Student Discussion Worksheet

Directions: Begin this exercise by answering the question in the “Reflect on an argument” section. Then read the online Science News article “Female big-game hunters may have been surprisingly common in the ancient Americas.” Another version of the story, “Early American women hunted game,” appears in the December 5, 2020 issue of Science News. With a partner, discuss and answer the remaining questions. Share your answer to the final question with the class.

Reflect on an argument
1. Think of an argument you had where you took a position on something. What was the viewpoint or position that you took? How did your past experiences influence your viewpoint or position? How did you explain your viewpoint or position? Did you support your viewpoint or position with evidence? What was the outcome of the argument? What, if anything, could you have done differently to impact the outcome?

Evaluate a scientific argument
2. What is the claim, or assertion of something as a fact, made by the scientists as described in the Science News article?

3. What evidence, or scientific data, do the scientists use to support their claim?

4. How did scientists use the finding as reasoning to support their claim?

5. What points of uncertainty, or caveats, to the claim does the Science News article mention?

6. What could scientists do to increase confidence in the claim? How could scientists go about that process?
7. Does the new claim challenge any previously accepted ideas? Were the old ideas rooted in evidence? Explain how the transition in thought occurred.

8. Figures and diagrams can be used to present qualitative and quantitative evidence. Click on the link to the primary research article found at the bottom of the online Science News article “Female hunters of the early Americas,” and look through the figures. Describe what each figure depicts and explain how the figure helps communicate the evidence and/or enhance the argument.

**Compare and share**

9. Compare your personal experience with scientists’ process for creating an argument. Which steps from the scientists’ process did you follow and which steps did you skip when you built your own argument? Explain.

10. What strategies for crafting a scientific argument do you think are relevant for enhancing a personal argument? What strategies do you think are irrelevant?

11. Should personal arguments follow the process for creating a scientific argument? Are there cases where the scientific process doesn’t work well for personal arguments?