

Exploring Nano & Society—Flying Cars

Try this!

1. Design a flying car! Choose a car body to start. If you want your car to have wheels, attach them using the wooden axles.
2. Decide how your car will fly. Will it have wings like an airplane, a propeller like a helicopter, or boosters like a rocket?
3. Make the extra parts you need. You can use foam stickers, or cut out pieces from craft foam and attach them using foam tape.
4. What else do you need to fly and land you car? You can make those things out of construction paper and other craft supplies.



Think about it...

1. Could your car work on regular roads? Where would you land it and park it?
2. Could everyone drive this kind of car?
3. Would we need new laws and regulations for flying cars?

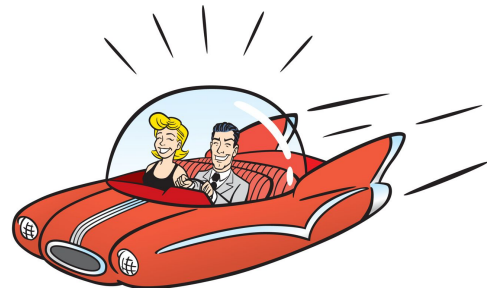
What's going on?

It's fun to imagine what our lives might be like in the future—and it's also important. The things we have today exist because, in the past, people thought about the kind of world they wanted and then invented technologies to help make their dreams real.

People have been thinking about flying cars for a long time. So why don't we all have one parked in our driveway?

The barriers to a high-tech future aren't necessarily related to our ability to build new technologies. Sometimes it's hard to adopt new technologies because too many other things would have to change.

Think about everything involved in having cars: licenses, roads and signs, parking lots, garages, gas stations, rules of the road... A lot of things would have to change if our cars could fly—not just the cars themselves.



How is this nano?



Vehicle that drives and flies

Technologies and society influence each other. Like other technologies, nanotechnologies work because they're part of bigger systems that include technological, political, social, and environmental aspects.

Nanotechnology is allowing us to create new materials and technologies that could mean big changes to our lives. We all can have a role in shaping our future, by thinking about the kind of world we want in the future and planning for it.

Companies are already producing vehicles that can drive on regular roads and take flight from airports. What else is on the horizon?

Learning objectives

1. Technologies and society influence each other.
2. Nanotechnologies are part of bigger systems.

Materials

- Foam car craft kit (body, wheels, and axles)
- Craft foam stickers
- Craft foam sheets
- Foam tape
- Construction paper
- Markers
- Scissors

Chunky race car craft kits are available from www.orientaltrading.com (#IN-48/7888). The other materials are available from craft stores.

Notes to the presenter

This activity is designed as an open-ended, conversational experience. There is no right or wrong way for visitors to build their cars and related materials. You can encourage visitors' creativity by asking them the questions in the "Think about it" section.

Related educational resources

The NISE Network online catalog (www.nisenet.org/catalog) contains additional resources to introduce visitors to the relationship between nanotechnology and society:

- Public programs include *Flying Cars*, *Nanotech and Consumer Products*, *Shrinking Robots!*, and *Would You Buy That?*
- NanoDays activities include *Exploring Nano & Society—You Decide*
- Forums include *Energy Challenges*, *Nanotech Solutions?*, *Nanomedicine in Healthcare*, *Privacy—Civil Liberties—Nanotechnology*, and *Risks, Benefits, and Who Decides?*
- Media include *Does Every Silver Lining Have a Cloud?*, *Is that Robot Real?*, *Let's Talk About It*, *Same Sides*, *Societal and Ethical Implications Posters*, and *Wonders and Worries of Nanotechnology*.
- Exhibits include *Balance our Nano Future* and *Nanotechnology: Fact or Fiction?*

Credits and rights

This activity was created as a collaboration of the NISE Network and the Center for Nanotechnology in Society at Arizona State University.

Image of Transition vehicle courtesy Terrafugia, www.terrafugia.com.



This project was supported by the National Science Foundation under Award No. 0940143 and 0937591. Any opinions, findings, and conclusions or recommendations expressed in this program are those of the author and do not necessarily reflect the views of the Foundation.

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