

## Do You Know?

*White* has the highest light reflection value of any paint.

Theater stage electric *lighting* was first tried 100 years ago.

To produce one ear of *corn*, 50 gallons of water are required, an agricultural scientist recently stated.

Home gardeners can make successive plantings of many *vegetables* throughout the summer.

To make the best *cattle feed*, alfalfa is cut before it is more than half in bloom.

Six queen *bees*, recently flown from California to Australia for experimental breeding, were valued at \$100 each.

A total of 3,970 *superfortresses*, the B-29 plane that acquired fame against the Japs, were constructed during or immediately following the war.



Photo courtesy Univ. of N. Carolina

### Equipment for Teaching Electrolytic Conductivity

A simple bridge setup for instruction consists of Students Slidewire, Resistance Box, 1000-cycle Hummer, Telephone Headset and Conductivity Cell. Slidewire, used as ratio arms of the bridge, due to its 30 ohms resistance plus two 135-ohm end coils, facilitates quick, easy operation and good reproduction of results. See Catalog EN-95, sent on request.

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OPTICS

## Man Must Learn To "See"

➤ A PERSON born blind who later gains his vision does not have the world of sight suddenly burst upon him in full glory. Even the sight of food means nothing to him. He must learn to see.

What happens when the eyes first look at the world has been observed in an experiment on chimpanzees conducted at the Yerkes Laboratories of Primate Biology by Dr. Austin H. Riesen.

Baby chimpanzees were raised in darkness until they were 16 months old. By that time they were able to sit and reach and run around in a way about like that of a two-year-old human child. Naturally they had never used their eyes.

Then these babies were brought into the light for their first look. They were blind!

They would turn their heads toward a light. Their eye pupils would dilate or contract with changes in light intensity. They would be startled by sudden changes in illumination.

But aside from these responses to light, they saw nothing. Even if a chimp playmate hit one of them in the face with something, they did not blink or show any sign of avoidance until the object actually touched the skin. Then they jumped, startled.

Like human babies, the chimps would put the nursing bottle in the mouth eagerly as soon as it touched the arm, hand or face. But if it was held before them, they gave not a single sign of recognition. It was not until one of them had been in the light for 11 days that she puckered up her lips on sight of the bottle. Not for 16 days—48 meals—did she learn to reach for it.

Study of humans born blind and later given their sight by removal of cataracts showed that they, too, have great difficulty learning to "see."

The prompt visual learning so characteristic of adult humans and apes is not, therefore, an inborn capacity, but requires a long apprenticeship in the use of the eyes, Dr. Riesen concludes in his report of the experiment in *Science*, (Aug. 1).

Lower in the animal scale this period of apprenticeship is much shorter, he found. A baby chick uses his eyes just as soon as he comes out of the shell. His efficiency is further improved after the practice given him by a dozen pecks. Rats, brought up in darkness, are at

first unable to use their eyes but can learn within 15 minutes to jump in response to what they see. After an hour they act just like normally reared animals.

*Science News Letter, August 9, 1947*

NUTRITION

### UN Plans Food Shipments To Needy Children Soon

➤ FIRST SHIPMENTS of food to Europe's underfed children and expectant and nursing mothers from the United Nations International Children's Emergency Fund are expected to be made this month, it was reported at the meeting of the Committee on Child Nutrition.

Medicine and clothes for needy mothers and children in Europe are also being planned as the ICEF carries on now-terminated work of the United Nations Rehabilitation and Relief Administration.

Austria, Greece and Poland were mentioned at the sessions as the countries likely to receive the first shipments of food. In all, a dozen nations and 20,000,000 children in war-torn areas are expected to be covered by the emergency program.

Top priority food needs of these children, as outlined by nutritional experts of several nations at the conference, are animal proteins, calcium and vitamins. Supplies of whole milk for European children less than one year old, and skim milk for older youngsters were urged as basic needs.

First part of the food program is being financed from a fund of more than half a million dollars which the group inherited from UNRRA. Most of this sum is going into dried milk. U. S. contribution of \$40,000,000 for the ICEF has been authorized by Congress and the first payment of \$15,000,000 will be made soon.

Norway already has donated 1,000 barrels of vitamin-rich cod liver oil to the Fund.

By the end of the year, ICEF hopes to have spent \$70,000,000 in improving the diets of five to six million European children.

*Science News Letter, August 9, 1947*