PURDUE UNIVERSITY

While the Geologic Time Scale tells us the order in which things happened (Relative Dating), geochronology provides the actual dates (Absolute Dating).

STEM Career Highlights

YOUR Career in STEM...Starts Right Now

Nat Lifton

Geomorphologist

Growing up in Pasadena, California, Nat Lifton was no stranger to mountains. This is where he remembers going to the Rose Bowl parade for years and where he developed a passion to learn more about the mountains around him and became a Geomorphologist. When he is not in the field collecting samples, Nat is in the lab analyzing them. Researching the Geologic Time Scale is essentially decoding the Earth's past. Researching and dating past events allows us to piece together 4.6 billion years of Earth's history. The primary tool of geochronology is radiometric dating. This relies on the predictable decay of radioactive isotopes. Scientists, like Nat, measure the ratio between a "parent" isotope and its "daughter" product. Since radioactive decay happens at a fixed rate (known as a half-life), we can calculate how long it has been since the rock formed, was buried, or was exposed at the surface.

Q: What are your hobbies?

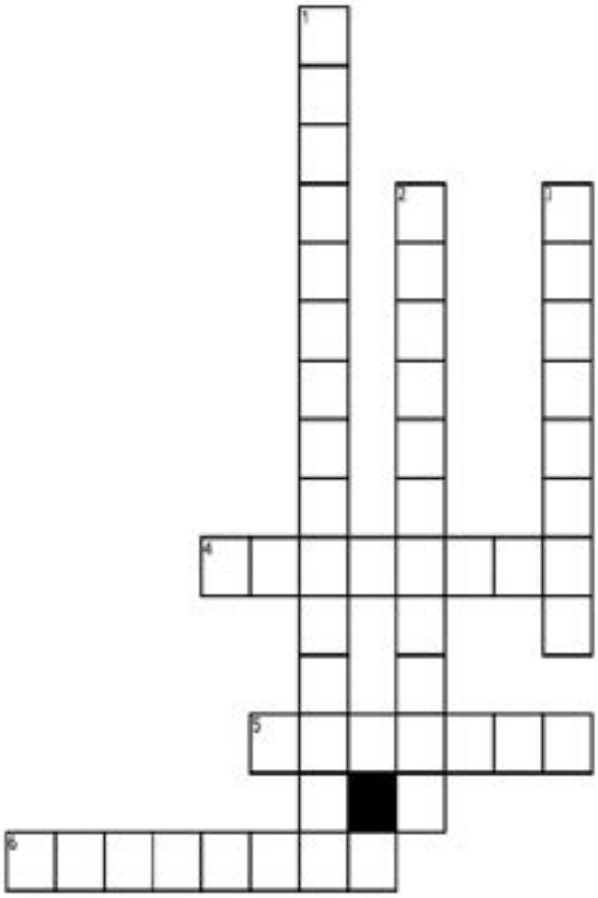
Cooking, running, cycling, hiking, being out in nature, watching birds (especially birds of prey)

Q: Where did you grow up?

Pasadena, Califorinia

Q: What do you like the most about being a Geomorphologist?

Being able to see different landscapes and and trying to understand how they developed.



Across

4. What kind of dating is the Geologic Time Scale which tells us the order in which things happened?
5. Researching and dating past events allows us to piece together 4.6 _____ years of Earth's history
6. What type of dating is geochronology, which gives actual dates of samples?

Down

1. What type of scientist is Nat?
2. Geochronology relies on the _____ decay of radioactive isotopes.
3. Scientists, like Nat, measure the ratio between a "parent" isotope and its _____ product.

Find more careers: https://www.purdue.edu/science/K12/stemcareers.html