Journal Entries

Week 1 - Identifying Scientific Principles

<u>Purpose</u>: This activity is designed to help you identify scientific principles in your everyday life.

- 1. Read the newspaper for a week.
- 2. Each day, cut out one article that you think somehow deals with science.
- 3. Attach that article to your journal and then as your journal entry, identify the scientific principles involved and then discuss how it relates to your life.
- 4. By the end of the week, you should have 5 articles and 5 journal entries one for each article.

Week 2 - Determining Perspective of the Author

<u>Purpose</u>: This activity is to help you identify bias and determine the perspective of the author.

- 1. Read the newspaper for a week.
- 2. Each day, cut out one article that you think somehow deals with science.
- 3. Attach that article to your journal and then as your journal entry, identify the scientific principles involved and then discuss how it relates to your life.
- 4. Next, identify where you think the author is coming from. Is the author for or against something? Does the author have a hidden agenda? Is there any author bias?
- 5. By the end of the week, you should have 5 articles and 5 journal entries one for each article.

Week 3 - Identifying Variables

<u>Purpose</u>: This activity is to help you identify variables in a published scientific study.

- 1. Read the following five research studies (one per day for this week).
- 2. As your journal entry, identify the scientific variables (dependent, independent, and control) in each research study.
- 3. Explain why each of these variables is important to a scientific study.
- 4. Could you identify the variables for any of the newspaper articles you read?
 - If so, identify the variables in your newspaper articles.
 - If not, why can't you identify variables? Is each article still scientific if there are no variables to be identified? Why or why not?
- 5. Also, identify where you think the author is coming from. Is the author for or against something? Does the author have a hidden agenda? Is there any author bias?

Week 4 - Determining Conclusions

<u>Purpose</u>: This activity is to help you determine how conclusions were reached from data.

- 1. Look back at the research studies we read last week. Identify the scientific principles in each.
- 2. Next, identify where you think the author is coming from. Is the author for or against something? Does the author have a hidden agenda? Is there any author bias?
- 3. Identify the conclusion reached in each study.
- 4. Determine and explain whether or not you think this conclusion logically follows the data.
- 5. Identify at least one other conclusion that may have been reached from this data.

Week 5 - Identifying Support for Conclusions

Purpose: This activity is to help you identify the data that supports the conclusion.

- 1. Look back at the research studies we read last week. Review your comments from last week about the scientific principles involved and any potential author bias to consider. Identify the data collected.
- 2. Now, identify the conclusion reached in each study.
- 3. Determine and explain whether or not you think this conclusion logically follows the data.
- 4. Identify at least one other conclusion that may have been reached from this data.

Week 6 – Preparation for Assessment

<u>Purpose</u>: You will now be expected to be able to do all the skills we have been working on through your journal entries. In preparation for assessment on these skills...

- 1. Find 2 articles in which you can do **all** of the following:
 - □ Read articles and identify the scientific principles involved
 - □ Read articles and determine the perspective of the author
 - □ Read articles and identify the variables in the research
 - □ Read articles and determine the conclusion
 - □ Read articles and identify support for the conclusion
 - □ Read articles and thoughtfully respond through journal entries
- 2. Attach each article to your journal and in your journal entry you should address the above for each article.