities, the sicknesses would spread there too.

When you are done, check your work using the answer sheet attached to this learning guide. Mark anything you got wrong, and then show it to your supervisor. **Supervisor pass.**

4. ACTIVITY: For the next 24 hours keep a list of facts and opinions you hear or read, from your courses, from your friends, family, supervisors, television, news sites, etc. Write next to each one whether it is fact or opinion.

5. ACTIVITY: Using a current events magazine, history book or other reference that is easy for you to read, find examples of facts and opinions. For each fact that you find, explain how you know it is a fact. For each opinion explain why it is an opinion and not a fact. Do this until you can do it easily. When you are done, show your supervisor some examples of what you found. **Supervisor pass.**

6. READ: TB, pp. 47–50.

7. ACTIVITY: On a separate piece of paper write two real-life facts you can get from each of the following laws:

a) When you hold a burning match to dry paper, the paper burns. _____

b) Moving things tend to stay in motion. _____

c) Dark surfaces absorb more heat from the sun than light surfaces do. _____

d) Law of a computer store: We guarantee that the customers will be happy with our product. _____

e) An accused person is considered innocent until proven guilty beyond a reasonable doubt. _____

8. ACTIVITY:

a) List five laws. Think of at least three of the laws yourself, but if you have trouble thinking of more laws on your own you can look for examples of laws in books or online. You may use the following subject areas, or you may choose your own subjects: ____

- laws of science
- laws of grammar
- laws of a game
- laws of building things from wood or metal
- laws of manners
- laws of growing plants
- laws of your classroom
- laws in your family

b) For each law you listed, write down an example of how you could use that law to tell how things will be or should be. ____

9. READ: TB, pp. 51–56. _____

10. ACTIVITY: List five orders and five suggestions that you have given to someone else or someone else has given to you. _____

11. ACTIVITY:

a) Choose a subject that you like and that you have studied about, either on your own or in the classroom. In writing, give an example of a fact and an opinion, a law and a lesser fact, and an order and suggestion in that subject. ____

b) Using those examples, explain how knowing these categories would help a student be sane about that subject. ____

E. GETTING RIGHT ANSWERS

1. READ: TB, pp. 57–65. _____

2. ACTIVITY: Use objects to demonstrate three different examples of someone thinking and getting right answers and doing things. _____

3. READ: TB, pp. 66–69. _____
4. ACTIVITY:
 - a) Look around and find three things in the room that make sense (are logical) to you. ____
 - b) Think of three things you have read recently that made sense (were logical) to you. ____ _____
5. READ: TB, pp. 70–76. _____
6. ACTIVITY: In writing
 - a) Describe three things you have observed or heard recently that didn't make sense (weren't logical) to you. Tell why they didn't make sense. ____
 - b) Describe three things you have read about recently that didn't make sense (weren't logical) to you. Tell why they didn't make sense. ____ _____
7. ACTIVITY: Demonstrate in clay
 - a) something that is illogical. ____
 - b) something that is logical. ____ _____

F. THE FIVE PRIMARY ILLOGICS

1. READ: TB, pp. 77–86. _____
2. ACTIVITY: In each of the following examples, decide what was omitted and write it down on a separate piece of paper.
 - a) The bank robbery occurred at 1:00 in the morning, and it is known that suspect was not at home. There were fingerprints on the door to the safe, and the suspect's fingerprints are on file with the police department.
 - b) The manager decided to hire John Robertson for the team rather than Mel Franklin. Robertson's batting average was excellent for the past two years, and he was ranked third in the league for bases stolen. Did the manager hire the right man?
 - c) The lab was testing a possible replacement for sugar, and fed small amounts to fifty lab rats. Two of the rats died. Is this new sugar replacement safe for humans?

- d) The crocodile is a very large reptile with powerful jaws that can crush bones. Crocodiles have been around for many thousands of years and are some of the largest reptiles. They should definitely be put on the endangered species list.
- e) There have been several accidents in that kind of car, so the car has been declared unsafe to drive.

