

Feria de Ciencias 2022

¡Martes, 3 de mayo, en la cafetería de Will Rogers!

Todos los proyectos deben entregarse a las 8:00am, el 3 de mayo, en el salón de su estudiante. Nuestra feria de ciencias será durante el día escolar, con la oportunidad de que los padres vean los proyectos esa noche entre las 5:00pm a 7:00pm.



Comenzaremos a retirar los proyectos a las 7:00pm y los llevaremos al laboratorio de ciencias. Puede llevarlos a casa esa noche [en cualquier momento] o recogerlos el día siguiente 4 de mayo en el salón de clases de su estudiante.)

¡Estudiantes, están invitados a participar con un proyecto en la feria de ciencias de este año! Aunque la feria de ciencias es opcional para todos los grados, estamos animando a todos los estudiantes interesados a participar con un proyecto. Los proyectos deben ser completados en casa, pero por favor hablen con su maestro(a) si necesitan ayuda.

3 Categorías para elegir:

- **Experimento:** ¡Utiliza el método científico para diseñar un experimento que pone a prueba tu pregunta!
- **Ingeniería:** Usa el proceso de diseño de ingeniería para construir o crear algo nuevo, o para resolver un problema!
- **Investigación:** ¡Elige un tema de Ciencia, Tecnología, Ingeniería u otro tema que te interese y descubre más sobre éste!

Habrán tres niveles de grado para las calificaciones:

- Kinder y Primer Grado
- Segundo y Tercer Grado
- Cuarto y Quinto Grado

Los estudiantes pueden trabajar individualmente o en grupos de NO más de tres. Un grupo de grados mixtos debe participar con un proyecto en el grado más alto.

Cuando ya tengas una idea, baja la propuesta de proyecto de la página de Ciencias de Broncos en el sitio web de la escuela, o puedes obtenerla por medio de tu maestro(a). Completa tu propuesta de proyecto y muéstrala a tu maestro(a) quien la revisará contigo y te dará un tablero de presentación.

¡Escanee aquí para ir a la
Página de Ciencias de
Broncos para obtener más
información e ideas!



Los proyectos se calificarán durante el día escolar. Después de que todos los proyectos hayan sido evaluados, todas las clases tendrán la oportunidad de ver la exhibición. Los proyectos se dejarán en exhibición de 5:00pm a 7:00pm esa noche si los padres desean ver toda la exhibición del Feria de Ciencias.

Para más información, incluyendo requisitos detallados, fotos de años pasados, ideas de proyectos, rubricas de calificación, y mucho más, visiten las páginas de Ciencias de Broncos en el sitio del web de Will Rogers.

<http://www.venturausd.org/willrogers/students/BroncoScience.aspx>

Science Fair 2022

Tuesday, May 3rd in the Will Rogers Cafeteria

ALL Projects are due by 8:00am on May 3rd in your student's classroom. Our Science Fair will be during the school day, with the opportunity for parents to see the projects that evening between 5-7pm.



(We'll start taking projects down at 7:00pm and moving them to the science lab- you can take them home that night (at anytime) or pick them up the next day, Wednesday May 4th from the student's classroom)

Students, you are invited to enter a project into this year's science fair! Although science fair is optional for all grade levels, all interested students are encouraged to enter a project. Projects must be completed outside of school, but please see your teacher if you need help.

Three categories to choose from:

- **Experiment:** Use the scientific method to design an experiment that tests your question!
- **Engineering:** Use the engineering design process to build or create something new, or to solve a problem!
- **Research:** Choose a Science, Technology, or Engineering topic that interests you, and discover more about it!

There will be three grade levels for scoring

- Kindergarten and First Grade
- Second and Third Grade
- Fourth and Fifth Grade

Scan here
to go to the
Bronco Science
Page for more info.



Students can work individually or in groups of no more than three. A mixed-grade group/level must enter their project into the oldest grade category.

