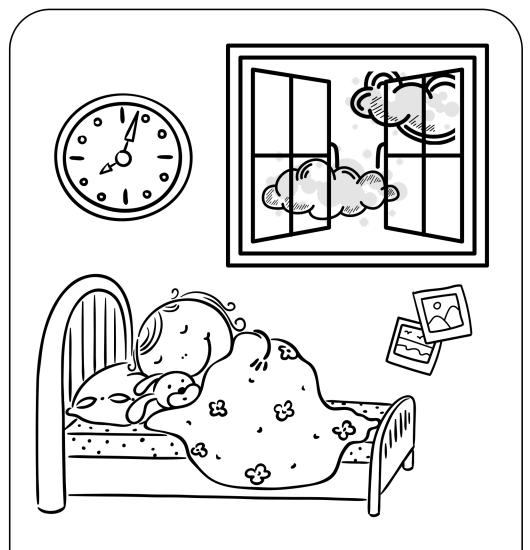
People, Pollinators, and Pollution:

Beckman Innovation and the Science of Clean Air

"Let's Color and Learn Science!"



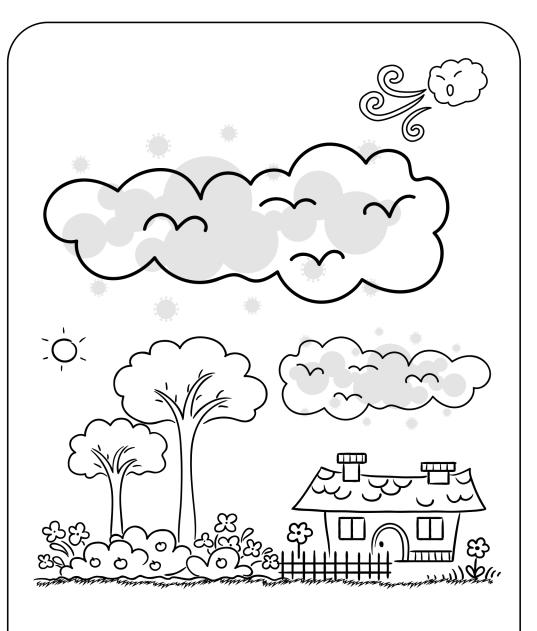
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Once upon a time in Southern
California, as people started to wake
up, they noticed that the sky looked
gray and dirty. It was difficult to see
through it to the mountains.

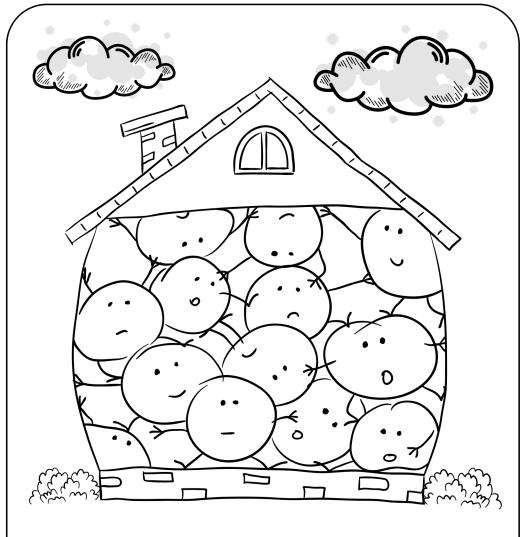


Something in the air made their eyes sting and their lungs hurt. If they breathed it in, they'd start to cough.



It was smog.

The smog hung around for years. Not even the wind could blow it away.



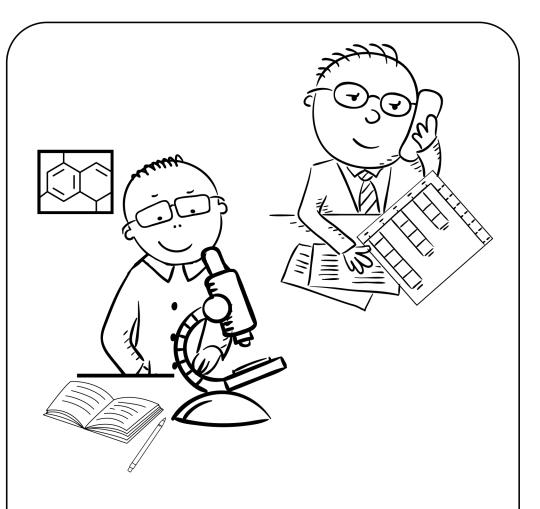
So, the people changed their plans to avoid it. In the middle of the day, when the smog was thick, they stayed indoors. We just have to learn to live with this, they thought.



