

# LET ME SEE THAT!



## ELEMENTS OF PHYSICS

October 2004

For Junior High and Senior High

**Catalog Number: V2023**

**Title: Motion, force and gravity** VHS

Edition: CLOSED CAPTION

Imprint: UL 2002

Physical Description: 20 mins. col 1

This program describes Newton's theories and goes on to outline the four fundamental forces of the universe and how Einstein revolutionized the way we understand gravity with his general theory of relativity.

**Catalog Number: V1099**

**Title: Light: optics and electricity** VHS

Edition: CLOSED CAPTION

Imprint: UL 2002

Physical Description: 20 mins col 1

This program begins by describing the field of optics and how scientists came to understand such principles as refraction, reflection, and the behavior of light as it passes through lenses. James Clerk Maxwell's theory of electromagnetism is reviewed along with the importance of the speed of light.

**Catalog Number: V2007**

**Title: Energy: work and power** VHS

Edition: CLOSED CAPTION

Imprint: UL 2002

Physical Description: 20 mins. col 1

This program explores the many different forms

of energy from sound, heat, light and chemical energy.

**Catalog Number: V2008**

**Title: Modern physics and cosmology** VHS

Edition: CLOSED CAPTION

Imprint: UL 2002

Physical Description: 20 mins. col 1

This series concludes with a program on the way that modern physics had revolutionized the way we understand our universe.

**Catalog Number: V2022**

**Title: Matter: atoms and molecules** VHS

Edition: CLOSED CAPTION

Imprint: UL 2002

Physical Description: 20 mins. col 1

This program explains the common characteristics of atoms and shows how each element is made up of atoms, which have the same number of electrons and protons. The way these different elements combine into molecules explains how a small number of elements can form into the millions of different substances that we find in the universe.

**Catalog Number: V1097**

**Title: Waves: sound and electromagnetism** VHS

Edition: CLOSED CAPTION

Imprint: UL 2002

Physical Description: 20 mins col 1

Summary: This program looks at two different types of waves, longitudinal and transverse waves, and the common characteristics of all waves. Sound and light waves are examined in some detail, and then the program concludes with a look at a modern theory called the wave-particle duality, which holds that all matter and energy have characteristics of both waves and particles.