Chemistry Games in the Classroom

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Overview

- Why Board Games?
- Types of Chemistry Board Games
- How to Frame a Board Game within a Lesson Plan
- Adjustments to Board Games Due to COVID-19
Warm-Up:

- Top 8 Most Popular Board Games of All Time:
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  2.
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  8.

- Top 8 Most Popular Board Games of 2018:
  1.
  2.
  3.
  4.
  5.
  6.
  7.
  8.
Warm-Up:

- Top 8 Most Popular Board Games of All Time:
  1. Chess
  2. Checkers
  3. Backgammon
  4. Scrabble
  5. **Monopoly**
  6. Clue
  7. Othello
  8. Trivial Pursuit

- Top 8 Most Popular Board Games of 2018:
  1. Sequence
  2. Codenames
  3. **Monopoly**
  4. Pandemic
  5. Settlers of Catan
  6. The Game of Life
  7. Ticket to Ride
  8. Suspend


Why Board Games?

- Board games are experiencing a renaissance
- Fastest growing market in toy industry
Why Games?

- Games have long been known to be more engaging.
- Games also known to enhance brain development and critical thinking.
- Now, emerging evidence suggests that they are also more effective at learning content.
How to Frame a Game within a Lesson Plan

Key Factor #1: Time

- What can you learn and play in one class period (45 – 90 minutes)?

- Also **MUST** frame it with pre- and post-activities

***Not good for one class period...***
Example Lesson Plan

Scaffolded learning is key component of using games in the classroom

- Pre-Game Activity
  - Poll of previous knowledge
  - Definition of new terms
  - Introduction of new concepts

- Game

- Post-Game Activity
  - Discussion of concepts
  - Post-game quiz
  - Exit ticket
How to Frame a Game within a Lesson Plan

Key Factor #2: Motivation

- What games will best connect with your students?

- Age is important; ex: younger kids might prefer more silliness

How to Frame a Game within a Lesson Plan

Key Factor #3: Budget

- Yard sales, thrift stores
- Print-and-play versions
- Adaptations of existing board games
Game Type 1: Content Knowledge

- Card Games (Light)
Game Type 1: Content Knowledge

- Card Games (Heavy)
Game Type 1: Content Knowledge

- Board Games (Light)
Game Type 1: Content Knowledge

- Board Games (Heavy)
Game Type 2: Adaptations

- Take an existing game and change the rules/theme:
  - Metals/non-metals
  - Columns/groups
  - Gases/liquids
COVID-19

Adjustments to board games due to pandemic

- Tabletop Simulator
- Google Slide versions – homemade
- Choice board - optional reinforcement activity to play at home
- Print-and play versions from publisher
Questions?

Please Contact!

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