



CHEMCAPER

<https://chemcaper.com/>

 **CATEGORY:** Simulation Games

 **GRADE AND SUBJECT:** Chemistry concepts for students aged 10 to 14.

 **SHORT DESCRIPTION:** ChemCaper is an adventure role-playing game for teaching the basics of chemistry.

READING TIME: 3 minutes
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 **LEARNING GOALS:** ChemCaper can help students familiarize themselves with chemistry terminology and apparatus, understand the properties of elements, remember chemical symbols and formulae for elements and compounds and practice observing chemical reactions through experiments.

 **MOMENTS OF NEED OF THE TOOL:** ChemCaper can be a useful tool for introducing and teaching fundamental Chemistry concepts for the first time.

 **LEVEL OF DIFFICULTY (RATING) AND AGE LEVEL:** Medium, 10+

 **WHY USE THIS TOOL:** ChemCaper introduces and explains the fundamental concepts of Chemistry in a comprehensive manner allowing students to practice logical reasoning and problem-solving through the challenges and tasks of the game built around chemistry concepts. By playing the game, students acquire new information with a “learning by doing” method that helps them memorize concepts better and longer.

TOOL DESCRIPTION: ChemCaper is a story-based role-playing game that helps teachers to teach Chemistry through an immersive world and interesting characters. It teaches various chemistry topics like the scientific apparatus, the separation techniques, the groups of elements, their properties and their chemical reactions by providing many different challenges based on fundamental chemistry concepts and the periodic table. This tool also offers a Compendium, an interactive guide that links the contents of the game to reality to discover how they connect to the real world.

PREPARATION AND HOW TO USE THE TOOL: To start using ChemCaper, users do not need to register, they only need to purchase the game. ChemCaper consists of different characters and landscapes based on the types of chemical elements in the Periodic Table. Players can explore unique environments, craft potions, and battle with collectible creatures, gaining knowledge of chemical concepts through challenges and tasks. Users have a lot of freedom to discover the game world at their own pace and learn through exploration.

THE EXAMPLE: This video presents the ChemCaper game platform:
https://youtu.be/67qOI9fLn_A

RESOURCES NEEDED: Computer/Notebook/
Mobile phone – Interactive whiteboard –
Internet connection



ADDITIONAL REFERENCES:

- How ChemCaper helps students learn Chemistry <https://youtu.be/nCzKUFFJeAl>
- ChemCaper Youtube Channel <https://www.youtube.com/c/ChemCaper>
- ChemCaper: Act I - Pesticides in Peril Game https://youtu.be/67qOI9fLn_A

PROS AND CONS OF USING THE TOOL:

PROS Easy-to-use platform; interactivity; gamification; a wide choice of quizzes.

CONS Internet connection required; only paid version; single-player game.

TEACHERS' RECOMMENDATION RATE (SCORE): 3/5