SCIENCE SCREEN REPORT FOR KIDS VOLUME 8

1 ENGINEERING: DUMMY AND ROBOT HEROES

Crash test dummies have been our stand-ins in hundreds of accidents staged by automotive engineers to analyze what happens to people in collisions and design ways of keeping us safe in automobiles. But test dummies, and their mobile counterparts, robots, spare us life and limb in many other capacities. See the growing sophistication of human substitutes and their use in fields like new product and safety testing, disaster and rescue training, manufacturing, and hazardous materials handling. 12:17

2 CHEMISTRY: MAKING MODERN MIRACLES

From a little more than one hundred elements known today, modern chemists have contributed many riches to our everyday lives. Beginning with the basics of atoms and elements, this program goes on to show how chemists have created from them new arrangements of molecules and chemical compounds that help feed, clothe, and shelter us; and provide us with medicines, transportation, faster computers, and a cleaner environment. 13:00

3 OVERCOMING VISION IMPAIRMENTS

Forty-two million people worldwide are considered blind because they have vision impairments severe enough that they cannot distinguish the individual fingers on a hand from three feet away. This issue gives a glimpse at what it's like to look through their eyes, as it reveals the workings of the human eye and the causes of several vision impairments, from common nearsightedness and farsightedness to blindness. It also shows some of the ways research and technology are helping those with severe vision impairments lead active, satisfying lives. 12:43

4 ECOLOGY: THE AMAZING AMAZON

SSR FOR KIDS embarks on a 4,000 mile journey along the Amazon River, from its source high in the Peruvian Andes to where it spills 100 miles out into the Atlantic Ocean. On the way, we'll learn about Earth's water cycle, and the features typical of major rivers. We'll see how the river shapes the land as it makes its transition from trickling mountain stream to raging torrent, broadens and meanders across the flood plain, and divides in its delta. These transitions provide a variety of habitats for what may be the greatest diversity of life forms on the planet, and many interesting species featured. 13:20

5 THE SUN: HEAT, LIGHT, AND LIFE

Our lives quite literally revolve around the sun, the closest star. A blazing ball of gases 93 million miles away, it does what no planet can do - it radiates life-sustaining light and heat. Without this tumultous source of energy, Earth would be dark, cold, and lifeless. But what is the source of the sun's energy? This issue explains the latest theory as it shows how scientists are using instruments in space and within the Earth to study the sun inside and out. 13:10

6 GENETIC ENGINEERING: MAKING PLANTS GROW PLASTIC

Most of the crops we grow today were developed over decades or centuries of careful selection, cross pollination, and cultivation. Now, plant breeders are using genetic engineering to speed up the process of improving plants This issue of SSR FOR KIDS looks at what they've done with rapeseed, a plant grown for animal food and the oil in its seeds, which is used to make cooking oil, salad dressings, soaps, paints, varnishes, medicines, and even biodegradable fuels, lubricants, and plastic. Genetic engineers are now working on an extraordinary variety that will actually produce plastic in its seeds! 11:40

7/8 BIOLOGY: MINI-WORLD OF INSECTS AND SPIDERS

Wherever we live, we are sure to share our world with insects and spiders. But as we go about our lives, we may rarely notice them going about theirs. SSR FOR KIDS enters their mini-world for an up-close look at the lifestyles of some of these fascinating creatures, from how they grow and develop to the ways they construct their homes, protect and provide for themselves and their young, and sometimes live in cooperative societies or collaborate with other species. 25:10