

Element Groups

Name

Period

Date 9/20/18

Essential Question: What are the properties of different Groups of Elements?

The periodic table is color-coded and labeled as follows:

- Alkali Metals:** Group 1 (1A)
- Alkaline Earth Metals:** Group 2 (2A)
- Transition Metals:** Groups 3-10 (3B-10B)
- Chalcogens:** Group 16 (6A)
- Halogens:** Group 17 (7A)
- Noble Gases:** Group 18 (8A), highlighted in green.

The lanthanide and actinide series are labeled as **Rare Earth Metals (Inner Transition Metals)**.

Noble Gases - Group 18

- Full Valence Shell → 8 Valence e^- (2 v. e^- for He)
- Gases
- Very Unreactive (stable)
- Do not gain or lose electrons easily

Alkali Metals - Group 1

- 1 Valence e^-
- Extremely Reactive
- Lose 1 electron Easily
- Soft Metal

Alkaline Earth Metals - Group 2

- 2 Valence e^-
- Reactive
- Lose 2 e^-

Halogens - Group 17

- 7 Valence e^-
- Highly Reactive
- Gains 1 e^- easily

Summary: