

# What would you do if you had an invisibility cloak?

**You could get up to mischief... but so could other people.**

Technologies change the way we interact with our families, friends, people in our communities, and people far away from us. Whether it's a cell phone or an invisibility cloak, we work together to gradually figure out when, where, and how it's ok to use a new technology.

Right now invisibility cloaks are imaginary, but nanotechnology could make them a reality. Researchers are experimenting with ways of bending light to make objects invisible to the human eye or to surveillance devices.



Technologies affect social relationships. If invisibility cloaks existed, who would use them and why? What kind of new rules or laws do you think we'd need to create?

## What is nano?

What is nano? Nano is the scientific term meaning one-billionth (1/1,000,000,000). At this size, the size of atoms and molecules, materials take on new properties. Nanotechnology is the manipulation of materials at the nanoscale to take advantage of these properties. For more info visit [www.whatisnano.org](http://www.whatisnano.org)

# What if we could take an elevator into space?

## Space travel might be as easy as pressing “up.”

The technologies we have today exist because people created them in the past. They thought about the kind of world they wanted and invented things to help make their dreams real. Today, scientists at NASA and Google are working on creating a space elevator. They think new materials like carbon nanotubes could make this technology possible.

A space elevator could make it cheap and easy to bring people and materials into space. And that would mean big changes to our lives.

People’s values shape how nanotechnologies are developed and adopted. Do you think exploring and developing outer space is important? If we could get people and materials into space cheaply, what kind of world would we create there?

### What is nano?

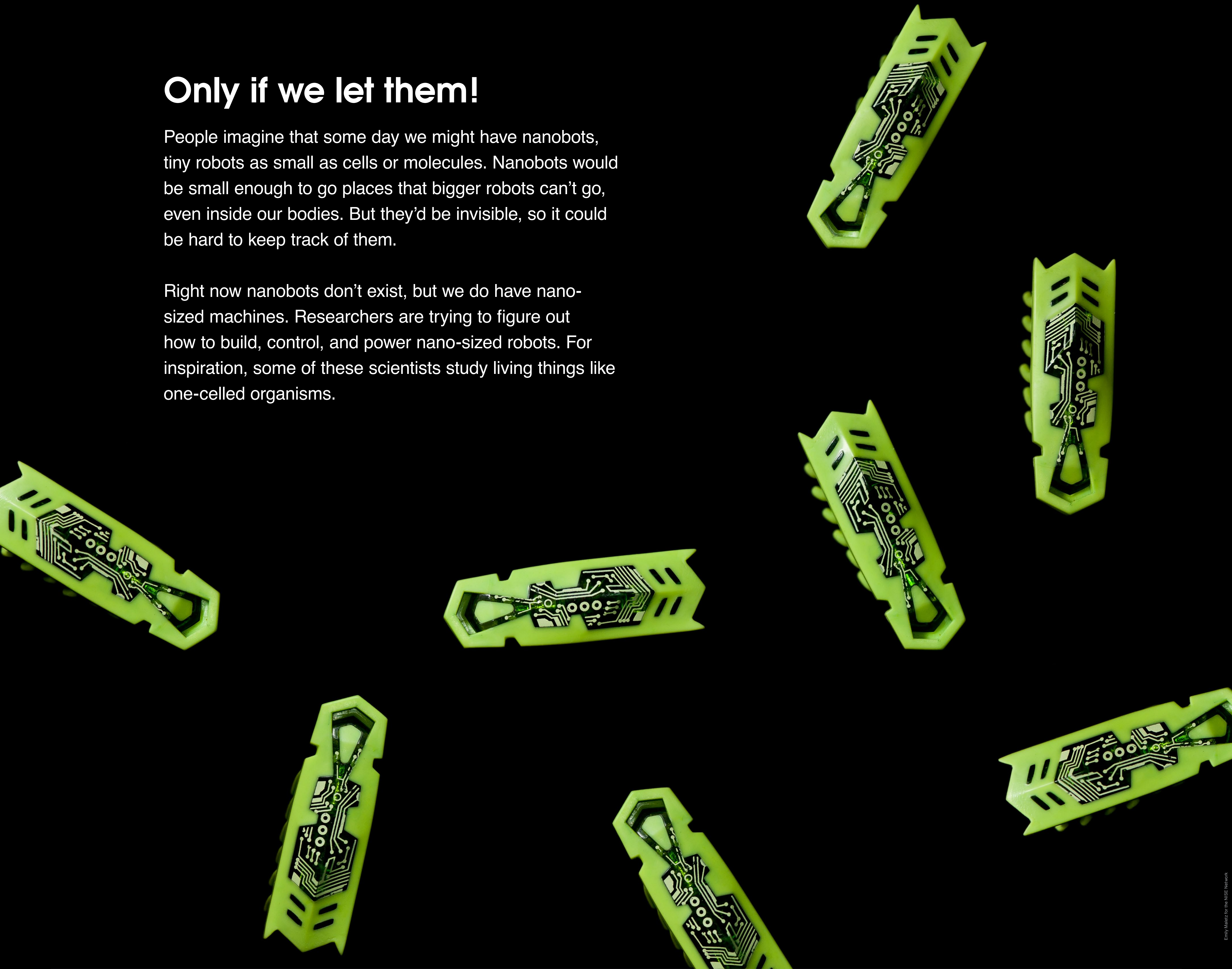
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# Will nanobots take over the world?

## Only if we let them!

People imagine that some day we might have nanobots, tiny robots as small as cells or molecules. Nanobots would be small enough to go places that bigger robots can't go, even inside our bodies. But they'd be invisible, so it could be hard to keep track of them.

Right now nanobots don't exist, but we do have nano-sized machines. Researchers are trying to figure out how to build, control, and power nano-sized robots. For inspiration, some of these scientists study living things like one-celled organisms.



People's values shape how nanotechnologies are developed and adopted. If you were going to invent a nanobot, what would it do? How would it change our lives?

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# Why don't we have flying cars?



## We don't have anywhere to park them!

Just because we can invent new things doesn't mean they'll be adopted. Sometimes people don't use technologies because they don't fit with the rest of our lives.

Technologies work because they're part of bigger systems. Think about everything you need to drive a car: a license, roads, signals and signs, parking spaces, gas stations... A lot of things would have to change if our cars could fly. In order to be useful, new nanotechnologies will also have to work with existing systems.

Technologies are part of bigger systems, which include technological, political, social, and environmental aspects. Lots of people are involved in the development and adoption of new technologies. How do the decisions you make shape new technologies?

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