

April 2011

Groundbreaking Research

Is Water-Based Renewable Energy an Alternative to Fossil Fuels?

Explore a catalyst-based process for splitting water, from scientists at MIT

Solar energy may be available for immediate use, but storing the energy for use when it is dark is a challenge. In [Water to Fuel to Water: The Fuel Cycle of the Future](#), you can try the **process of splitting water** into hydrogen and oxygen, fuels that can be used to produce clean electricity--anytime. The use of a **cobalt-based catalyst** makes the process more energy-efficient. (Difficulty: 7-9)



Explore a Future in Science and Engineering!

The following career profiles have been added to the [Careers in Science](#) pages:

- [Biomedical Engineer](#)
- [Cardiovascular Technologist or Technician](#)
- [Certified Registered Nurse Anesthetist](#)
- [Cytotechnologist](#)
- [Dental Hygienist](#)
- [Pathologist](#)
- [Physician Assistant](#)
- [Physics Teacher](#)

Don't Miss These New Project Ideas!



Creepy Characters: Successful Animation

Is there such a thing as "too realistic"?

The idea of the **uncanny valley** comes from **robotics**, but according to box-office sales, it may be an important factor for audiences. In [That's Creepy! Exploring the Uncanny Valley](#), you can test audience reaction to a range of movie or TV characters. (Difficulty: 6)

Plug-and-Play Electronic Drums with PicoBoard

Create a Scratch program to "play" the beats you make on a set of makeshift drums

Hook a set of foil-covered plates (your *drums*) to a PicoBoard and the **Scratch programming environment** in the [Customize Your Own Drum Set](#) computer science project to explore **resistance-based input**. (Difficulty: 6)



Taking It Even Further!

Designing and testing your own music-based game

If you are interested in **video game design** and/or **computer programming**, you could design a novel project exploring "natural mapping" in games where users are asked to "play" an

Just Released!

The following Project Ideas were recently added to the Science Buddies [directory of 1000+ projects](#):



- [A Sweet Sequence: The Cacao Genome*](#)
- [Build a Gauss Rifle!](#)
- [Do Your Storm Drains Keep the Ocean Trash Free?](#)
- [Does Your Cell Phone Leak? Measuring Cell Phone Radiation](#)
- [HAMing It Up with the Astronauts*](#)
- [How Far Will It Fly? Build and Test Various Paper Planes](#)
- [Smart Medicine Cabinet: Build a Sensor That Reminds Patients When to Take Medication*](#)
- [Water Drops and Sparks!](#)

instrument to rack up on-screen points. How might you combine the following projects: [Out of Control!](#), [Want To Make a Video Game? Here's How!](#), and [Customize Your Own Drum Set!](#)? We'd love to see what you come up with!

[Experimenting with a Kelvin Electrostatic Generator](#)

(*Science Buddies projects in [computer science](#) are sponsored by Symantec Corporation. Projects in [video and computer games](#) are sponsored by the AMD Foundation.*)

Science Project Success!

As McCray, a 2nd grader in North Carolina, knows, science projects begin with a question: **Was Squanto right about fertilizing crops with fish?** With the help of his family and his pet pig, McCray put it to the test on the family farm. It's a great [Science Buddies in Action](#) story! If you have a science project or science fair success story to share, please contact us at SciBuddy@sciencebuddies.org.



I Did This Project!

Congratulations to the students who **won an iTunes gift card for filling out an I Did This Project report last month** as part of our newsletter contest. Winning students have been notified via email. If you completed a Science Buddies project, please use the "**I Did This Project**" button (on the project page) and let us know how it went! *Your feedback on our projects helps the Science Buddies' community!*



Don't Miss...

- Follow our "This Day in Science History" posts at [Facebook](#). 
- Check our [Summer Science Camp](#) resource to find fun and exciting summer programs you might enjoy.
- The Whiz Kids documentary will be [shown on PBS](#), beginning this month! Tune in to follow the story of three top science students!



On the Blog

- [Birds on the Move](#)
- [Programming a Logo](#) 
- [DIY Musical Instruments](#)
- [A "Science Mom" Thumbs-Up Science Detectives Series](#)
- [Natalie Portman: A Winning Combination](#)
- [Sorting Things Out with Paper Chromatography](#)

Quick Links

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