Once you have an idea, download a project proposal from the bronco science webpage, or get one from your teacher. Fill out your project proposal and show it to your teacher who will review it with you and give you one free science fair board.

All projects will be scored during the school day. After scoring is finished all classrooms will have a chance to do a quick walk through to look at all of the projects. The projects will be left on display from 5-7:00pm that evening if parents wish to see the entire Science Fair display.

More information, including detailed requirements, photos from previous years, project ideas, scoring rubrics, and much more can be found on the Bronco Science Page Website:

<http://www.venturausd.org/willrogers/Students/BroncoScience.aspx>

Science Fair Project Proposal *(attach more paper if needed)*

I am working:

- By myself *(individual)*
- In a group *(no more than 3 students) - each group member fills this out, staple them together, and give to one teacher to review.*

First and Last Name: _____

Grade: _____ Teacher: _____

Select one category: Experiment Engineering Research

Describe your project in 2-3 sentences. Experiment: *What experiment are you planning? How will you test it and collect data?* Engineering: *What are you going to build? What will it do?* Research: *What topic are you going to research? What questions do you have about that topic?*

What materials will you need? _____

How will you record and/or display your results? _____

***Teacher Approval Signature: _____

STAPLE THIS PAPER TO THE BACK OF YOUR SCIENCE FAIR BOARD. WRITE YOUR NAME, GRADE, AND CATEGORY IN THE UPPER LEFT CORNER OF YOUR DISPLAY BOARD.

Propuesta de Proyecto para La Feria de Ciencias *(añade otra página si es necesario)*

Estoy trabajando:

- Yo solo(a) (Individualmente)
- En un grupo (no más de 3 estudiantes) - Cada miembro del grupo deberá completar una página de éstas, engrapar las páginas juntas, y entregarlas al maestro/a para que las revise.

Nombre y Apellido: _____

Grado: _____ Maestro/a: _____

Seleccionas una categoría: Experimento Ingeniería Investigación

Describe tu proyecto en 2-3 frases. Experimento: ¿Qué experimento estás planeando? ¿Cómo comprobarás tu hipótesis y cómo vas a coleccionar datos? Ingeniería: ¿Qué vas a construir? ¿Qué hará? Investigación: ¿Qué tema vas a investigar/estudiar? ¿Qué preguntas tienes acerca de ese tema?

