

# Student STEM Fair Resources

## 2019-20

### **Online Resources for STEM Fair Project Ideas**

- <http://cusef.byu.edu>
- <https://sciencebob.com/category/science-fair-ideas/>
- <http://www.stevespanglerscience.com/>
- <https://sciencebob.com/>
- <http://www.education.com/science-fair/elementary-school+middleschool/computers+engineering/>
- <http://faculty.washington.edu/chudler/fair.html>
- <https://www.education.com/science-fair/middle-school/>
- <https://www.education.com/science-fair/elementary-school/>
- <https://www.education.com/science-fair/>
- <http://www.sciencefairadventure.com/AboutUs.aspx>

### **OSW Publications**

The following documents are available from EPA's toll-free Hotline (800 424-9346) at no charge; reference the following publication numbers when ordering:

- **The Quest for Less: A Teacher's Guide to Reducing, Reusing, and Recycling.** EPA530-R-00-008.
- **Planet Protectors Club Kit (workbooks, certificate, badge, board game).** EPA530-E-98-002.
- **A Resource Guide of Solid Waste Educational Materials: Second Edition.** EPA530-B-99-018.
- **Adventures of the Garbage Gremlin: Recycle and Combat a Life of Grime (comic book).** EPA530-SW-90-024.
- **Ride the Wave of the Future: Recycle Today! (poster).** EPA530-SW-90-010.
- **Service-Learning: Education Beyond the Classroom (brochure).** EPA530-K99-001.
- **Let's Reduce, Reuse, and Recycle! (CD-ROM).** EPA530-C-00-001

### **Online Resources for Environmental Science Projects**

- <http://faculty.washington.edu/chudler/fair.html>

### **Other Resources for Teachers**

- **The Environmental Education Collection: A Review of Resources for Educators, Volume I, North American Association for Environmental Education (1997).**
- **The Environmental Education Collection: A Review of Resources for**

**Educators,**

**Volume 2, North American Association for Environmental Education (1998).**

## **STEM Fair Project IDEAS**

### *Tips for selecting a topic*

For most students, the hardest part of the science fair project is coming up with an idea and then narrowing down their question. The following list outlines ways that most students follow to select their own project.

#### **Interests & Hobbies**

All STEM projects should be something that the student is interested in and finds exciting. Many really good projects relate to student interests and hobbies. Science Buddies has an excellent topic wizard that helps students sort through their interests and then offers suggestions and project examples based on their answers.

#### **Current Events**

Current events and problems facing our society are really hot project ideas each year.

*Teaching Method Idea:* Current Event File and Science in the News logs  
Research and debate in class how as a class or a student they could set up an experiment and test a problem or find a solution.

#### **Observations**

A lot of good projects come from student observing and questioning the things they see around them.

*Teaching Method Idea:* Observation Log

#### **News Articles, Books and Television Shows**

All students will have to do an extensive amount of research regardless of their topic - reading helps students come up with ideas.

*Teaching Method:* Science in the News, Files, Current Event Discussions, etc.

#### **Class Projects:**

There are a lot of class projects and experiments that can be taken further.

*Teaching Method:* Do a lot of class projects and experiments, use examples from Science Buddies to expand projects.

**Parent or Mentor Suggestions:**

Use the research of others to start another project. Many parents have great ideas. some professors are willing to work with kids and allow them a small part of a larger project.

*Teaching Method:* Read abstracts and journal articles relevant to studies in class, have scientists come and talk with students in class.