

SCI 100 Module Four Short Answer Guidelines and Rubric The Role of Funding in Research

Prompt: In this short answer assignment, you'll explore what can happen when special interest groups spend money to fight against scientific research that would harm their business.

For this assignment, choose one of the following two articles:

- 1. Clair Patterson and the Age of the Earth: Fighting for a Clean Earth
- 2. Big Tobacco and Science: Uncovering the Truth

If you chose the **first** article, respond to the following questions:

- 1. Why do you think the lead manufacturers and petroleum companies fought so hard against the scientific evidence Patterson uncovered about lead?
- 2. What tactics did these companies use to try to undermine Patterson's research?
- 3. What do their efforts say about the role of funding and "big money" in scientific research?

If you chose the **second** article, respond to the following questions:

- 1. Why do you think the tobacco companies fought against evidence that showed the harmful effects of secondhand smoke?
- 2. What tactics did these companies use to try to downplay this evidence?
- 3. What do their efforts say about the role of funding and "big money" in scientific research?

Rubric

Guidelines for Submission: Submit your responses in a Microsoft Word document. The length of your responses to each question may vary. A good response will be about 1–2 paragraphs in total.

| Critical Elements | Proficient (100%) | Needs Improvement (75%) | Not Evident (0%) | Value |
|-------------------|--|--|--|-------|
| Evidence | Explains why companies with special interests fought against scientific evidence using evidence from the chosen article | Explains why companies with special interests fought against scientific evidence, but explanation is unclear or lacking support | Doesn't explain why companies with special interests fought against scientific evidence | 30 |
| Tactics | Explains the tactics that companies used to downplay or undermine the scientific findings using evidence from the chosen article | Explains what tactics the companies used to downplay or undermine the scientific findings, but explanation is unclear or lacking support | Doesn't explain what tactics the companies used to downplay or undermine the scientific findings | 30 |



| Critical Elements | Proficient (100%) | Needs Improvement (75%) | Not Evident (0%) | Value |
|----------------------|--|--|---|-------|
| Funding | Discusses what the companies' efforts | Discusses what the companies' efforts | Doesn't discuss what the companies' | 30 |
| | say about the role of funding and "big | say about the role of funding and "big | efforts say about the role of funding and | |
| | money" in scientific research | money" in scientific research, but | "big money" in scientific research | |
| | | explanation is lacking detail | | |
| Communicates Clearly | Clearly communicates key ideas and | Response needs clarification in order to | Key ideas or thoughts are not | 10 |
| | thoughts in a short-answer response | support understanding of key ideas and | understandable | |
| | | thoughts | | |
| Total | | | | |