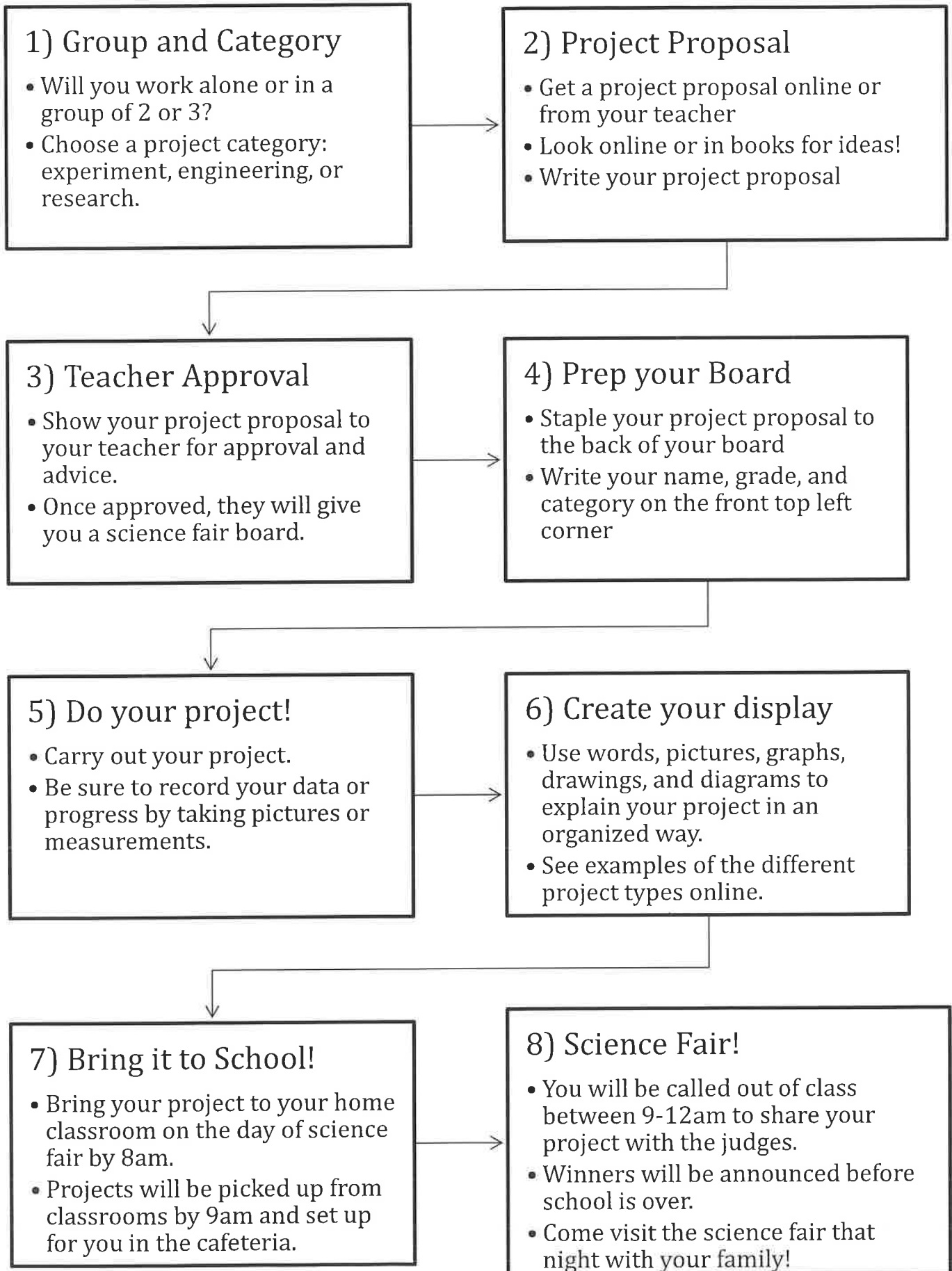
¿Qué materiales vas a necesitar? _____

¿Cómo vas a reportar los resultados? _____

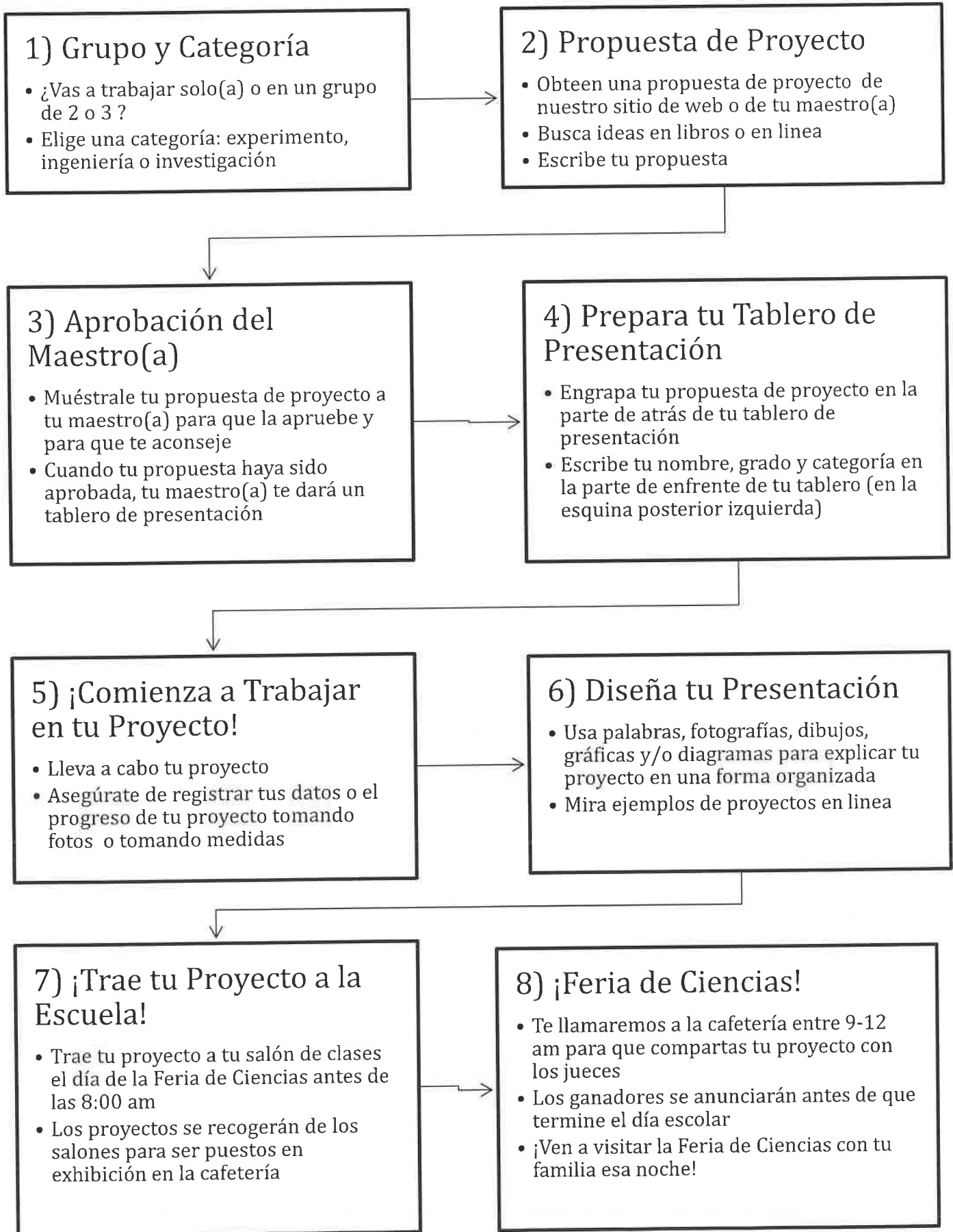
***Firma de Aprobación del Maestro/a: _____

ENGRAPA ESTA FORMA ATRÁS DE TU TABLERO DE PRESENTACIÓN. ESCRIBE TU NOMBRE, GRADO Y LA CATEGORÍA QUE ELEGISTE EN LA ESQUINA SUPERIOR IZQUIERDA DE TU TABLERO.

