

## **1** *Astronomy: The Sky Isn't Falling*

Introduced by the classic tale of Henny Penny, this issue of SCIENCE SCREEN REPORT for KIDS presents the widely accepted Big Bang theory of the origin of our universe. A prism, a demonstration of the Doppler Effect, and a loaf of raisin bread show students how astronomer Edwin Hubble determined that the universe is expanding, perhaps because of a tremendous explosion many cosmologists believe happened billions of years ago. Running Time: 13:52

## **2** *Earth Science: Earth - Our Changing Planet*

Volcanoes, earthquakes, geysers, and boiling mud are awesome testimony to the powerful forces constantly churning beneath, and changing, our planet's surface. This SSRFK features volcano footage, and goes underground to reveal why volcanoes erupt and the earth quakes. Graphics illustrate the theory of continental drift, how Earth's land masses may have looked millions of years ago, and how the continents could look far into the future. Running Time: 13:15

## **3** *Ecology: Nature's Delicate Balance*

Increasingly aware that we are ultimately part of one huge, but delicately balanced planetary ecosystem, individuals, government, industry, and agriculture are getting more actively involved in monitoring, preserving, and restoring natural habitats and ecosystems. SSRFK visits several natural areas to show how the delicate balance within an ecosystem can be upset, the effects an imbalance may have on the system, and efforts to restore balance. Running Time: 14:00

## **4** *Biotechnology: Decoding Nature's Secret*

How do cells "know" what to become? Scientists have begun to unravel the mystery. Their discoveries have led to a new field of science called biotechnology which is helping us increase food production and live longer, healthier lives. This SSRFK gives a simple explanation of how life forms develop according to the instructions coded in their DNA and genes, and shows how biotechnologists are learning to change those instructions with techniques such as genetic engineering. Running Time: 14:35

## **5** *Biotechnology: New Miracles From Science*

Building on material presented in Issue 4, this SSRFK focuses on some of biotechnology's amazing contributions to human health and the health of our companion animals and livestock. Featured are segments that show how genetic engineers have been able to induce caterpillars to produce large quantities of a protein that could be used to make a life-saving vaccine, efforts to "grow" edible vaccines in bananas, and how biotechnology is helping farmers raise healthier, more productive livestock. Running Time: 11:28

## **6** *Environmental Science: Our Ozone Blanket*

A lesson in scientific investigation as well as our planet's atmosphere, this issue shows how scientists determined that CFC's were the cause of a hole discovered in our protective ozone blanket in 1977; and how scientists, engineers, and manufacturers worked together to prevent further damage to the atmosphere until ozone friendly substitutes for CFC's could be developed. Running Time: 10:08

## **7/8** *Physics: Understanding Gravity*

The force of gravity is silent and invisible but always with us. This double issue SSRFK makes physics understandable and entertaining with demonstrations of Newton's three laws of motion and gravity. Wonderful slow motion videography reveals how plants, animals, and machines use Archimedes' and Bernoulli's principles to overcome gravity. Running Time: 24:00