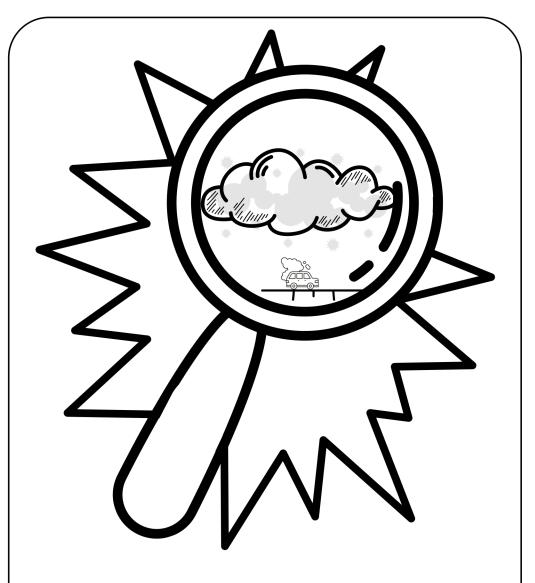
But as the years went by and the problem persisted, the people began wondering what was causing the smog. Maybe it was coming from the large industrial plants they could see nearby. Maybe it was the sulfur coming out of them.



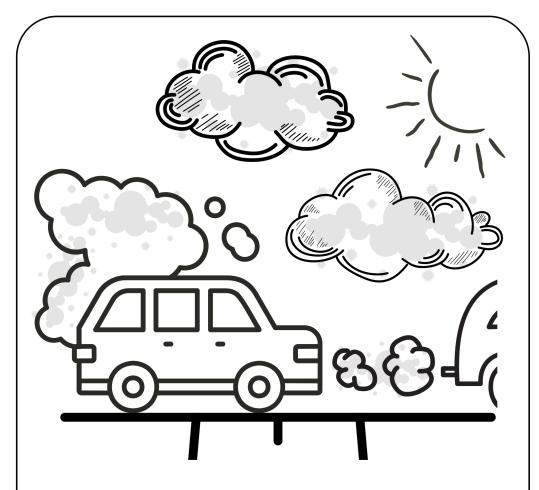
But one person, Dr. Arnold O.
Beckman, thought it might be
something else. He was a chemical
engineer. During his work, he visited
industrial plants. He knew sulfur had
a very strong smell. People would
smell it before they'd see it.



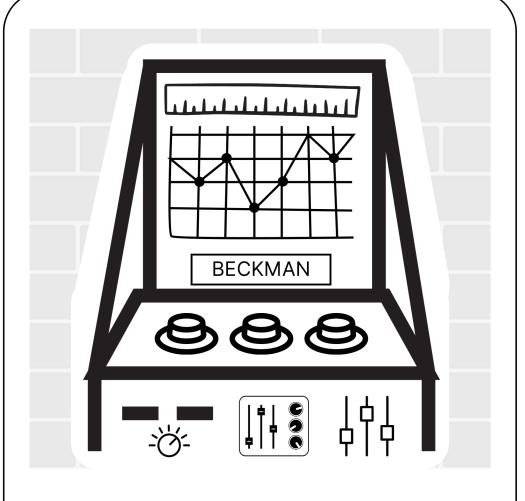
Dr. Beckman wanted to analyze the air for other pollutants. He asked two people to help him with his project, an air pollution manager and a chemist. Their names were Louis McCabe and Arie Jan Haagen-Smit.



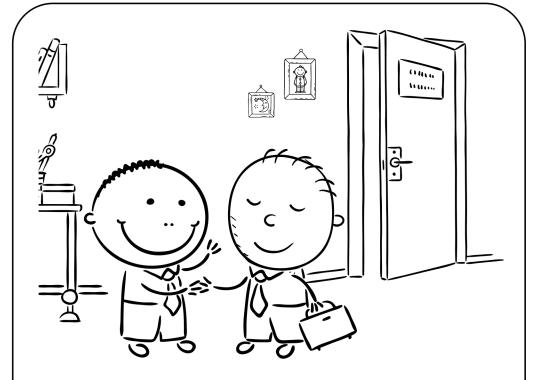
They did something that had never been done before. By measuring things like pollutants in the air, they found the cause of the smog!



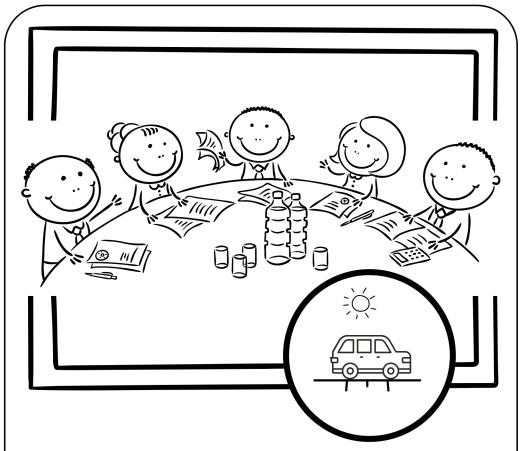
Most of it was the result of exhaust coming from cars and trucks driving on the roads. As the exhaust left the vehicles and entered the sky, it reacted with the sunlight, and became a thick blanket of smog.