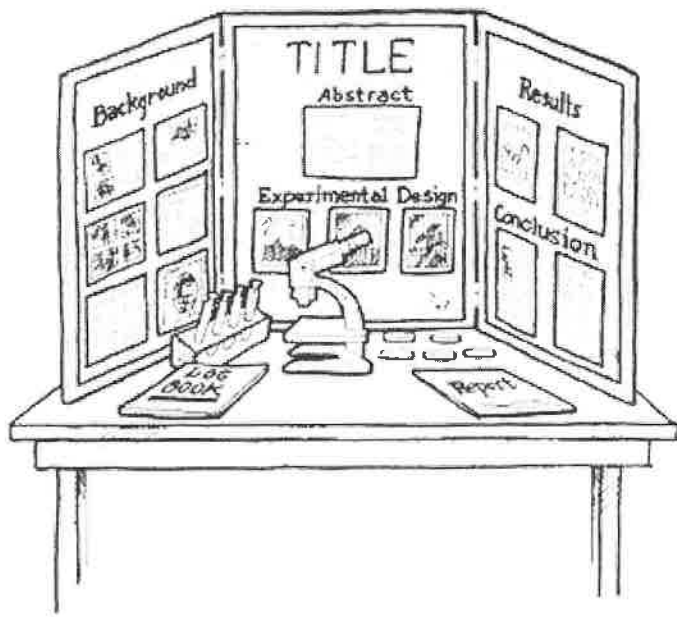
Science Fair at Will Rogers



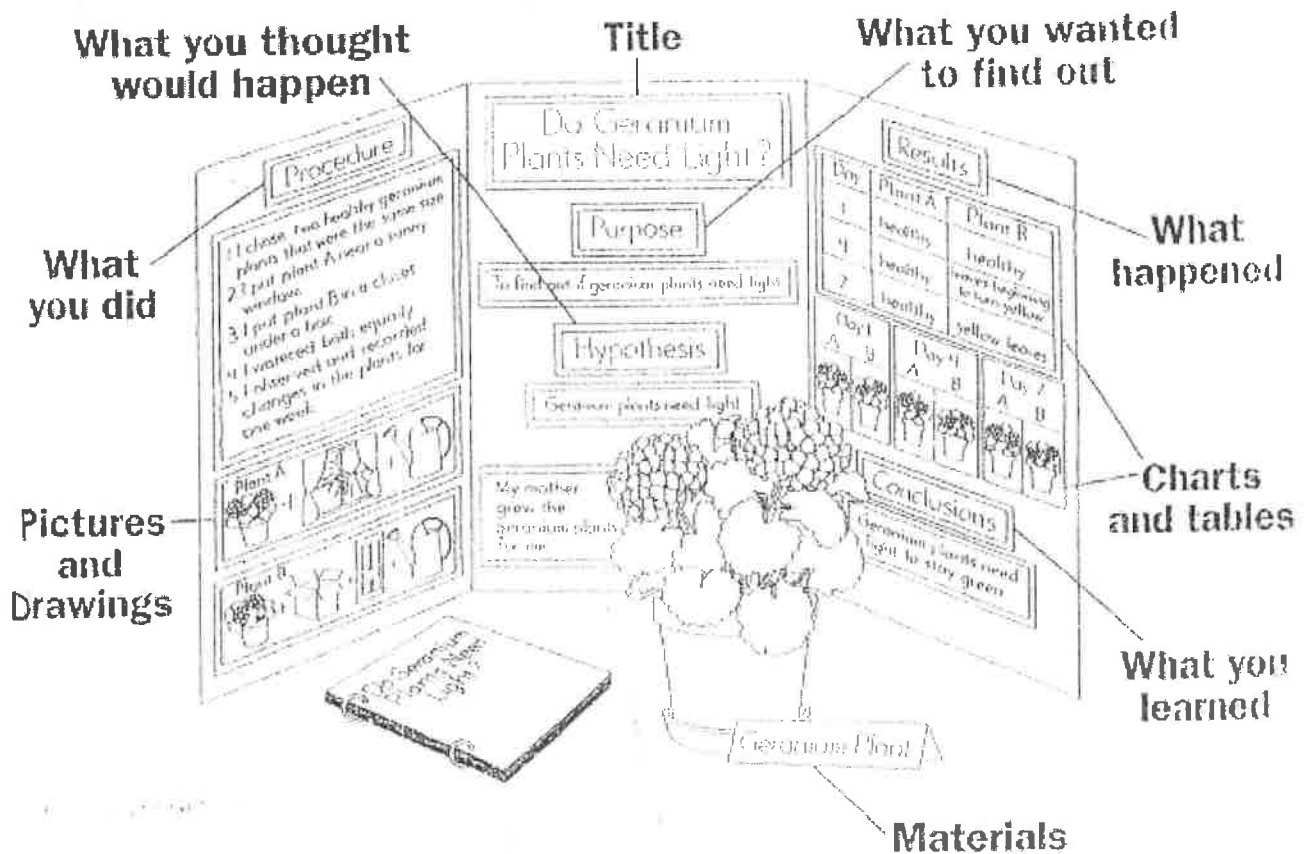
Feria de Ciencias de Will Rogers



Display Board Examples / Ejemplos para su Cartulina



Science Fair Display Board Guide



THE SCIENTIFIC METHOD

PROBLEM

Make observations of the world around you. What do I wonder? What question do I want to answer?



