*Little Leonardo's™ Fascinating World of Technology* introduces kids to how new ideas and innovations in technology are present in nearly every aspect of our lives. From the invention of the wheel several thousand years ago to the increasing miniaturization of our computers, smartphones, and other electronic devices, we've always been looking for new ways technology can make our lives easier. Included are a glossary of terms and brief biographies of some important inventors.

With original Renaissance man **Leonardo da Vinci** as inspiration, these charming primers are the perfect way to encourage your child's interest in the fascinating worlds of the educational STEAM curriculum: Science, Technology, Engineering, the Arts, and Mathematics.
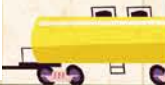
$12.99 U.S. • Ages 4 to 8

# Little Leonardo's™

## Fascinating World
## of TECHNOLOGY

Illustrated by
**GREG PAPROCKI**

Written by
**BOB COOPER**

Important inventions that have dramatically changed our way of life include the PRINTING PRESS, ELECTRIC LIGHTS, the TELEPHONE, and TV.

Since the last half of the twentieth century, new technology has been introduced at a faster and faster rate.

The SPACE PROGRAM of the 1960s and '70s was an important reason for this technology boom.

Portable Computers

Wireless Headsets

Scratch-Resistant Lenses

Miniaturized Cameras

Shock-Absorbent Rubber

In addition to landing astronauts on the Moon, it resulted in thousands of innovations in medicine, transportation, computers, cameras, fabrics, food science, waste disposal, and many other things.

Technology has helped us build a vast communications network so that we can instantly communicate with people around the world.

Hundreds of SATELLITES orbiting the Earth are an important part of this network.

ELECTRONIC DEVICES like phones and computers have become increasingly smaller, faster, and more powerful.

The COMPUTERS that guided astronauts to the moon in the 1960s had less computing power than the microwave oven that's in your kitchen today.

Today we carry around SMARTPHONES in our pockets that are 100 million times faster than a 1960s supercomputer.

In addition to smartphones, we now have smart wristwatches, eyeglasses, and other WEARABLE TECHNOLOGY. Are smart tattoos that monitor your health the next technological innovation?

A lot of current innovation is with the SOFTWARE that runs on computers and other electronic devices.

CODERS write software using PROGRAMMING LANGUAGES. Different kinds of programming languages are used for things like creating games and APPS, and organizing data in DATABASES.
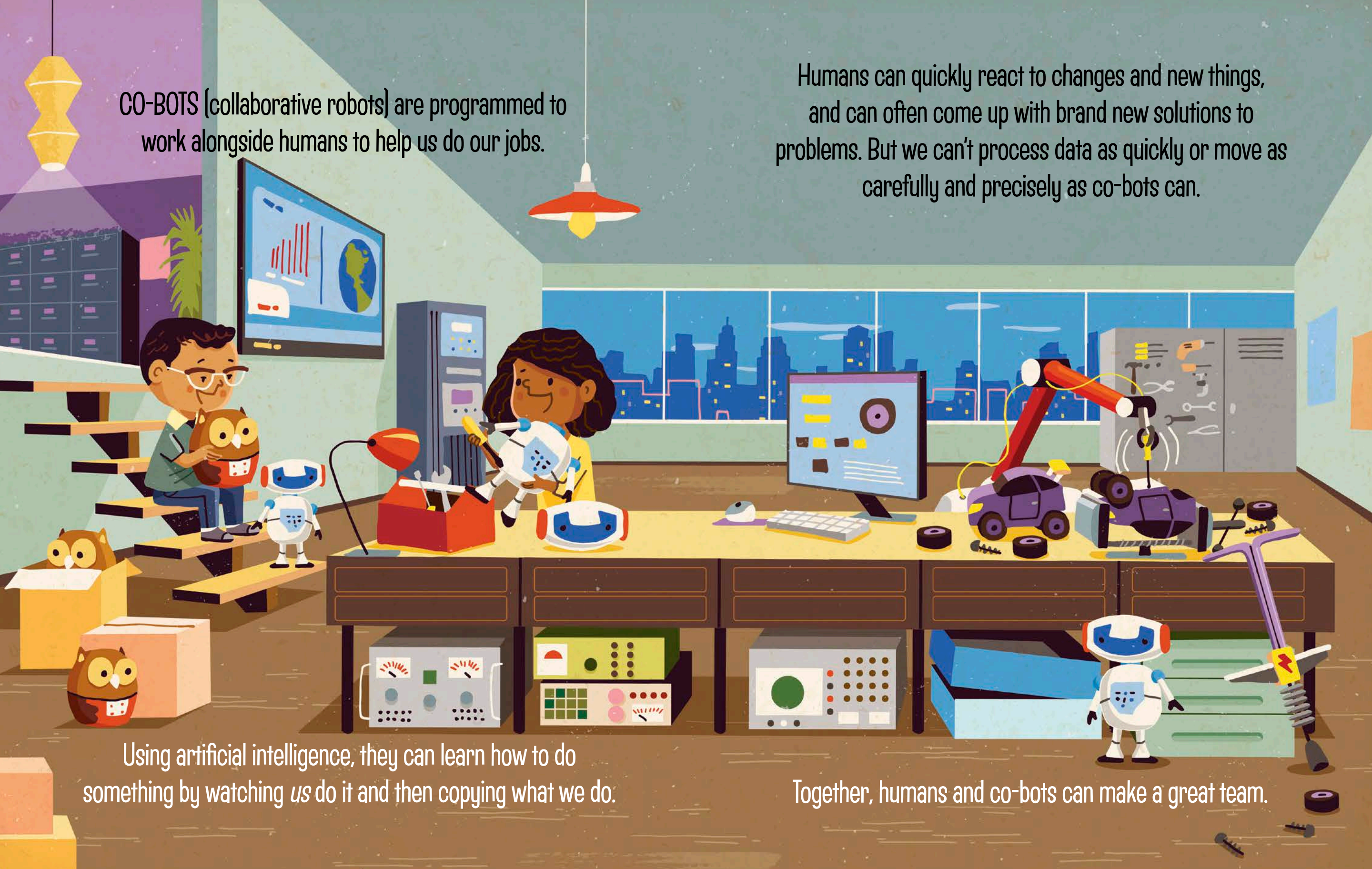
CO-BOTS (collaborative robots) are programmed to work alongside humans to help us do our jobs.

