## CALIFORNIA SCIENCE & ENGINEERING FAIR California Sciencenter

TIPS AND TOOLS IN PREPARING FOR THIS EVENT!

#### CONGRATULATIONS!!!!



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You have completed the regional competition for Los Angeles County!

- First and Second Place Winners will automatically advance to state.
- Some 3<sup>rd</sup> place will also advance to state.
- Los Angeles County is given 94 slots for the State Competition.



# WHAT DO I NEED TO DO?

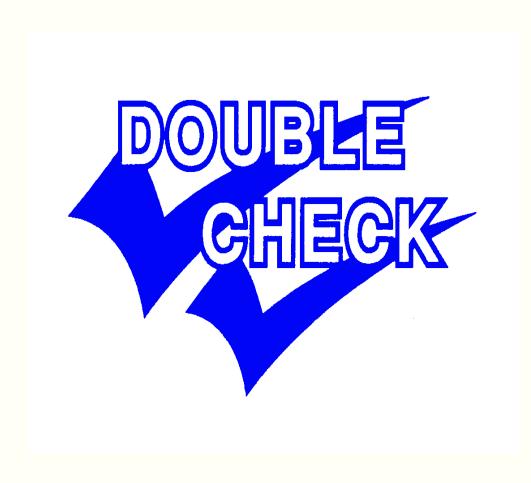
#### DON'T WAIT!!! REGISTER ASAP!!!SCIENCE2018



- REGISTER ASAP WITH http://cssf.usc.edu/
- REGISTER DURING OFF-PEAK HOURS (EARLY AM, MID-DAY, ETC.)
- IF YOU CANNOT ATTEND, IMMEDIATELY CONTACT EMILY HOFFMAN (ehoffman@spusd.net)

<u>Alternates</u>: If you are selected, you will need to go through the whole process AND submit your signature card. You will be notified if you are attending and provided with more details.

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- WHEN YOU REGISTER:
- CHOOSE THE BEST FIT CATEGORY (THIS MAY CHANGE)
- FOLLOW ABSTRACT FORMAT FROM STATE SITE
- CONTINUOSLY CHECK WEBSITE TO SEE THAT YOUR INFORMATION HAVE BEEN RECORDED.
  - VOLUNTEERS WILL CONTACT YOU IF IT SHOWS NOTHING.

### THIS IS A DIFFERENT FAIR WITH IT'S OWN PRIORITIES

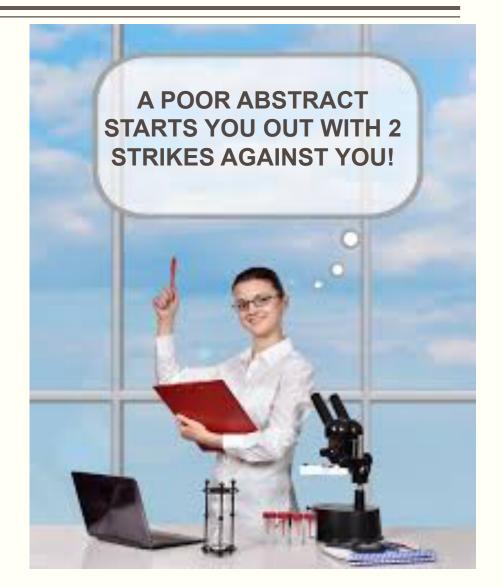
"What worked at LA County doesn't always work at State"

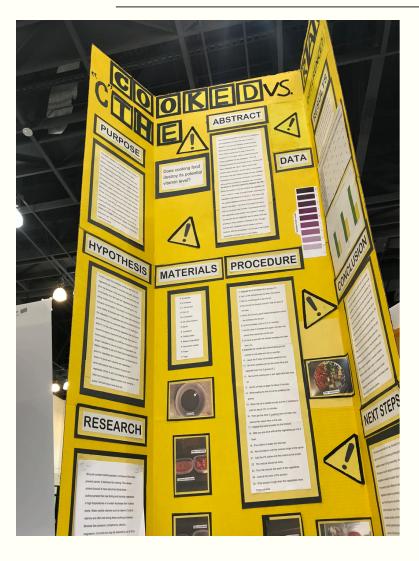


- Don't be afraid to revise your display....if needed.
- Remember, you are making an impression on the judges.
- The display rules are consistent for County and State.

