Activity Guide for Students: Get to Know Your Local Geology

Directions:
In this activity, you will learn to think like a science reporter. You will analyze a *Science News* article and the scientific study on which it is based to understand how journalists use studies to develop articles.

The setup
For homework, read the *Science News* article “*A new chameleon species may be the world’s tiniest reptile*” and the *Nature* study “*Extreme miniaturization of a new amniote vertebrate and insights into the evolution of genital size in chameleons.*” Take notes on anything you consider important or interesting. Think about why the journalist chose to write about this topic.

Class discussion
Your teacher will introduce your class to the basics of science journalism. During the class discussion, be prepared to answer the following questions.

1. What factors does a journalist consider when deciding which scientific findings to cover?

2. What is the subject of the scientific study and the related *Science News* article?

3. Is the scientific study a primary source or secondary source? What about the *Science News* article? Explain the difference between primary sources and secondary sources.

4. Why do you think the *Science News* journalist chose to write an article about this particular discovery?

5. Who is the intended audience for the scientific study and the news article?

Dissecting stories
Using your homework notes and what you learned during the class discussion, work with a group to answer the following questions. Submit your answers to your teacher when you have finished.

1. How does the *Science News* article convey to readers that the findings of the scientific study are important or interesting?
2. Note key pieces of information (who, what, where, when, why and how) and where that information appears in the Science News article and in the scientific study.

3. How does the way that the Science News article organizes information compare with how the scientific study organizes information?

4. Are there any elements of a news article that you learned about in the class discussion that are not included in the Science News article? Why might those elements be missing from the article?

5. Besides the scientific study, what other sources of information are cited in the Science News article? Why do you think the reporter included those sources in the article?

6. Compare and contrast the writing styles of the Science News article and scientific study. Think about the language, voice and tone used in each piece of writing.

7. Provide examples where the reporter simplified scientific language or concepts to help the general reader.

8. Practice simplifying. Take a sentence from the news article and phrase it in an even simpler way. Include the original sentence for reference.

More stories to tell
Work on your own to answer the following questions. Submit your answers to your teacher when you have finished.

1. After reading the Science News article, what additional questions would you want to ask the scientists who did this research?

2. When journalists read a scientific study, they get different kinds of information from the various sections. Look at the abstract, materials and methods, discussion and references. Write down any pieces of information that interest you and that are not mentioned in the Science News article.
3. Considering your answers to the previous two questions, propose an article that you would write. What would the article be about?

4. What additional information could help you write the article?

5. Is the additional information included in the scientific study? If not, how could you find the information? What types of sources would you look for?

6. If you want to get information from a different scientist who might know about this research, how would you find that person?

**Optional writing assignment**
Apply what you have learned. Ask your teacher to assign an open-access scientific journal study. Read the study and consult additional primary and secondary sources as needed to write and submit a 500-word news article. Your article should have a lede, a nut graf, general background information and a quote either from the scientific study or from an interview. Your news article should include evidence from a primary source and an analysis to help your readers understand why the article matters. Use lively, engaging language. Make sure to cite any other sources you used to write the piece.