Name _____

Elementary Explorations: The Wonders of the Periodic Table

Short Answer Key

1. An element's atomic number provides the number of protons in its nucleus, which also determines its position on the periodic table.
2. Synthetic elements are created by scientists in laboratories and do not occur naturally on Earth.
3. Scientists believe there may be more elements to discover because there are empty spaces in the periodic table, suggesting the existence of elements with higher atomic numbers.
4. (Example answer) Nihonium was created by smashing atoms of bismuth and zinc together in a particle accelerator. It was named after Japan, where it was first synthesized.
5. The periodic table helps scientists understand the properties and relationships of elements by organizing them based on their atomic number, which reveals trends in their behavior, such as their chemical reactivity and physical characteristics.