#### **ABSTRACT**

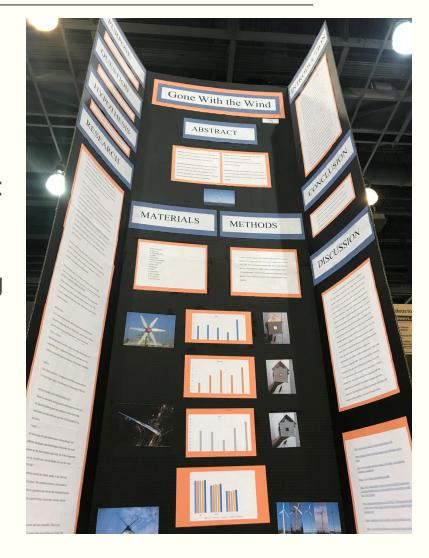
- WORK ON YOUR ABSTRACT!!!
  - It is important to make sure that your work makes sense, background is accurate and there are clear thoughts.
  - Have someone check your spelling and grammar!
  - Good idea to have someone read for organization and clarity.
  - What makes sense to you may not necessarily be clear to everyone else... including your judges.





#### KEEP IN MIND THE FOLLOWING DETAILS:

- Think about the size of your board:
- If it is too tall, you make the work harder on your judges.
- There is no extra points for making a ginormous display. DON'T GET CARRIED AWAY!



- Make sure your title is clear and describes your investigation.
  - This is not the place for "imaginative" or "clever" titles that might not necessarily make sense.
- Organization must take priority!
  - Don't put "Data" first and the "Abstract" in the middle.



REPEAT!!! CLARITY IS KEY!!!

#### **INTRODUCTION:**

- Clear and understandable.
- Hypothesis may be included in this section.
- Relevant background information may also be added to this section (footnotes should be included) or as a separate section in your research paper.
- Don't include "Fun Facts" if it has nothing to do with your project or topic.



Following this suggestion shows that you have made a huge effort in learning as much as possible about your topic.

#### **MATERIALS AND METHODS (OR PROCEDURES)**

- CAN'T SAY THIS ENOUGH....CLARITY!!!
- Judges should be able to copy it exactly....Remember, this is to allow other researchers prove to themselves that your result is what you say they were. Anyone should be able to reproduce YOUR data with YOUR procedures.

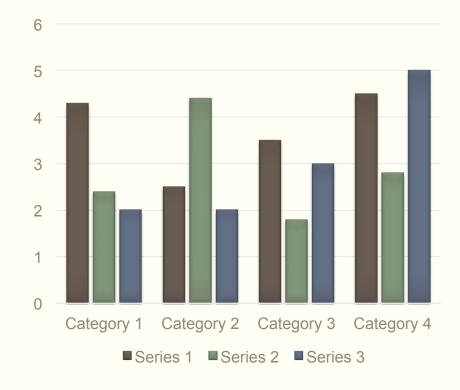


- NOW IS THE TIME TO CHECK AND POSSIBLY DO MORE WORK!
- Be sure that your research shows sufficient trials and/or subjects that makes sense for someone who is still in 6<sup>th</sup>-12<sup>th</sup> grade

#### It doesn't hurt to mention that...

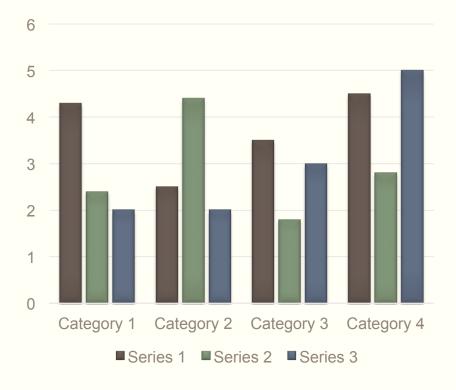


- Speaking about <u>DATA</u>...
- It needs to be organized and understandable. Our new favorite word....CLARITY!!!
- Graphs should be easy to compare with similar measurements, if that is what you want the judges to do.
- Independent variables (ones you have the most control over) should be on the "X" horizontal axis and dependent variables on the "Y."
- You do not have to have to start with a 0/0 origin, if that would leave big, unused spaces on the graph.



