

ELEMENTARY RESEARCH ACTIVITIES

NAME _____ SCHOOL _____

DATE STARTED _____ DATE COMPLETED _____

PREREQUISITE: Ability to use a dictionary to look up definitions of words.

HOW TO DO THIS COURSE: Do the steps one at a time, in order. When you finish a step, put your initials and the date on the sign-off line on the right. A split line means get a pass (and an initial) from another student (or your Academic Supervisor if it says that). A * means get a checkout. Essays are turned in to the Academic Supervisor.

PURPOSE: Improve your ability to find out what you want to know by direct observation and use of written references.

ESTIMATED TIME: 9–11 hours.

MATERIALS NEEDED FOR THIS COURSE _____

Study booklet, *Elementary Research Activities*, with these data sheets (DS):

6126 5159

Exam: 5160, 8321 (answers)

Other texts/references:

The World Almanac and Book of Facts (World Almanac), current edition, The World Almanac, 200 Park Avenue, NY, NY 10165.

Access to *New Book of Knowledge* encyclopedia, or a similar encyclopedia at that level.

Local maps (see Data Sheet #5159, Set 3, #1).

NOTE TO THE ACADEMIC SUPERVISOR _____

If the student is not studying in a school setting, other items may be substituted in DS #5159 Assignments for Elementary Research Activities where appropriate.

A. DOING RESEARCH

1. **ESSAY:** Read the Purpose statement for this course and write how you think those abilities could be useful to you. List three things you would like to learn by research that you think you could do this year. Save the essay so that you can look at it again at the end of the course. _____
- *2. **READ:** Data Sheet #6126 Research, to heading “Accuracy.” _____
3. **DEMONSTRATE USING CLAY:** The difference between first-hand data, second-hand data and third-hand data. _____
4. **ESSAY:** Make up five examples of first-hand data, five examples of second-hand data and five examples of third-hand data. _____
- *5. **READ:** Data Sheet #6126 Research, section “Accuracy.” _____

6. DEMONSTRATE: Three ways a student can check the accuracy of data. _____

7. DEMONSTRATE: Two responsibilities of a researcher. _____

B. RESEARCH ASSIGNMENTS

1. DRILL: Look at Data Sheet #5159 Assignments for Elementary Research Activities. Do the five steps in Set #1. Write a report for your supervisor that explains what you found out. **Supervisor pass.** _____

2. DEFINE: reference (as in reference book). _____

3. DRILL: Look at Data Sheet #5159. Do Set #2. Write your answers to the questions and turn them in. _____

4. DRILL: Data Sheet #5159, Set #3. Write your answers to the questions and turn them in. _____

5. DRILL: Using the same areas you did for Sets #1–3 above, write down 5–10 research steps for someone else to do. Write questions about things that you would be interested in researching yourself. Turn in your questions to your supervisor. _____

6. DRILL: Data Sheet #5159, Set #4. Write your answers for each question and turn them in. _____

7. DRILL: Using the same areas you did for Set 4 above, write down 5–10 research steps for someone else to do. Choose questions you would be interested in researching yourself. Turn in your questions to your supervisor. **Supervisor pass.** _____

8. PRACTICAL APPLICATION: Before you finish this course, get another student or adult to do at least three of the research steps you proposed, and see if he gets the information you wanted. _____

C. PROBLEMS

1. DEFINE: problem _____

2. DRILL: Give an example of something that is a problem. Then give an example of something that is not a problem. Continue giving examples back and forth until you are sure what a problem is. **Supervisor pass.** _____

3. DRILL: Go and find some problems in the areas visited in section B. Write down 5–10 problems and turn them in to your supervisor. _____

4. DRILL: Make up 5–10 problems about *anything* you wish that would require direct observation to solve. Write these down and turn them in to your supervisor. _____
5. PRACTICAL APPLICATION: Before you finish this course, get another student or adult to do at least three of the problems you proposed. See how well the person was able to solve the problems. _____

D. WRITTEN SOURCES

1. DRILL: Data Sheet #5159, Set #5. Find out the answers to the questions. Then get a sheet of paper and rewrite the questions as directions. Describe exactly how to find each item listed in questions 1, 2 and 5, and how to do the actions in questions 3 and 4. Write your directions so that someone else could use your paper to find or do these things. Turn your paper in to your supervisor. _____
2. DRILL: Using the same areas as in Set 5 above, make up 5–10 questions of your own for someone else to answer. Turn your questions in to your supervisor. _____
3. DEFINE:

almanac	chronology	index
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4. DRILL: Data Sheet #5159, Set #6 Part A. Use the *World Almanac* for the current year. Write down the answers. **Supervisor pass.** _____
5. DRILL: Data Sheet #5159, Set #6 Part B. Write down the answers and turn them in to the supervisor. _____
6. DRILL: Data Sheet #5159, Set #7. Write down the answers and turn them in to the supervisor. _____
7. PRACTICAL APPLICATION: Below is a list of categories from the *World Almanac*. Pick two and make up at least two questions each, for someone else to answer. Turn your questions in to your supervisor.

