



## **Student Final Assignment:** *Hydrofracking*

To help you bring together what you've learned about data exploration and about hydraulic fracturing for natural gas, please complete the following.

- 1. Consider the 5 different arguments at the bottom of this page and think about which most interest or intrigue you. Rank the 5 Arguments from most (1) to least (5) interestiYour teacher will form small groups based on your interests. You will be focusing on that Argument for the rest of this assignment.
- 2. Read the Argument and the article associated with it. Identify:
  - a. the claim
  - b. the evidence presented (or not) in support of the claim
  - c. the reasoning included that uses scientific concepts to justify or explain how the evidence supports the claim.
- 3. On your own, prepare a short written report with these parts:
  - a. Your summary (in 1 paragraph) of
    - i. the claim
    - ii. the evidence presented (or not) in support of the claim
    - iii. the reasoning included that uses scientific concepts to justify or explain how the evidence supports the claim.
  - b. Your criticism of the argument based on the evidence provided. If you used other sources, list those sources and explain why you used them. Be as specific and thorough as possible. (1-2 paragraphs)
  - c. Your proposal for new research, using new or existing data, that would better address the question. (1-2 paragraphs)

## Hydrofracking Arguments

- 1. Hydrofracking is a safe and proven technology and will provide lots of jobs and needed energy. (Doyle, 2010)
- 2. Hydrofracking is beneficial because it increases the amount of natural gas that is used, which reduces greenhouse gases. (The Economist, 2012)
- 3. Fracking fluids are dangerous and may be getting into the drinking water in Pennsylvania. (Lustgarten, 2012)
- 4. Hydrofracking fluids are likely contaminating drinking water in Wyoming, causing concern about potential health risks for the people living in the area. (Worthington, 2011)
- 5. Regulations are not set up to manage the wastewater coming from hydrofracking operations. (Urbina, 2011)