Form a HYPOTHESIS

What do I think is going to happen? What is my educated guess about this scientific problem?



Design your EXPERIMENT

Test your hypothesis. What is my procedure? What steps are involved? What materials do I need?



RECORD DATA and RESULTS

What is happening? Write down your observations, take measurements and photos.



Draw CONCLUSIONS

What did you figure out? What happened, and WHY? What patterns appeared in the data?



COMMUNICATE

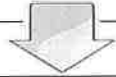
Explain your experiment and conclusions to others. Share your data by creating graphs, charts, and diagrams.



MÉTODO SCIENTÍFICO

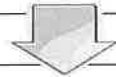
PROBLEMA

Haz observaciones del mundo que te rodea. ¿Qué me pregunto? ¿Qué pregunta quiero contestar?



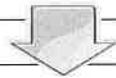
FORMA TU HIPÓTESIS

¿Qué creo que va a pasar? ¿Cuál es mi predicción sobre este problema científico?



Diseña tu EXPERIMENTO

Prueba tu hipótesis. ¿Cuál es mi procedimiento? ¿Qué pasos voy a tomar? ¿Qué materiales necesito?



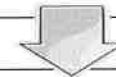
REGISTRA TUS DATOS y RESULTADOS

¿Qué está pasando? Escribe tus observaciones, toma medidas y fotos.



SACA TUS CONCLUSIONES

¿Qué encontraste? ¿Qué pasó, y por qué? ¿Qué patrones aparecieron en tus datos?