Humans can quickly react to changes and new things, and can often come up with brand new solutions to problems. But we can't process data as quickly or move as carefully and precisely as co-bots can.

Using artificial intelligence, they can learn how to do something by watching *us* do it and then copying what we do.
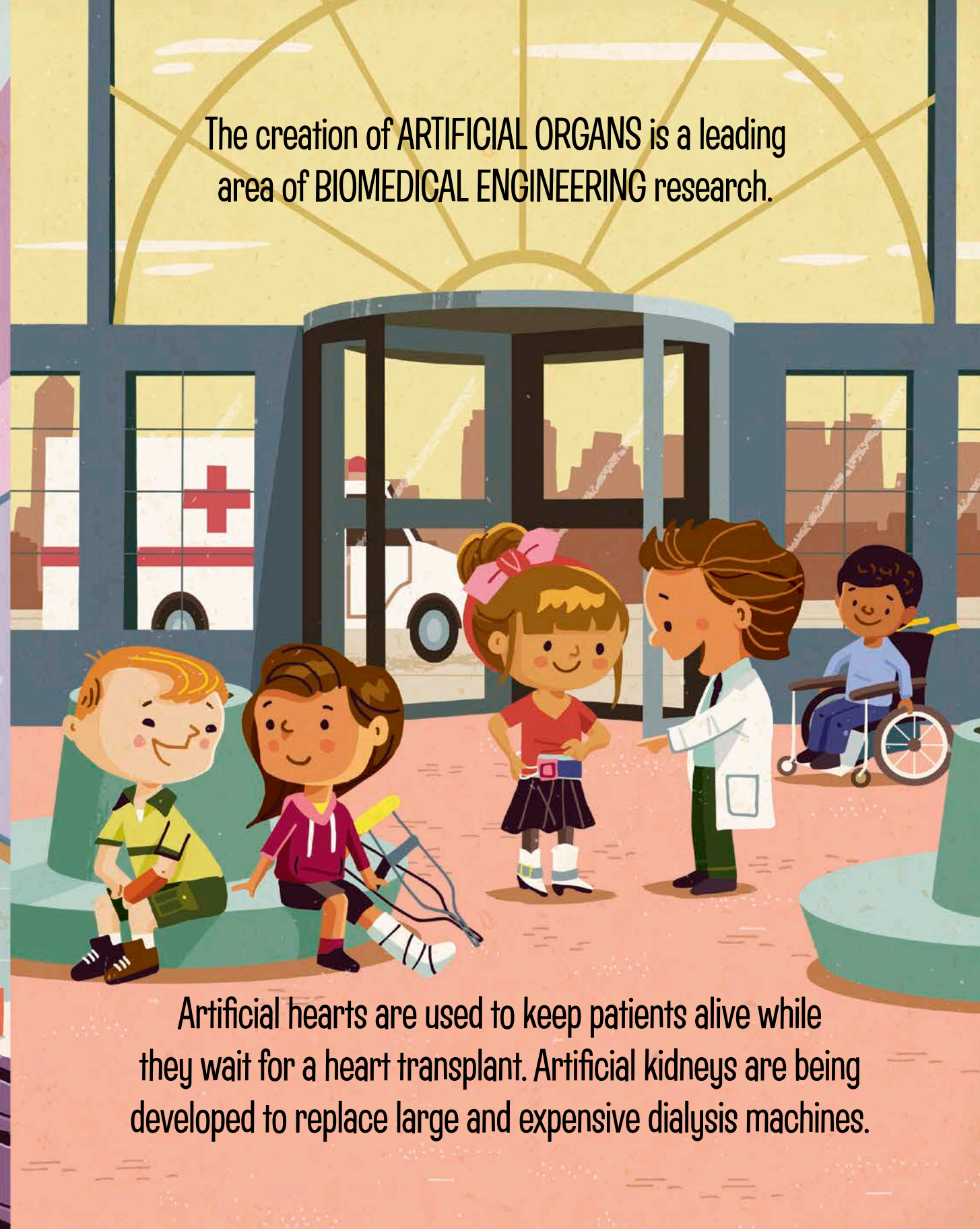
Together, humans and co-bots can make a great team.

Technology is an important part of medicine and health sciences.

The creation of ARTIFICIAL ORGANS is a leading area of BIOMEDICAL ENGINEERING research.

Surgical co-bots are more precise than human surgeons, allow faster healing, and create smaller scars.

Artificial hearts are used to keep patients alive while they wait for a heart transplant. Artificial kidneys are being developed to replace large and expensive dialysis machines.