

Strontium Found in Neutron Star Crash

Student Comprehension Worksheet

Directions: After reading "[Strontium found in neutron star crash](#)," answer the following questions.

1. What recent discovery related to a neutron star merger does the article describe?
2. Why is this discovery important?
3. How did astronomers make this discovery? What data did astronomers use and what instrument collected the data?
4. The neutron star merger was first observed in 2017, so why hadn't the discovery been made sooner?
5. Name and briefly describe the series of reactions that produced strontium and other heavy elements in the neutron star merger.
6. How is strontium similar to other elements created in the neutron star merger? How does its atomic structure differ from the other elements? How did this difference contribute to the discovery?
7. What does the discovery reveal about the material that was released during the neutron star merger? Explain.
8. What does astrophysicist Brian Metzger think contributed to the material's unusual composition?