When you are done, check your work using the answer sheet attached to this learning guide. Mark anything you got wrong, and then turn it in to your supervisor. **Supervisor pass.**

- 3. ACTIVITY: Think of five examples of omitted data and write them down. Try to make your examples be something that could really happen. _____
- 4. ACTIVITY: Look at an area you are familiar with and see if you can spot something omitted. Make sure the things you find fit the definition of an illogic. Keep looking in familiar areas until you find three examples of omitted data. Write down what you found. _____
- 5. READ: TB, pp. 87–94. _____
- 6. ACTIVITY: Think of some activity that you are familiar with or observe an activity in your classroom. Write down what the sequence of the activity is. Examples might be planning a school activity, playing a game or making something. Write down what would happen if the sequence were altered. _____
- 7. ACTIVITY: The sentences in the following paragraph are scrambled into altered sequence. On a separate piece of paper rewrite them in correct sequence.

At the end of the war a new country called the United States of America had been created. When their demands weren't met, the settlers formed an army under General George Washington and fought for freedom to run their own government. But even though they were loyal, when the king charged the settlers high taxes without letting them have a say in their government, the American settlers protested and demanded their rights as English citizens. Before the war many of the settlers in America were English citizens and loyal to King George.

When you are done, check your work using the answer sheet attached to this learning guide. Mark anything you got wrong, and then turn it in to your supervisor. **Supervisor pass.**

8. ACTIVITY: Decide on an activity that you're familiar with and that you can watch. Check it with your supervisor; then go watch the sequence of the activity. Look to see if anything is done out of sequence. Come back to the classroom and write down the sequence of actions that you observed and whether you saw any altered sequence. Do this until you're sure you could spot an altered sequence.

9. READ: TB, pp. 95–102.

10. ACTIVITY:

a) Look in a current events magazine, history book or other book or reference that is easy for you to read. Find a discussion about an event and notice at what time it took place. ____

b) Now look for an example of dropped time. Write down what you found and what happens when you are given information that has dropped time. ____

11. ACTIVITY: Choose some activity or an area you're familiar with. Examples might be how things are at your home during a meal, a sport that you play, or something that you know how to do well. Write down three examples of how there could be dropped time in that area and what would happen if those examples of dropped time happened.

12. READ: TB, pp. 103–110.

13. ACTIVITY: Write down five examples that you have observed where someone was given data that had a falsehood in it. For each example tell what happened to the person's ability to think clearly and make sane decisions with the data.

14. ACTIVITY: Read a page of a book, magazine or other reference that is not fiction. Figure out whether or not the data presented contains any falsehoods. Write up what you did and how you decided.

15. READ: TB, pp. 111–121.

16. ACTIVITY: Use objects to show examples of
- a) giving something more importance than it has. ____
 - b) giving something less importance than it has. ____
 - c) giving two or more things of different importance the same importance. ____
-

17. ACTIVITY: On a separate piece of paper write down the letters of the sentences below that have altered importance. (You don't have to say what the altered importance is.)
- a) When the astronauts returned to Earth after the first trip to Mars, they were interviewed by newspaper reporters who all wanted to know what they liked to eat for breakfast.
 - b) When they packed for the five-day wilderness hike, they brought food, a first-aid kit, sturdy clothes and sleeping bags.
 - c) The miner who had found a rich vein of gold heard some men planning to steal his claim the next day. He spent the day moving his tent so it would be in the shade.
 - d) The strawberry farmer could see that her crop was ripe and would need to be harvested within the next couple days or it would rot on the vine. Since she didn't like their manners she fired all her strawberry pickers.
 - e) In the Navy the decision about who will be promoted to Admiral should be decided by whom can give the best parties.
 - f) When the parents realized that their daughter was gifted at playing the piano, they moved to New York so that she could have excellent teachers.
 - g) The jury needed more time to be certain, but people were upset because it was taking too long, so they submitted their verdict.

When you are done, check your work using the answer sheet attached to this learning guide. Mark anything you got wrong, and then turn it in to your supervisor. **Supervisor pass.**

18. ACTIVITY: Practice saying the five primary illogics until you can say them all to another student without looking at the list.

1. Omitted data
2. Altered sequence
3. Dropped time
4. Falsehood
5. Altered importance

19. ACTIVITY: Each of the following has one of the five illogics in it. On a separate piece of paper write down the letters of the sentences and for each one note what the correct illogic is.