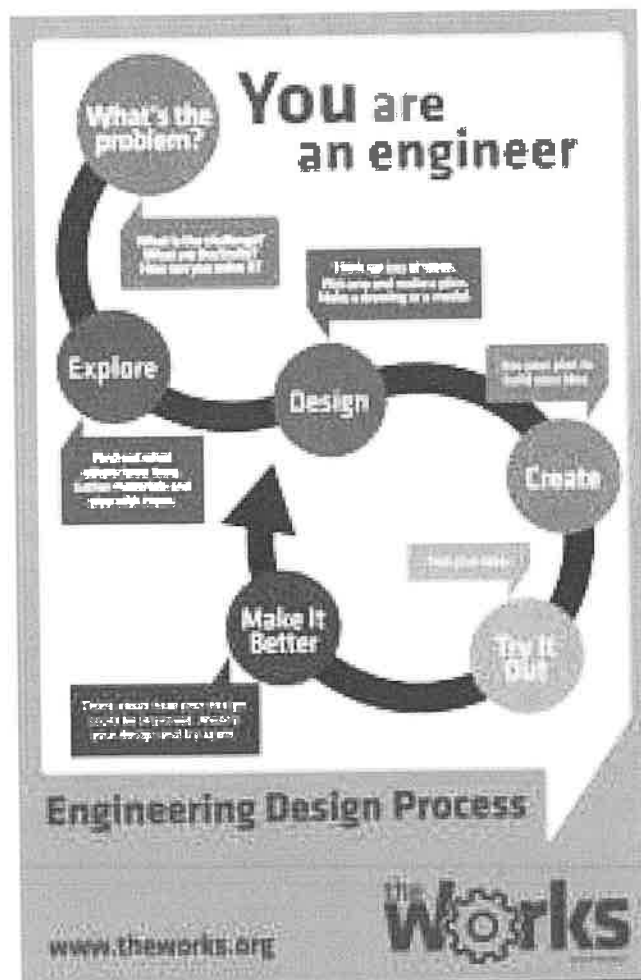
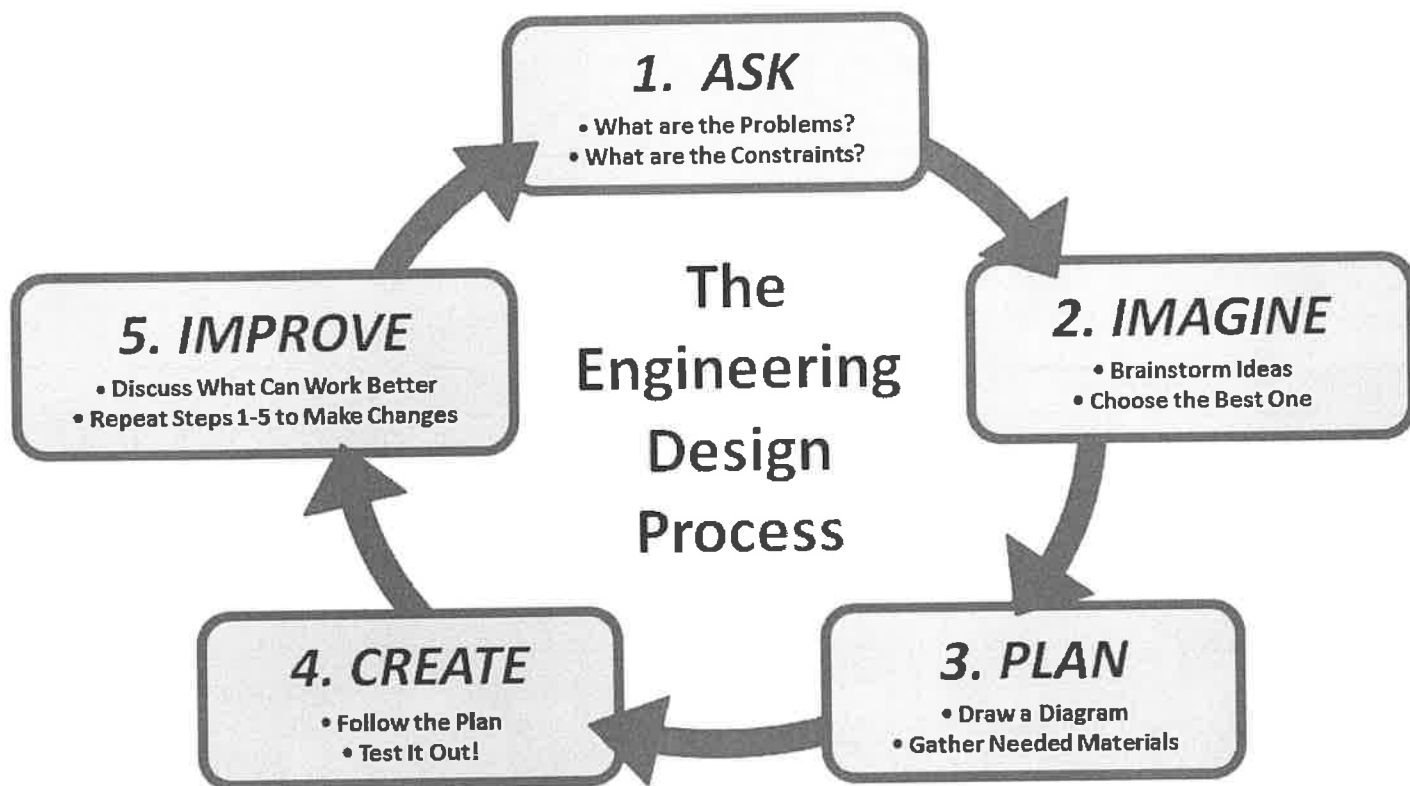


COMUNICA TUS CONCLUSIONES

Explica tu experimento y conclusiones a otros. Comparte tus datos creando gráficas, tablas, y diagramas.



