

PERIODIC

OVERVIEW

BOARD GAMES IN THE CLASSROOM

Science Content Area



PERIODIC: A GAME OF THE ELEMENTS

Age: 10+
40 minutes
2 to 5 Players

GENIUS GAMES

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OBJECTIVE: *Players activate periodic trends to maneuver across the Periodic Table, researching elements to score points. The goal is to land on and research specific elements shown on available Goal Cards - this is the primary way players will score points. As players move across the board, they're also racing to end their turn within specific families of elements, competing with other players for the limited Academic points. The player with the most points at the end of the game wins!*

VOCABULARY USED

Alkaline Earth Metals, Alkali Metals, Atomic Mass, Atomic Number, Element, Halogen, Ionization Energy, Noble Gas, Nonmetal, Metalloids, Periodic Table, Post-Transition Metals, Transition Metals

COMMON CORE SCIENCE STANDARDS

Classification of Matter Unit: *Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms, Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties, Developing and Using Models, Obtaining, Evaluating, and Communicating Information, Structure and Properties of Matter, Patterns, and Structure and Function.*

MYP/DP, 21st CENTURY SKILLS

MYP: *Knowing and Understanding, Change, Relationships, Systems, Models, Function, Interactions, Patterns.*
21st Century: *Collaboration, Knowledge Construction, and Self-Regulation.*

NGSS: SEP: *Asking questions and defining problems, Obtaining, evaluating, and communicating information, Analyze and interpret data for patterns: Emphasis is on finding patterns of changes in the level of complexity of anatomical structures. CCC: Systems and system models, Structure and function, Energy and Matter. DCI: PS1A: Structure and Properties of Matter, PS1B: Chemical Reactions, PS2B: Types of Interactions, PS3A: Definitions of Energy, PS3C: Relationship Between Energy and Forces.*

