

## Alignment with Connecticut's Science Standards

This document evaluates the state's Education Standards for Science to determine alignment with content found in Cogno board games. Grades 3-8 were analyzed.



### Highlighting Key

Indicates a significant amount of material addresses the standard

Indicates a moderate amount of material is present to develop student understanding of the standard

## SCIENCE

□ *By the end of Grade 12, students will know the basic concepts of, and the interrelationships among, biology, chemistry, physics, and earth (including ecology) and space sciences, and will be able to apply scientific skills, processes and methods of inquiry to real-world settings.*

### Program Goals

As a result of education in Grades K-12, students will:

- understand and apply basic concepts, principles and theories of biology, chemistry, physics, and earth (including ecology) and space sciences and their interrelationships;
- recognize and participate in scientific endeavors which are evidence based and use inquiry skills that lead to a greater understanding of the world;
- analyze the possibilities and limits of science and technology in order to make and defend decisions about societal issues; and

### K-12 Content Standards

#### 1. The Nature Of Science

Students will experience an inquiry-based learning environment in which they are free to ask questions, seek information and validate explanations in thoughtful and creative ways. Students also will understand that the processes, ways of knowing and conceptual foundations of science are interdependent and inextricably bound.

#### 2. History Of Science

Students will learn the evolution of scientific thought, how science has influenced culture and society, and how groups from many countries have contributed to the history of science.

#### 3. Living Things And Their Environments

Students will understand that all organisms in the biosphere are linked to each other and to their physical environments by the transfer and transformation of matter and energy.

#### 4. Units Of Structure And Function

Students will understand that living things share common materials and structures which perform basic life functions.

## **7. The Earth**

Students will understand the processes and forces that shape the structure and composition of the Earth.

## **9. The Earth's Atmosphere**

Students will understand the composition and structure of the atmosphere, including energy transfers, the nature of weather and climate, and the effect of the atmosphere on human activity.

## **10. The Universe**

Students will understand that the Earth is a unique, dynamic member of the solar system, located in a galaxy within a changing universe.

## **11. Structure Of Matter**

Students will know the characteristic properties of matter and the relationship of these properties to structure and composition.

## **12. Energy**

Students will know that energy is conserved, transferred, transformed and appears in different forms.

## **13. Interaction Of Matter And Energy**

Students will know that interactions between matter and energy can produce changes in a system, although the total quantities of matter and energy are unchanged.

**14. Science And Technology** Students will understand the relationships among mathematics, science and technology, and the way they affect and are affected by society.

Please note that use of these standards does not imply this state's endorsement of Cogno.