

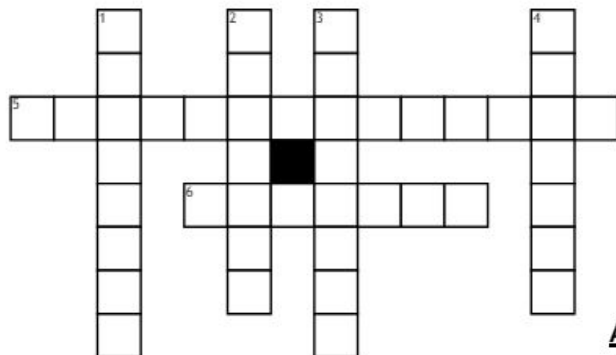
Dr. Ryan Ickert
Senior Geological Research Scientist

Dr. Ryan Ickert is a Senior Geological Research Scientist who uses uranium-lead dating to determine the ages of rocks and minerals. His research is used to help museums by providing the age of rocks and archaeological materials such as dinosaur fossils and fish scales.

Uranium-lead dating is one of the best-known radiometric age dating techniques for artifacts that range from around 1 million years to over 4.5 billion years old. This timescale is suitable for dating ancient rocks and minerals that help provide information about the early Earth and solar system formation. It works because the decay of uranium isotopes used has a very long half-life, which allows for dating extremely old materials. It is one of the most precise radiometric dating methods; accuracy in the 0.1-1% range.

Reference: <https://www.sciencedirect.com/topics/earth-and-planetary-sciences/uranium-lead-dating>

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Across

- 5. These materials can be found in a museum.
- 6. Uranium-lead dating is used for artifacts ranging from 1 _____ to 4.5 billion years old.

Down

- 1. The _____ of uranium-lead dating is in the 0.1-1% range.

- 2. Uranium-lead dating is one of the most _____ radiometric dating methods.
- 3. Uranium isotopes used in uranium-lead dating have a very long _____.
- 4. The _____-lead dating method can determine the ages of rocks and minerals.

