

Extract of:

Dr. Ott's Amazing Experiments

45 Ideas for Little Scientists Aged 5 and up

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Actually astonishing!

Do you want to bend light around the corner, make eggs float or transform Cola into a bubbling volcano? Do you want to know why your hair sticks up when you put on your pullover, and what a cucumber has to do with electricity? If so, this book is exactly right for you!

45 exciting experiments that vividly illustrate the secrets of science and technology.

15 awesome topics:

- Air
- Centrifugal Force
- Repulsion
- Buoyant Force
- Water
- Cola
- Thermal expansion
- Wärmeauftrieb
- Balloons
- Currents
- Light
- Sounds
- Magnets
- Statics
- Electricity



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Hello, scientist!

I'm glad you're here! And now that you are, it won't be long before we can get started. We've got a lot to do: we're going to launch a rocket and test how a submarine works. We'll fly a hot-air balloon and set off a volcano. We'll conjure up a rainbow and make an electromagnet... Together, we'll go on a journey right around the world of science!

Why science and technology?

How you ever stopped to think how much technology you come across in your everyday life? Of course, you know that mobile phones and computers, remote-controlled cars and coffee machines are full of clever technology. But much simpler gadgets are often pretty remarkable, too: have you



ever wondered why you can crack even the hardest nut with a nutcracker? And how it actually works? Understanding science and technology is an important way of understanding our world.

Why do experiments?

Of course, you could read a lot of clever books to understand the world of technology better. Or you could watch films or get an adult to explain something to you. But the best way is to try things out for yourself. Want to really grasp something? Then you have to grasp it literally, with your hands! It's much easier to understand something you've seen for yourself in an experiment. And you'll remember it for much longer, too.

Why this book?

All 45 experiments in this book can be done using quite ordinary materials, most of which you will already have at home. At the start of each chapter, you'll find a list of things you will need for the three experiments in that chapter. These experiments build on each other: you start with something simple, and then get deeper and deeper into the topic. That way, you can try out, experience and learn a lot without too much effort.

So, let's get started!