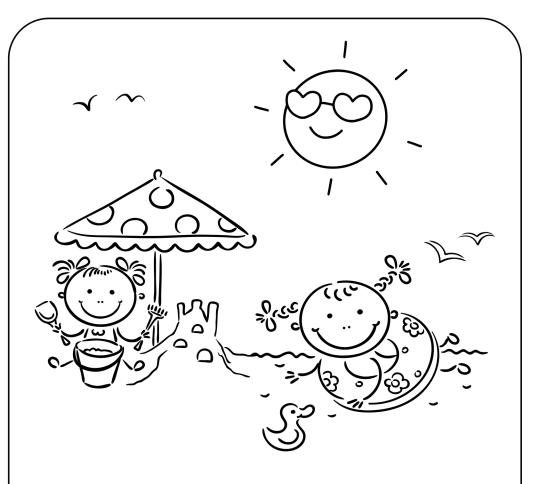
Dr. Beckman began thinking about monitoring the air for these pollutants. He invented an instrument called an oxidant recorder that could measure harmful chemicals in the air.



Soon, Dr. Beckman's invention led to the creation of more devices for monitoring air pollution. The local governments and large industrial companies started to use them. The Governor of California even asked Dr. Beckman to lead a special committee that would make a plan for controlling the smog.

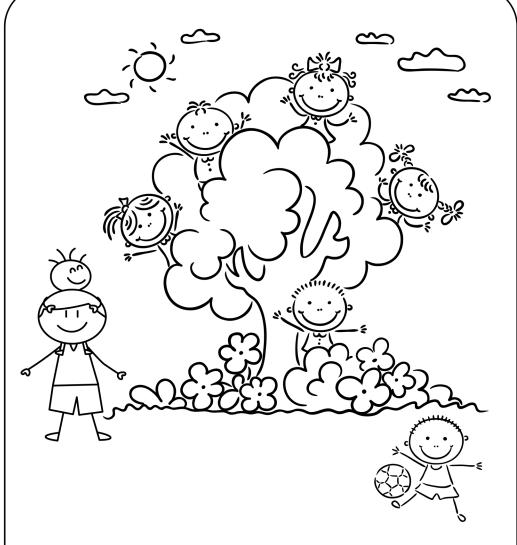


Dr. Beckman worked hard with the committee members. They figured out how to change cars so the exhaust was cleaner. They also wrote a report that helped new rules and regulations go into effect so there would be clean air for everyone.

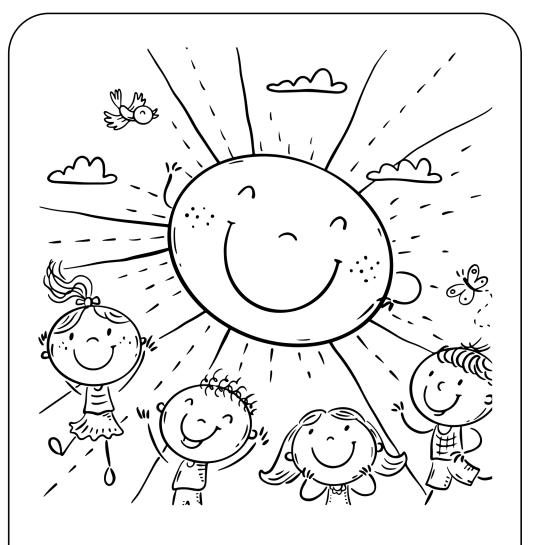


Dr. Beckman's instruments made the difference! The air started to become clean and blue again.

People could see clearly across the beach and ocean or over to the trees and mountains, just about every day.



Their eyes didn't sting anymore, and they could go outside to work and play without the air hurting their lungs and making them cough.



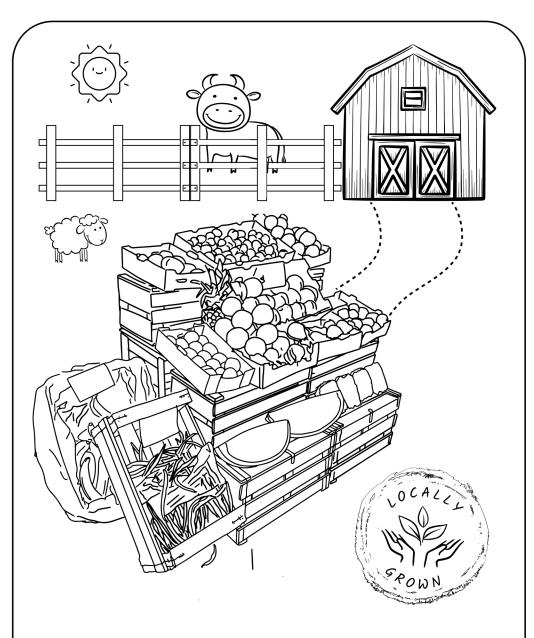
Dr. Beckman started a positive change, and everyone wanted to help because clean air is important for creating a healthy environment.



So, they started walking, cycling, and scootering everywhere they could, and used cars less.



They planted gardens that filtered the air and attracted pollinators like butterflies, bees, and birds.



They bought fresh food from local farms to reduce pollution from shipping and transportation.



Then, they shared the science of clean air and ideas for helping with their friends and family, too. Together, the instruments and the people worked to keep Southern California's sky free from smog.