- a) Write a letter to a friend, think of what you want to say, put a stamp on the envelope, drop it in the mail.
- b) “Yes, Mother, I emptied the garbage” (thinks to himself: “last month”).
- c) Oh no, I stubbed my toe! I think I should just stay in bed today.
- d) Since glass catches on fire easily, I’m always careful to keep glasses away from hot stoves or lit matches.
- e) If you add 13 to a number, what answer do you come up with?
- f) When you get a cold, it’s best to eat chocolate because it is well known that chocolate is a cure for the common cold.
- g) You decide which man the police should arrest for robbing the store: the one who was standing next to the door or the one who was running down the street.
- h) In the morning I always take a shower, go to work, get dressed and then eat a good breakfast so I have plenty of energy to start the day.
- i) The student got the highest grade on his research paper because his handwriting was very neat.

When you are done, check your work using the answer sheet attached to this learning guide. Mark anything you got wrong, and then turn it in to your supervisor. **Supervisor pass.**

20. ACTIVITY: Have another student call off the five primary illogics in any order. For each one give an example. This activity is passed by the supervisor when you can quickly give an example for each illogic called out. **Supervisor pass.**

G. FIVE PRIMARY WAYS THINGS ARE LOGICAL

1. READ: TB, pp. 123–128. _____
2. ACTIVITY: Write what it would mean to have all the related facts about the following subjects:
 - a) deciding whether to go swimming or not ____
 - b) how to grow a plant ____
 - c) playing a ball game ____
 - d) solving a mystery _________
3. READ: TB, pp. 129–133. _____
4. ACTIVITY: Write out instructions for someone telling how to get from one place to another, in correct sequence. Have another student follow the instructions while you watch (silently) to see if you've given the instructions in correct sequence. _____
5. READ: TB, pp. 134–138. _____
6. ACTIVITY: Write down three instances in your experience when time was noted correctly and it helped things to happen correctly. _____
7. READ: TB, pp. 139–144. _____
8. ACTIVITY: Make up five examples of data proven factual. Make them things that could really happen. Write them down. _____
9. READ: TB, pp. 145–150. _____
10. ACTIVITY: Discuss each of the following statements with another student. Decide whether each is correct importance or altered importance, and why:
 - a) In studying, the most important thing is to finish quickly. ____
 - b) It is more important to eat nutritious food than to eat large quantities of food. ____
 - c) It's better to let things be the way they are than upset people by trying to fix them. ____
 - d) Doing what you know is right and being liked are of equal importance. _____

11. ACTIVITY: Make up five examples of correct relative importance that could really happen. Write them down. _____
12. ACTIVITY: In current events magazines, books or other references that are easy for you to read, find an example of each of the five primary ways that data is logical. _____
13. ACTIVITY: In your classroom find an example of each of the five primary ways data is logical. _____
14. ACTIVITY: Practice saying the five primary ways things are logical until you can say them all to another student without looking at the list.
 1. Related facts known
 2. Events in correct sequence
 3. Time noted
 4. Data proven factual
 5. Correct relative importance _____
15. ACTIVITY: Have another student call off the five primary ways things are logical in any order. For each one give an example. The activity is passed by the supervisor when you can quickly give an example for each. **Supervisor pass.** _____

H. OUTPOINTS AND PLUSPOINTS

1. READ: TB, pp. 151–156. _____
2. ACTIVITY: Use objects to demonstrate this sentence: “An *outpoint* is a datum that is offered as true, but is actually illogical when compared to the five primary illogics.” _____
3. READ: TB, pp. 157–162. _____
4. ACTIVITY Use objects to demonstrate these sentences:
 - a) “Each of the five primary ways that things can be logical is a *pluspoint*.” _____
 - b) “Pluspoints show where logic exists and where things are going right, or likely to go right.” _____

5. READ: TB, pp. 163–169. _____

6. ACTIVITY Use objects to demonstrate:

a) a student who can't see outpoints and pluspoints and doesn't know if something is right or wrong. _____

b) a student who can see outpoints and pluspoints and can find the right answers. _____

I. HOW THINGS SHOULD BE

1. READ: TB, pp. 170–179. _____

2. ACTIVITY: Use objects to demonstrate why you would have to know how something is supposed to be before you try to find outpoints and pluspoints about it. _____

3. ACTIVITY:

a) Observe an area you are not familiar with. Before you learn anything more about it, list things that seem to you like they may be outpoints and pluspoints. _____

b) Have someone who knows the area well explain how it should be. Then observe the area again for outpoints and pluspoints and note down what you spot. _____

c) Write an essay explaining what you learned about being familiar with an area before you can spot outpoints and pluspoints in that area. _____

Supervisor pass. _____

J. BEING REASONABLE

1. READ: TB, pp. 180–201. _____

2. ACTIVITY: Find something in your classroom that is not the way it should be. Write down what it is, and then write down five ways that you could be reasonable about it. For each, explain how being reasonable about that could keep you from getting correct answers. _____

3. ACTIVITY: Find something that is illogical. Point it out to someone and ask that person why it is that way. Decide if the answer is

reasonable or not. Repeat this until you can spot when someone is being reasonable.

