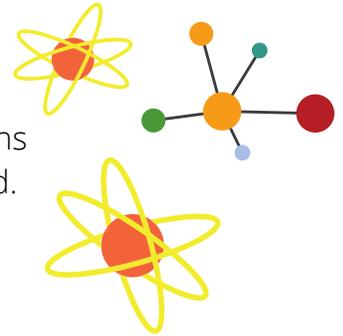


# big ideas

## Logic, Math, & Science

Charles Dodgson (AKA Lewis Carroll) was one of the most gifted mathematicians of his age and taught math at one of the most prestigious schools in the world. There is a lot of science, math, and logic references and jokes throughout Wonderland. Can you spot them? The story itself could be argued is a logical exercise for fun.



How do math and science show up in the crazy fantasy world of Wonderland? What logic is there in Wonderland?

## The Industrial Revolution and Time



Wonderland opens with a rabbit looking at his watch, worried he would be late. Measuring time in the way we do today was still pretty new in the Victorian Age. Before the 1800s, most people in England were farmers and it did not matter what time the clock said, but rather when you needed to plant and harvest crops. Work days revolved mainly around the sun, not the hour. During the Industrial Revolution, the growing number of factories needed more and more workers who were paid by the hour or by the day. Set schedules became how they made a living. If they were late, they did not get paid and could be fired. Indeed, the White Rabbit is very worried bad things will happen if he is late... to work. More and more people were moving from farms to cities, and from working on farms to working in factories.

Factories could be very dangerous. "Mad as a hatter" is a saying from the early Industrial Revolution and refers to the very real problem of people getting sick at work (making felt hats used mercury, which was very dangerous and often led to brain damage and mental impairment).

How do these major changes and themes of the Industrial Revolution show up in Wonderland?

## Rationalism Vs. Romanticism

With your head or with your heart? Rationalism and Romanticism were both social, artistic, and intellectual schools that had major impacts on the world.

Rationalism is all about logic, reason, and reality. It dominated most of the 1700s, which became known as the Age of Enlightenment. It was based on new interest in science and ancient Greek philosophies (when ideas like democracy and equality were encouraged).