Children’s books	National Basketball Association
Maps (color)	Temperature (weather)—highest, lowest
Stars (morning, evening)	Books—Awards (Newberry Medal)
Postal Service (abbreviations)	

E. USING AN ENCYCLOPEDIA

1. DEFINE: encyclopedia article _____

2. DEMONSTRATE: Find a set of the *New Book of Knowledge* (NBK) or similar encyclopedia, and see how many volumes there are. Look through a volume and notice the diagrams and pictures, and the information given on the various subjects. Notice that the articles are arranged in alphabetic order. _____
3. DRILL: The purpose of this drill is to learn how to find information in an encyclopedia quickly using an index. You don't have to read the information you find, but you have to be able to use the index to find it.

Do A, B or C:

A. If your encyclopedia has an index for each volume:

- 1) Pick a volume and find the index pages for that volume. _____
- 2) In the volume index find a subject you know something about. Then find the information on that subject in the encyclopedia. The information might be an article in the encyclopedia or part of an article. _____
- 3) Repeat steps 1) and 2) five more times. Use a different volume each time. _____

B. If your encyclopedia just has one index for the whole set:

- 1) Find a subject in the index volume that you know something about. Then find the information on that subject in the correct volume of the encyclopedia. The information might be an article in the encyclopedia or part of an article. _____
- 2) Repeat 1) five more times. Try to find subjects that are in different volumes. _____

C. If your encyclopedia has an index for each volume and an index for the whole set: Do A *and* B, but only look up three subjects for A and three subjects for B. _____

4. RESEARCH: Below is a list of subjects. Pick one to research and use the index(es) and alphabetic order to find it in an encyclopedia. Read through a few paragraphs and find four things you didn't know about the subject. Write an essay of at least 75 words on what you learned.

guinea pigs	candles
book design	tricks
shoes	Thomas Jefferson
gymnastics	Indian Ocean

Supervisor pass. _____

F. RESEARCH AND PRESENTATION

1. **PRACTICAL APPLICATION:** Name a favorite subject you like, or a hobby. Look at this subject carefully to find out something about it that you would like to know more about. Choose something that requires some reading, but also requires actually doing something (learning a new skill, for example). Choose something you can learn and do in about two hours. Write a proposal to research the subject you have chosen, including in it what you plan to learn. Get your supervisor to approve your proposal. (Save your paper.) Then:

- a) Carry out the research. ____
- b) Practice as much as you need to. ____
- c) Get the proposal you wrote. Now add to it what you did and exactly what you found out. Your paper should be at least 75 words. Turn this in to the supervisor. If you made something you can turn in, turn that in also. ____

Supervisor pass. The paper should be well-written, with proper language usage for this level. _____

2. **PRACTICAL APPLICATION:** Choose another subject, but this time choose something you know less about. Find out something about it that you would like to know more about and can learn in about 2 hours. Write a proposal to research the subject and include in it what you plan to learn. Get your supervisor to approve your proposal. (Save your paper.) Then:

- a) Carry out the research. ____
- b) Practice as much as you need to. ____
- c) Get the proposal you wrote. Now add to it exactly what you found out. Your paper should be at least 75 words. Turn this in to the supervisor. ____

Supervisor pass. The paper should be well-written, with proper language usage for this level. _____

3. **FINAL APPLICATION:** With your supervisor, decide which of the two subjects you researched above should be presented to an audience. Then set up a separate room or section of your classroom to make your presentation, and practice giving it until you feel you can do it. Give a presentation to at least five people, including the supervisor. Show what you learned or made in your presentation. You can use other things, such as a chalkboard or pictures, to make your presentation better. _____

4. **ESSAY:** Look at the essay you wrote at the beginning of the course (step A.1) and answer these questions: Did you research any of the things that

you were interested in? Did you learn something you didn't know before? What would you like to research next? Explain why. _____

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 _____

This student has passed the exam for this course.

Examiner _____ Date _____