4. ACTIVITY: Write a short story that shows how being reasonable can make things worse. Make it about something that you think could really happen.

5. ACTIVITY: (Go on with your course and do this activity when you are not in class.) Observe other people in life until you have spotted at least two times when a person was reasonable about an outpoint. Write up what you observed and what the possible effects were of being reasonable about those things.

K. ERRORS

1. ACTIVITY: In a dictionary, look up the definition of *error*.

2. READ: TB, pp. 202–213.

3. ACTIVITY: Use objects to demonstrate the difference between an error and an outpoint.

4. ACTIVITY: On a separate piece of paper write down the letters of the following sentences. After each one, write whether the sentence contains an error or an outpoint.

a) There was spilled milk on the floor of the kitchen.

b) There were no firemen in a medium-sized town.

c) The cash register in the busy department store came up short by 50¢ at the end of the day.

d) After the family moved into the house, they found out that nobody had been willing to live in the house for the past 15 years because of the strange noises coming from the attic.

e) A page in that book was numbered wrong. The page after 12 was called page 14.

f) The ship left the dock and then was loaded.

g) The president of the company said that he liked the new blue couches in the meeting room, so her assistant sent out an order that the whole building be painted blue.

- h) After her suitcase was all packed and stowed on the train for the trip north, she noticed that she hadn't brought her warm sweater.
- i) The man tells his friends that he's happily married, but his wife is often seen in tears when she's talking to him.
- j) The electricity went out for 15 minutes so the clock in the classroom is 15 minutes slow today.
- k) He told his mother that he'd gotten 100% on the quiz, but he actually flunked it.
- l) It wasn't until after the new factory was built that the manager applied for a building permit, which was denied.
- m) The birthday card from my aunt didn't arrive until the day after my birthday.
- n) It's time to harvest the wheat, but the tractor is broken down.
- o) At the performance before 1,000 paying spectators in the auditorium the piano was way out of tune.
- p) That student's desk is messy today.
- q) Often students' work is lost because the classroom is so messy.

When you are done, check your work using the answer sheet attached to this learning guide. Mark anything you got wrong, and then turn it in to your supervisor. **Supervisor pass.**

5. **ACTIVITY:** Observe your classroom or another area you're familiar with. Make a list of at least 10–15 outpoints and errors you observe and label each. Pass when you can correctly spot outpoints and errors. **Supervisor pass**

L. MORE OUTPOINTS AND PLUSPOINTS

1. **READ:** TB, pp. 215–229.
2. **ACTIVITY:** On a separate piece of paper write down the letters of the following examples and name the outpoint.
 - a) Her mother wouldn't let her go to the movie because all movies have too much violence in them.
 - b) On his first day in the new town Andy decided he was going to be bored because all the people looked exactly alike to him.

- c) I want to be a lawyer when I grow up because lawyers don't have to obey any laws.
- d) Before 1919, women in the United States weren't permitted to vote because their judgment wasn't considered as good as men's.
- e) One of the boys told his teacher that he doesn't like to cook, so no boys are allowed to be in the cooking class.
- f) He was thrown from a horse when he was a child and now he's afraid of all horses.

When you are done, check your work using the answer sheet attached to this learning guide. Mark anything you got wrong, and then turn it in to your supervisor. **Supervisor pass.**

3. ACTIVITY: For each of the following outpoints think of an example that actually happened and write what it was.

- a) Assumed "identities" are not identical ____
- b) Assumed "similarities" are not similar or same class of thing ____
- c) Assumed "differences" are not different ____

4. ACTIVITY: Use objects to demonstrate a way that treating two people exactly the same way would be an outpoint.

5. READ: TB, pp. 230–241.

6. ACTIVITY: Go to three different areas for this activity. In each area:

- a) Spot data or things in the same classification and write up how they are in the same classification. ____
- b) Spot incorrectly included data or things and write up how they are incorrectly included. ____

7. READ: TB, pp. 242–249.

8. ACTIVITY: Interview people to find examples of wrong targets. For each person, find out what he or she is doing and the reason for doing it. Then determine through further questioning and observation if what the person is doing is a wrong target. Write up what you found out.

