

Core Skills Analysis

Chemistry

- Ebony learned to recognize and categorize elements into different groups on the periodic table, such as metals, nonmetals, and metalloids.
- She practiced identifying characteristic properties of element groups, enhancing her understanding of periodic trends.
- Ebony developed skills in interpreting chemical information presented in both digital and worksheet formats, bridging theoretical and practical knowledge.
- She reinforced her ability to work independently using online tools and worksheets, supporting self-directed learning.

Tips

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To deepen Ebony's understanding of the periodic table groups, consider integrating hands-on activities like creating a physical model of the periodic table using cards or elements' pictures. Encourage her to explore the real-world applications of different element groups by researching everyday items or materials made from metals, nonmetals, or metalloids. Introduce simple experiments that highlight properties unique to specific groups, such as testing conductivity of metals versus nonmetals using safe materials. Additionally, connect the learning to history by investigating how the periodic table was developed and refined, fostering appreciation of scientific discovery over time.

Book Recommendations

- [The Periodic Table: Elements with Style!](#) by Adriana M. Ocampo: A fun, illustrated book that explains the periodic table through engaging stories about each element and their groups.
- [Basher Science: The Periodic Table](#) by Simon Basher: An engaging and visual guide introducing element groups with quirky characters and easy-to-understand explanations perfect for young teens.
- [Periodic Table for Kids: Elements and Groups](#) by Kids Science Shelf: A simple and clear introduction to the periodic table and its groups with colorful illustrations aimed at middle school students.

Learning Standards

- KS3 Chemistry – Structure and Properties of Matter: Pupils should understand the organization of the periodic table and how it relates to element properties (NC Science KS3, 5a, 5b).
- Using and Applying Science: Use of online resources and worksheets to develop independent learning and apply knowledge (NC Science KS3, Working Scientifically).

Try This Next

- Create a color-coded periodic table poster identifying each group with explanations of their properties.
- Design a quiz matching elements to their correct group based on clues about their properties and uses.