

# Kid's KOrner

Happy Valentine's Day!

## Remote Sensing Leads Scientists To Prehistoric Indian Footpaths

BOULDER, Colo. — From the ground, most of the footpaths around the prehistoric Indian settlements in northeastern Costa Rica are invisible, blanketed under many feet of volcanic ash and thick tropical vegetation.

From the sky, it's an entirely different picture. On an orbiting satellite and aboard high-flying planes, electronic remote-sensing equipment visually peels away the blanket, revealing images from wavelengths of the electromagnetic spectrum that can't be seen with the human eye.

### Verified on Ground

Combined with verification from scientists on the ground, the images point the way to the paths. As a result, University of Colorado scientists are adding swiftly and steadily to their knowledge of a remarkably self-sufficient, stable culture that flourished for some 3,500 years before the Spanish Conquest in the 1500s.

The ancient agrarian Indians lived on the shores of Lake Arenal, at the base of 5,358-foot Arenal Volcano, about 2,000 years longer than any other society previously identified in that region.

They had their problems with the volcano, which has had at least nine big eruptions over the past 4,000 years. The last major one was about A.D. 1500. An eruption in 1968 killed 68 people, and another could occur "in the next couple of centuries," says Payson D. Sheets, the

Colorado anthropologist who directs the Arenal project.

Although eruptions have periodically plagued Arenal-area citizens, they've been a boon to Sheets and his team. Volcanic ash has helped preserve artifacts, and the definable layers of ash have helped establish precise dates for events.

But for Sheets, the real excitement has come from the remote-sensing devices on the National Aeronautics and Space Administration's Landsat IV satellite and the agency's specially equipped planes.

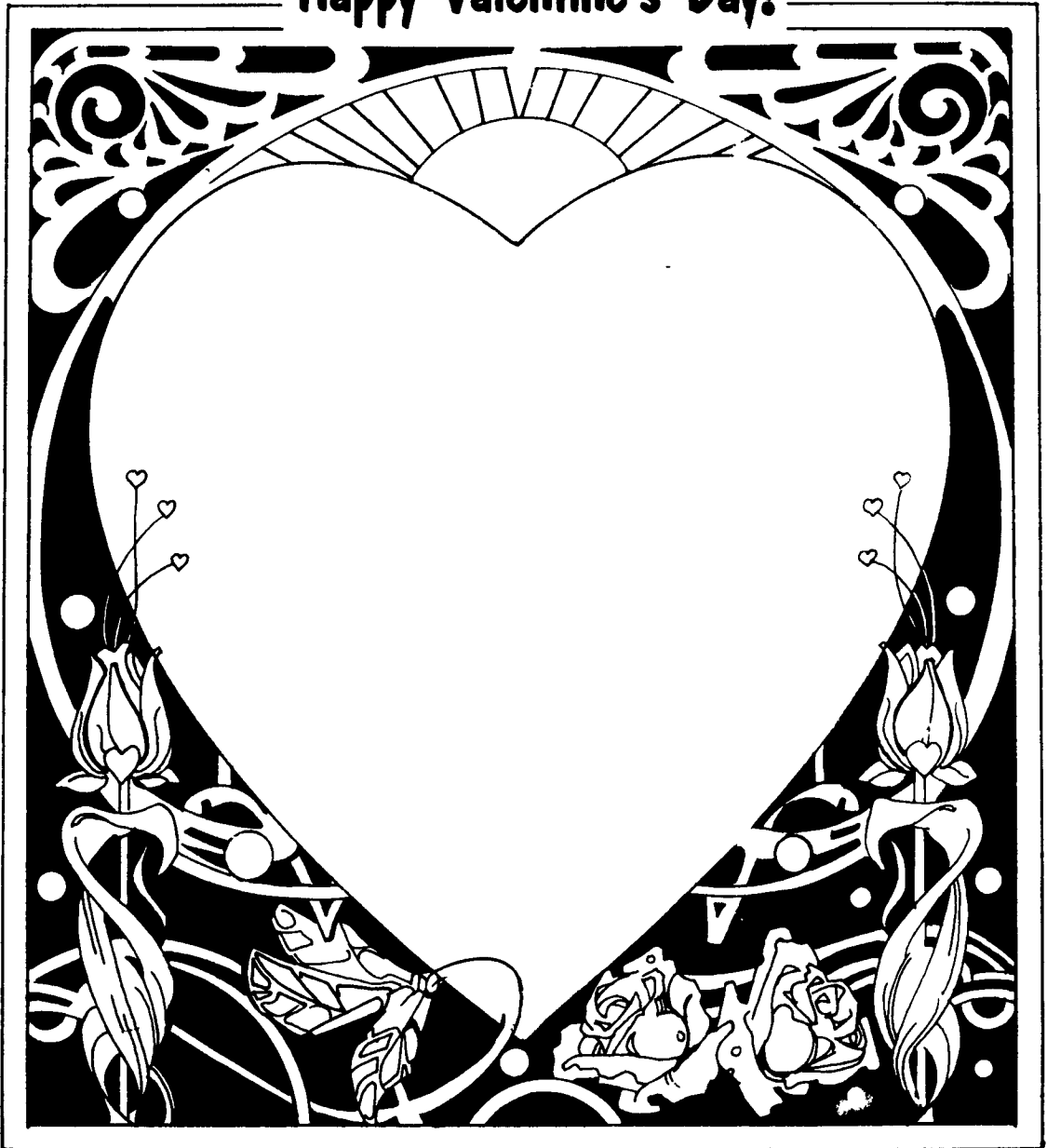
"Nobody's ever traced prehistoric footpaths this way before," Sheets says. "It's nice not to have such a burden of tradition, but to do something brand-new. It really is a new window on the past."