9. READ: TB, pp. 250–258.

10. ACTIVITY: For each of the following people list two examples of wrong sources for an order or information.
 - a) yourself ____
 - b) an artist ____
 - c) a doctor ____
11. READ: TB, pp. 259–268. _____
12. ACTIVITY: Write an essay that describes someone studying something and noticing contrary facts, then being reasonable about it. Then describe what that person should do about the contrary facts. _____
13. READ: TB, pp. 269–278. _____
14. ACTIVITY: Use objects to demonstrate the difference between dropped time and added time. _____
15. ACTIVITY: Look around the classroom or another area that you are familiar with and spot an example of:
 - a) Added time (something that should take a long time has taken only a little time). ____
 - b) Added time (something that should take a little time has taken a long time). ____
16. ACTIVITY: Write a story giving an example of added time. _____
17. READ: TB, pp. 279–287. _____
18. ACTIVITY: Use objects to show the difference between incorrectly included data and added inapplicable data. _____
19. ACTIVITY: Observe an area you are familiar with. Find some added inapplicable data or things in it and write up what you found. _____
20. ACTIVITY: Look at several advertisements in magazines or other sources, and find added inapplicable data. Write up what you found. _____
21. READ: TB, pp. 288–294. _____
22. ACTIVITY: Decide what the expected time period is for you to complete this course, or some other course, activity or project that you are working on. You may get help from your supervisor on this. _____

23. READ: TB, pp. 295–300. _____
24. ACTIVITY: Find someone who has omitted data or things. Handle it so that the person has adequate data or things. Write up what you did. _____
25. READ: TB, pp. 301–306. _____
26. ACTIVITY:
- a) Think of an area of study that you like. Write two examples of how related facts known, adequate data and applicable data apply in an area of study. _____
 - b) Pick an area of work or activity you are familiar with. Write an example of how each of these pluspoints could be used in that activity: related facts known, adequate data and applicable data. _____
27. READ: TB, pp. 307–312. _____
28. ACTIVITY: Use objects to demonstrate an example of correct source for these things:
- a) how you know what your daily schedule is _____
 - b) learning how to use a computer _____
 - c) finding out what's for dinner _____
 - d) giving you an order _____
29. READ: TB, pp. 313–318. _____
30. ACTIVITY: Write three examples you have observed of someone having the correct target. _____
31. READ: TB, pp. 319–324. _____
32. ACTIVITY: Choose an area that you are familiar with, and look there for five data that are in the same classification. Write down what you found. _____
33. READ: TB, pp. 325–331. _____
34. ACTIVITY: Use objects to demonstrate a way that treating two people exactly the same would be a pluspoint. _____

35. ACTIVITY: For each of the following pluspoints think of an example that actually happened and write what it was.

a) Identities are identical ____

b) Similarities are similar ____

c) Differences are different ____

36. READ: TB, pp. 333–336.

37. ACTIVITY: Practice saying the outpoints and pluspoints until you can say them all to another student without looking at the lists. You do not need to say them in order.

38. ACTIVITY: Have another student call off the outpoints in any order and for each one give an example of that outpoint. This drill is passed when you can quickly give an example for each. **Supervisor pass.**

M. USING LOGIC

1. READ: TB, pp. 337–359.

N. FINAL ACTIVITY

1. ACTIVITY: Spot an area where things aren't going as they should go.

a) Work out for yourself and write down how things should be. Do this by studying or talking to people who know, or however you can. ____

b) Talk to the people in the area and observe in the area to find outpoints and pluspoints. Write them down. ____

c) Try to determine how people have been reasonable about the outpoints and any other data that would help you see how it was possible for these outpoints to continue. Write down what you find. ____

Supervisor pass.

I have completed the steps of this course. I understand what I studied and can use it.

Student _____ Date _____

The student has completed the steps of this course and knows and can apply what was studied.

Academic supervisor _____ Date _____

The student has passed the exam for this course.

Examiner _____ Date _____

FOR FACULTY

NOTE

1. *The Learning Book* or other study course should be done before this one.
2. The student's write-ups for the final activity will be needed for the exam.

