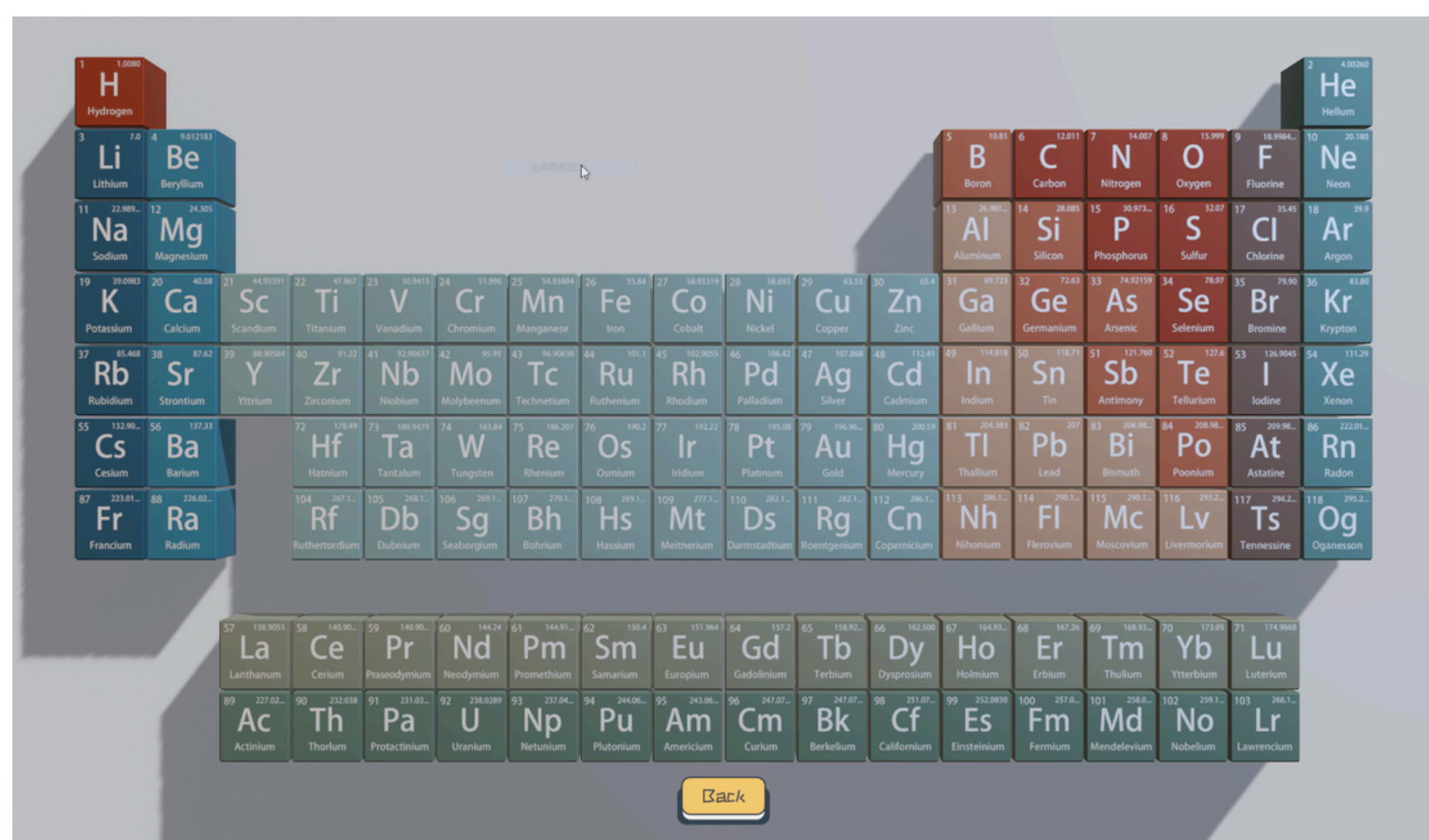


Chemical Odyssey

This software is designed specifically for **middle and high schools** and **science museums**, with the aim of promoting **STEM innovation experiences** and subject teaching. It focuses on **28 commonly used chemical elements**, and through in-depth analysis of their **basic characteristics**, vivid simulation of **chemical experiment scenarios**, and closely related to **real-life application examples**, it constructs a comprehensive learning system from basic knowledge mastery to skill improvement, to comprehensive application ability cultivation, meeting the learning needs of users at different stages.



The periodic table allows users to learn the basic information of each element, including its atomic number, symbol, atomic mass, and basic chemical properties.



By visually displaying the proton numbers of elements and precise electronic layer structure diagrams, users are guided to delve into the mysteries and intricacies of atomic construction.



Provide a virtual experimental environment to keep users away from the risks of chemical experiments and allow them to repeat experimental steps in a safe environment.



Vividly showing the extensive application examples of chemical elements in daily life, promoting the deep integration of theoretical knowledge with the real world.

Highlights

- The software utilizes **high-precision 3D models** to visualize the molecular structure and chemical properties of elements, allowing users to freely manipulate the model in virtual space and **intuitively understand the microstructure of elements**.
- The software has designed **interactive experimental scenarios**, allowing users to **safely operate** and **observe chemical experiments** in a virtual environment, thereby increasing the interest and participation of experiments, while reducing the risks of traditional experiments.
- By **cleverly designing gamification** and **scenarization**, the characteristics of chemical elements and their applications in daily life are presented in a vivid and interesting way, deepening understanding and **stimulating users' curiosity** and **strong desire for knowledge**.
- Empowering objects in the scene with **unlimited operational possibilities**, breaking conventional limitations, allowing users to explore freely, and **stimulating infinite creativity and curiosity**.
- Cleverly transforming complex chemical application cases into **interesting small experiments**, making the learning process an exploratory game, **learning through play**, and **playing through learning**.
- **Adhering closely to the aesthetic preferences of students** in the basic education stage, decorating products with rich colors and exquisite craftsmanship not only imparts knowledge, but also provides a dual feast of visual and spiritual enjoyment.

Functionalities

Modules

Content

Overall Introduction

The periodic table of chemical elements helps users grasp the periodic trends and intrinsic connections between elements, such as similar chemical behaviors of elements within the same group and gradual property changes across periods.

Basic characteristics

Thoroughly revealing the unique forms of each element in the vast natural world, guiding users to search for the mysteries of which minerals they are in.

Chemical Experiment

Restoring experimental phenomena, helping students deeply understand textbook theories, and building a bridge between knowledge and practice.

Life Applications

Vividly showcasing the extensive application examples of chemical elements in daily life, promoting the deep integration of theoretical knowledge with the real world.