- More stuff about **DATA**...
- Use consistent measurement intervals. If you want to show yourself doing something, or show pictures of results, label them clearly.
- Details about graphs that often go missing:
- (I know right?)
  - Add your labels
  - Don't forget the titles
  - Please include captions

#### LOOK!! Details are missing in this graph!!!



#### **DISCUSSION**

- Make sure that your Discussion (or Conclusion, if you prefer) follows from your data.
- Show that you have made an effort to look for patterns in the data.
- It is perfectly acceptable to not find clear patterns in the data or find that your hypothesis was not supported.
- You do need to try to evaluate how strongly your results seemed to match up.



ABOVE ALL...

#### **NO PROJECT EVER "PROVES" ANYTHING!!!**

- Your results may strongly suggest something.
- The data may support your hypothesis.
- But never say that you have "proven" anything.
- Someone would only have to find one instance where that was not so and the "proof" would fail!

- FINALLY....
- If you received help with something...

#### **ACKNOWLEDGE THAT!!**

 No one thinks that you have to use dangerous or sophisticated equipment without help or training.



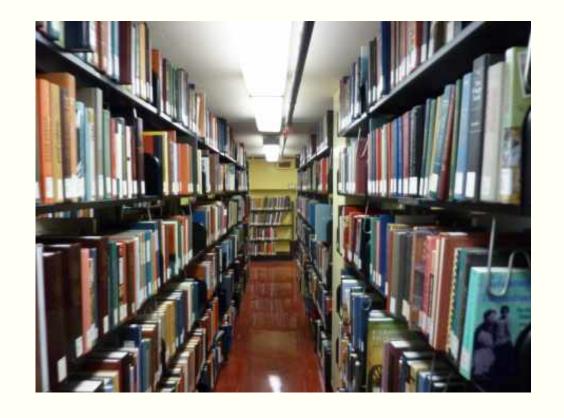
#### WHAT'S THAT AGAIN?

Preparing for the Interviews and Meeting the Judges.



#### PLEASE....

- Be sure that you have done enough reading in your area to be knowledgeable during the interview.
- You should know a lot more about your topic than others at your grade level, the more the better.
- Do this before the fair.



#### Preparing to meet your judges...

Remember those questions from the regional fair that you couldn't answer or caught you off guard?

- Now is the time to think about those questions.
- Prepare additional questions that might be asked.
- Talk to your advisors or site coordinators to help you prepare to speak to the judges.
- You have time to research those unaswered questions.



#### Preparing to meet your judges...

#### Be PROFESSIONAL!!

#### So dress professional:

- No jeans...pressed clothing. (Dress pants, skirts, etc).
- Comfortable shoes. You'll be standing for quite a while. Sneakers could be okay if they are clean and not distressed. (Think brand new).
- Shirts should be tucked (might want to think about an iron).
  - · Polo or button down.
  - A tie wouldn't hurt.



#### Preparing to meet your judges...

You will meet a number of judges, 1:1.

#### Remember:

- Make eye contact.
- Speak clearly and confidently (no, you don't have to scream or yell).
- Interact with your board (your board is your friend)
  - Take advantage of the materials on your board:
    - Graphs and Pictures



#### Best of Luck to all of you!

If you have any questions or clarifications, please contact:

- Emily Hoffman (<a href="mailto:ehoffman@spusd.net">ehoffman@spusd.net</a>)
- Margery Weitkamp (microbiot@earthlink.net)