LEARNING GUIDE ATTACHMENT

Activity Answers

ADDITIONAL RESOURCES

Exam and answers

Materials list



Activity Answers

The Thinking Book

D.3 FACTS AND OPINIONS ACTIVITY

- a) The king cobra grows to a length of 12 to 18 feet and is the longest poisonous snake in the world. Some cobras spit their venom to blind their prey, which is a pretty odd thing for a snake to do. When the cobra is disturbed, it lifts up and flattens its neck into a hood, and it is a strangely beautiful sight. Snake charmers get cobras to “dance” (sway back and forth) by swaying as they play their flutes. Since cobras are deaf they’re probably not “dancing” because they love flute music, but possibly they follow the motion of the flute player so they can spit venom at him. They are so dangerous to people and there are so many of them that it would be good if governments offered rewards for killing them.
- b) The Olympic Games are athletic games, which are held in a different country every four years for athletes from all over the world. The symbol of the Olympics is five linked circles, which stand for the continents. The games represent the highest excellence in sports, and it should be a great honor for an athlete to be able to compete in the Olympics. The first Olympic games were held in Ancient Greece, but ended hundreds of years ago. The games were started again in Athens, Greece, in 1896 when 285 athletes participated. In 2016, over 11,000 athletes competed. This is a great improvement, but it would be better if more people from smaller countries were in the games.
- c) At one time people in many places didn’t know that being dirty and having old food around could help cause sickness. They were not very smart because they did not take baths very often, and they left old food around or threw it into the street. There were many rats and insects in the cities. This made the cities very ugly. No one would want to go there. Sometimes the people were dirty enough that small insects called lice lived on their bodies, which was quite unpleasant. Sometimes there would be a lot of sickness in these cities, and many, many people would die from these sicknesses. Even though the country was much nicer than the cities, the sicknesses would spread there too.

F.2 OMITTED DATA ACTIVITY

- a) Do the suspect’s fingerprints match the fingerprints on file with the police department? Where was the suspect at 1:00 a.m.?
- b) Was Mel Franklin’s record better than John Robertson’s?

- c) What caused the rats to die—did it have anything to do with the test?
Do tests on rats mean the results are the same for humans?
- d) Are crocodiles an endangered species?
- e) Were the accidents caused by the driver and not the car? Were there more accidents in that kind of car than in other kinds of cars? What were the circumstances of the accidents?

F.7 ALTERED SEQUENCE ACTIVITY

Before the war many of the settlers in America were English citizens and loyal to King George. But even though they were loyal, when the king charged the settlers high taxes without letting them have a say in their government, the American settlers protested and demanded their rights as English citizens. When their demands weren't met, the settlers formed an army under General George Washington and fought for freedom to run their own government. At the end of the war a new country called the United States of America had been created."

F.17 ALTERED IMPORTANCE ACTIVITY

- a) Altered importance: what they like for breakfast is not as important as hearing about the first trip to Mars.
- b) No altered importance.
- c) Altered importance: it was more important to make his claim safe than to put his tent in the shade.
- d) Altered importance: the workers' manners weren't as important as getting the strawberries picked.
- e) Altered importance: an Admiral is supposed to run a Navy, not give parties.
- f) No altered importance.
- g) Altered importance: a fair verdict is more important than speed or avoiding upset.

F.19 FIVE ILLOGICS ACTIVITY

- a) Altered sequence
- b) Dropped time
- c) Altered importance
- d) Falsehood
- e) Omitted data
- f) Falsehood

- g) Omitted data
- h) Altered sequence
- i) Altered importance

K.4 ERROR OR OUTPOINT ACTIVITY

- a) Error
- b) Outpoint
- c) Error
- d) Outpoint
- e) Error
- f) Outpoint
- g) Outpoint
- h) Error
- i) Outpoint
- j) Error
- k) Outpoint
- l) Outpoint
- m) Error
- n) Outpoint
- o) Outpoint
- p) Error
- q) Outpoint

L.2 MORE OUTPOINTS ACTIVITY

- a) Assumed similarities are not similar or same class of thing
- b) Assumed identities are not identical
- c) Assumed differences are not different
- d) Assumed differences are not different
- e) Assumed similarities are not similar or same class of thing
- f) Assumed identities are not identical

