

Geologic Upheaval of the 1830s

Activity 1 - Group Discussion

Hand out “GU1830_Bio cards” to the student and urge them to work in small groups of 3-5. Have them read through the cards together. A potential suggestion moving further into the case might be to ask your students to adopt a perspective of one of these men to aid in their historical immersion.

You are now familiar with some of the leading geologists of the day. They come from different backgrounds that can end up giving these men biases in their approach to science. Have students regroup and discuss the following:

THINK [1]: How might the status and life history of these men have made their scientific view and social interactions biased? How might you have your own biases in your approach to science? (ie. Could De la Beche’s expulsion from military school provide insight to how he makes decisions?)

THINK [2]: This activity has brought to light a correlation with wealth and the men who did science, at this stage in history. With so much wealth, why do you think these men chose to student geology if they were not under the pressure to work a full-time job like the lay-person? How are these motivations the same and different to modern day individuals choosing their profession.

THINK [3]: Much of the original sources of material to develop this case study has come from records like letters. How might this material present biased history? (ie. Letters only have a one-sided discourse, the tone may change depending on the recipient, letters on this matter are designed to be persuasive)

Section 2: Teachers’ Notes

This section is important to reinforce the Nature of Science issue that science can be biased based on the personal history of the scientist or biased in how current researchers are able to access historical information. If struggling, students can be prompted by:

- Asking the students how each scientist came about their wealth and how they think that would affect their work.
- Asking the students how they think each scientist might value the use of fossils in determining the dating of strata or discredit the idea altogether.