



## New Engineering Design Process Resource

### How to Invent or Design...Anything!

*Not all projects use the scientific method.*

The [scientific method](#) is one of the most powerful techniques of the past millennium, but if you want to invent or design a **solution to a problem**, then the scientific method is most definitely the *wrong* tool for the job. Inventors, engineers, and designers instead use a complementary method, **the engineering design process**.

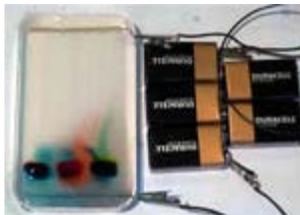


Our new [Engineering Design Process Guide](#) provides a blueprint for students working on engineering projects. Instead of starting with a question, **the engineering design process begins with a human problem or need**. Then the process systematically guides you in figuring out how to create an optimum solution in the real world.

To help students and teachers understand which method is most appropriate for a project, we've put together "[Comparing the Engineering Design Process and the Scientific Method.](#)" a side-by-side comparison of the two methods.

## 3-2-1, Science 'Action'

The [Summer Science Fellows](#) got behind the camera--and in front of it--this summer when they collaborated on making videos of two Science Buddies Project Ideas. Designed to highlight the "fun" of doing a science project, these [YouTube videos](#) put two popular science projects in action and might help inspire your students!



COOL BIOTECH EQUIPMENT! 



A BANG OUT OF BREATH SPRAY 

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## Register Now!

***Register to join us for our free webinar for educators, Sept. 14 (3:30-4:30 p.m. PDT)!***

This year's [webinar](#) will include our new video and computer game design resources, developed with support from the AMD Foundation.

## New Video Gaming Resources!

### Video Games for Science Projects?

*Absolutely! Our new video and computer game design resources help you encourage and support student gaming projects.*



## No Bones Required!

We just released an updated set of video and computer game design resources, sponsored by **AMD Changing the Game**, an initiative of the AMD Foundation, which is designed to spark students' interest in science, technology, engineering and math by creating video games. Our "gaming" resources help teachers and parents pinpoint the academic goals behind gaming projects and guide students toward successful, exciting, and educational video and computer game design exploration.

- [Kid-Friendly Programming Languages](#)
- [Tips and Resources for Making Video and Computer Games](#)
- [Resources for STEM Education Through Video Game and Animation Creation](#)
- [Video & Computer Games Project Ideas](#)
- [AMD Changing the Game video](#)



Young fossil hunters can dig in with the ["Get Some Practice at 'Fossil Reconstruction with Owl Pellets'"](#) geology project. After some hands-on *skeletal* detective work, students can learn more about related career paths in the [geoscientist](#) profile.

(Science Buddies [geology projects](#) are sponsored by Chevron.)

## Making Connections



THE 'ROW TO THE POLE'



LEGO PHOTO-ENGINEERING



INSPIRED BY ARMSTRONG



PHYSICS AND ANGRY BIRDS



WINNING ASTRONOMY



EXPLORING COLOR SENSE

## Do Something New!

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



- [Go Fish! Creating an Ocean-Friendly Fishing Video Game](#)
- [Under Pressure: Does a Child's Blood Pressure Depend on His or Her Age?](#)
- [When Your Sniffer Snoozes, You've Got Olfactory Fatigue](#)
- [Want to Warm Up or Cool Down? Go Underground!](#)

## Student Successes

- [Lara Fulton](#) investigated the microbes that grow on a water bottle. 
- [McCray McGee](#) tested the effectiveness of fish as a fertilizer on the family farm.
- [Mikaela Kay](#) turned an interest in the floral industry into a multi-year study of floral preservatives.
- Read more [Science Buddies in Action](#) stories.
- We would [love to hear](#) about your

## Quick Links

- [Project Ideas](#)
- [Topic Selection Wizard](#)
- [Project Guide](#)
- [Scientific Method](#)
- [Careers in Science](#)
- [Ask an Expert Forums](#)
- [Volunteer Opportunities](#)
- [Donate](#)



students' summer science  
experiences and science projects!

### Share Science Buddies!

Use the "Forward this email" button to send a copy to friends and colleagues. Encourage them to [join Science Buddies](#) to continue receiving our monthly newsletter.



### Want to Do More?

Our volunteer [Science Buddies Ambassador](#) opportunity suggests a number of easy steps you can take to let your circle of friends, family, and colleagues know about our **free** resources.

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