

CHAPTER OVERVIEW

12: Chemistry of the Representative Elements

We will describe some of the chemistry of the representative elements, showing as we do so how their properties may be rationalized on the basis of concepts and principles. Explanation of these properties is organized according to the concept of periodicity, with each subsequent section corresponding to one of the eight groups of representative elements. As you read, you should try to see why a certain reaction occurs, as well as what actually happens, and instead of memorizing each specific equation, you should try to organize the chemistry of these elements according to the generalizations you have already learned. At this point it is useful to look and consolidate some of the general trends observed for the representative elements.

Topic hierarchy

[12.1: Prelude to Descriptive Chemistry](#)

[12.2: Group IA - Alkali Metals](#)

[12.3: Group II- Alkaline Earths](#)

[12.4: Group IIIA](#)

[12.5: Group IVA](#)

[12.6: Group VA Elements](#)

[12.7: Group VIA- Chalcogens](#)

[12.7.1: Cultural Connections- Sulfur](#)

[12.8: Group VIIA- Halogens](#)

[12.9: Group VIIIA- Noble Gases](#)

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