Retired Educators of the Center for Excellence in Mathematics and Science Education (RECEMSE)

STEM Research Fair Resources

Student Resources

Ten Steps for a Science project

Science Project - 1 Ask a Measurable Question - YouTube

<http://www.youtube.com/watch?v=CO8oENtHv-g>

Science Project - 2. Start a Journal

<http://www.youtube.com/watch?v=yuFDyjrk1hU>

Science Project - 3. Research & Form a hypothesis

<http://www.youtube.com/watch?v=L6uOJX3dYPE>

Science Project - 4. Write a Procedure

<http://www.youtube.com/watch?v=bAYhDfvsEFU>

Science Project - 5. Fill out Required Forms

<http://www.youtube.com/watch?v=PlOwEibOGco>

Science Project - 6. Conduct the Experiment

<http://www.youtube.com/watch?v=rGunpqKpuH8>

Science Project - 7. Create Graphs & Charts, then Analyze the Data

<http://www.youtube.com/watch?v=DVrbmDDG8Zs>

Science Project - 8. Form a Conclusion

<http://www.youtube.com/watch?v=6dCT_xC1qpM>

Science Project - 9. Write a Research Paper and an Abstract

<http://www.youtube.com/watch?v=LvzcwRVJ1bk>

Science Project - 10. Create a Display and Practice a Presentation

<http://www.youtube.com/watch?v=G4L5i6dJzd0>

Science Project Ideas web sites

* Science Buddies Browse the Project Ideas Index

<http://www.sciencebuddies.org/science-fair-projects/project_ideas.shtml#browseallprojects>

<http://www.education.com/science-fair/>

* Science Buddies

<http://www.sciencebuddies.org/science-fair-projects/project_ideas.shtml#browseallprojects>

* Science fair ideas

[www.sciencebob.com](http://www.sciencebob.com)

* Sciencespot.net

<http://www.sciencespot.net/Pages/sciclub.html>

* Infotopia

<https://www.infotopia.info/index_oscar_mayer_weinermobile.html>

Teacher Resources

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Prepare for the Science Fair by Kevin Temmer

<http://www.youtube.com/watch?v=7e5XU0HKFLA>

Google Forms for creating rubric

<https://docs.google.com/forms/d/1evew971MzTmP1zhLDersvSkqHvV1Eif23I6ZPrZP1KU/viewform>

Scientific Method Vs Engineering Design Process

<https://www.youtube.com/watch?v=ZQF8iU7ygoM>

Scientific Method Song

<https://www.youtube.com/watch?v=wlb7tLJy5AI> (animated)

Science Buddies Browse the Project Ideas Index

<http://www.sciencebuddies.org/science-fair-projects/project_ideas.shtml#browseallprojects>

[**http://www.education.com/science-fair/**](http://www.education.com/science-fair/)

Science Buddies

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science fair ideas

[www.sciencebob.com](http://www.sciencebob.com)

Six Week Timeline

Teacher’s Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Date of the science fair: Morgan State University**

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**Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ Week One**

* Choose a topic, problem and hypothesis to investigate
* Check resources (in school or community library)
* Contact experts in the field
* Gather all the written material you can find on the topic

**\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ Week Two**

* Begin putting your project notebook together
* Start collections or experiment
* Begin designing display unit

**\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ Week Three**

* Take the photographs you need
* Complete your research
* Consult with experts (scientists, college professors, teachers, parents) to check your progress
* Write the first draft of report

**\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ Week Four**

* Continue collecting items for display
* Continue your experiments
* Set up your apparatus and test it

**\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ Week Five**

* Write second draft of report
* Construct background for display
* Design and assemble graphs and charts
* Complete lettering for display unit and mount it
* Double check your written data
* Complete experiment and record data

**\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ Week Six**

* Write and type final report
* Set up display unit and test and transport to science fair site

**Total**