"Remote sensing may soon be as valuable as radiocarbon dating," says a key member of the Arenal team, NASA anthropologist Thomas L. Sever, a remote-sensing expert who is now a doctoral candidate at the University of Colorado.

### Most Paths Ancient

During their July dig, Sheets and his crew checked out, through excavation, little lines on the remote-sensing photographs to see if they really were ancient paths. Most were; a few were old roads of less scientific interest.

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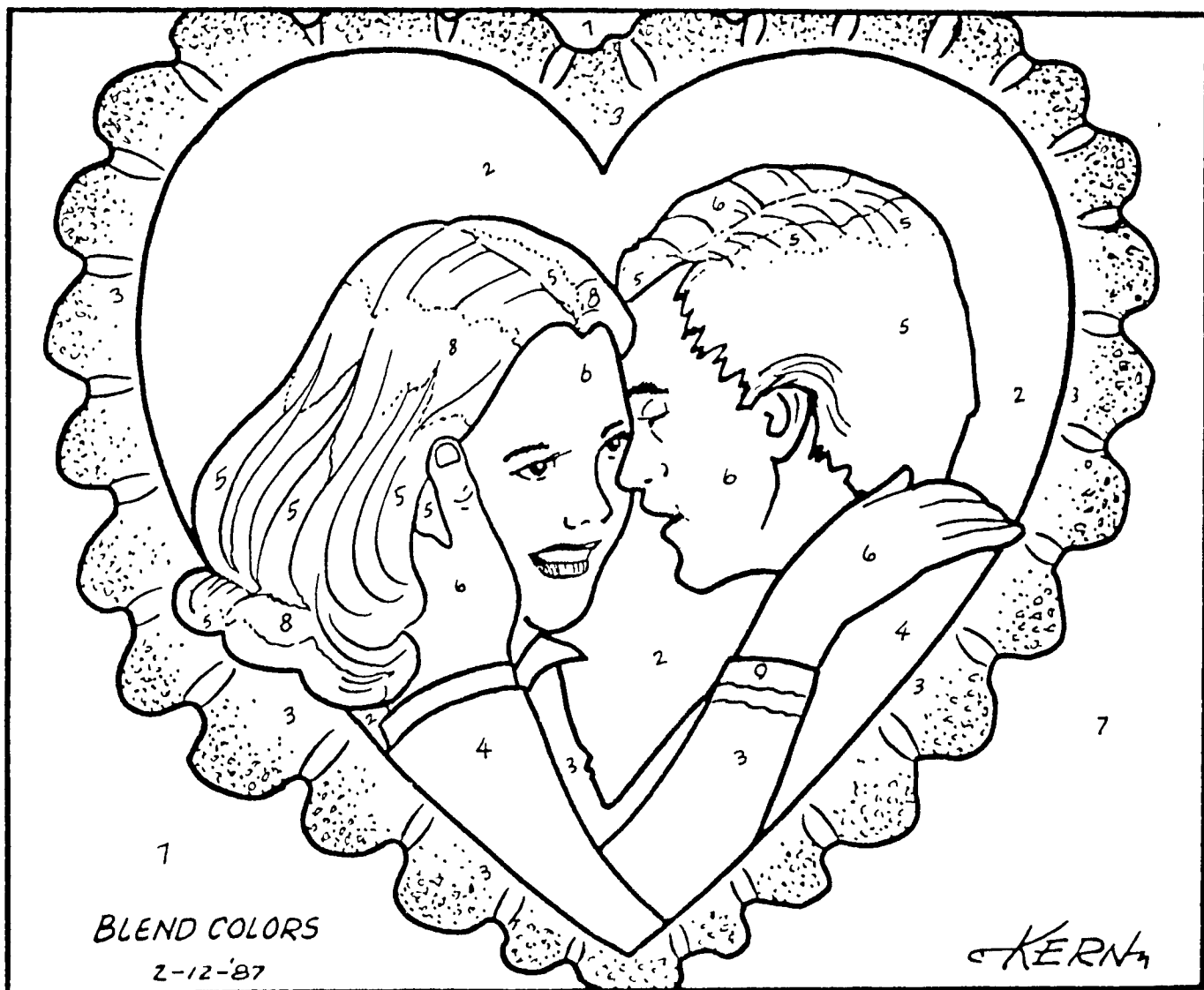


St. Valentine's Day offers an opportunity to send cards and tokens of affection to loved ones. Homemade Valentines are especially appreciated on this day for loved ones. If you'd like to surprise your mom and dad with a card, make up your own, or write a message in the heart above. You can clip it out of the paper with scissors and color it in with crayons or magic markers. When you're finished, surprise your parents with a hug, a kiss and the special card you've made just for them.

## COLOR THIS!

- |           |               |
|-----------|---------------|
| 1. BLACK  | 6. PEACH      |
| 2. RED    | 7. PINK       |
| 3. YELLOW | 8. LT. BROWN  |
| 4. BLUE   | 9. LT. BLUE   |
| 5. BROWN  | 10. LT. GREEN |

VALENTINE'S DAY IS NAMED FOR A SAINT WHO WAS DEVOTED TO THE IDEA OF LOVE. ACTUALLY THERE WERE TWO ST. VALENTINES. ONE WAS A PRIEST WHO LIVED DURING THE TIME OF THE ROMAN EMPIRE, THE OTHER WAS THROWN INTO PRISON BECAUSE HE WOULDN'T WORSHIP THE ROMAN GODS. CHILDREN WROTE MESSAGES OF LOVE TO HIM WHILE HE WAS IN PRISON.



BLEND COLORS  
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