Engineering Design Process: For building, designing, creating, and solving problems. Use the scientific method and the engineering design process together to carry out and communicate the results of your engineering project.



Research for K-5 Students

Step 1
Task Definition
What do I need to do?
What information do I need?

Step 2
Information-Seeking Strategies
What information sources can I use?
Which information sources are the best?

Step 3
Location and Access
Where can I find each source?
How can I find information in each source?

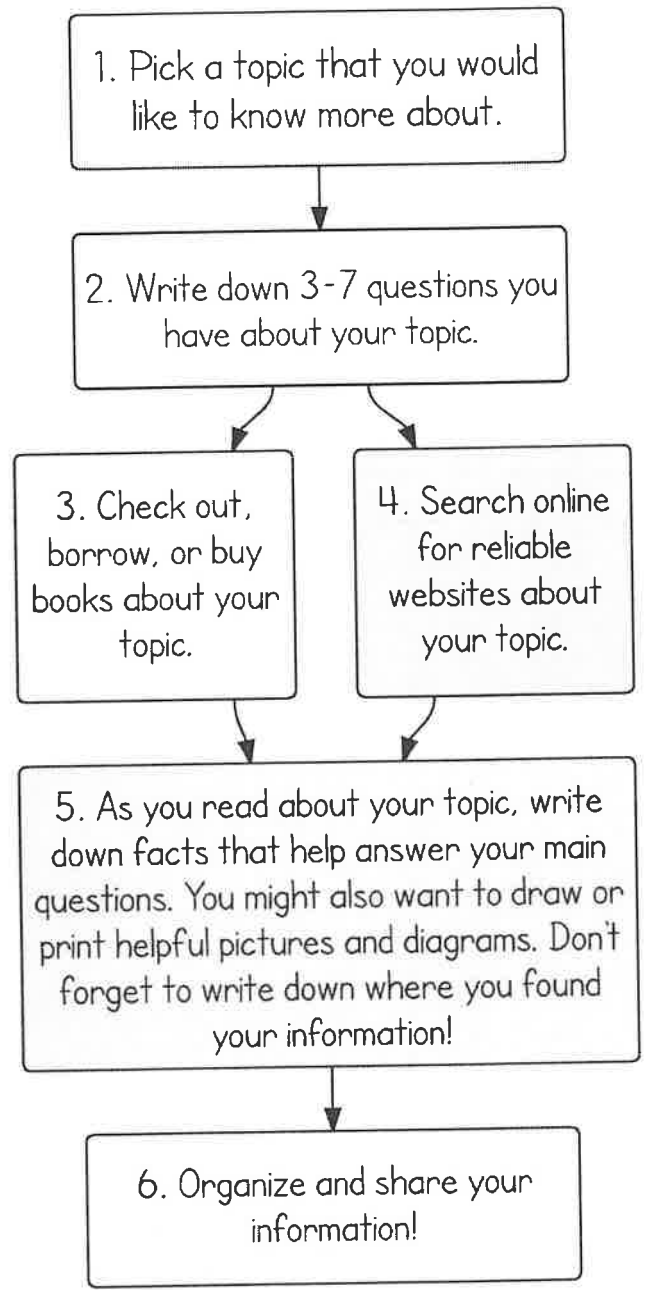
Step 4
Use of Information
What information in each source is useful?
How should I record my notes?

Step 5
Synthesis
How should I organize the information to meet the requirements of my task?

Step 6
Evaluation
Is my project complete?
Did I meet each requirement?

The BIG 6™
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How to do Research!



The Kentucky Virtual Library presents: **HOW TO DO RESEARCH**

1. PLAN
START HERE
DEFINE SUBJECT
BRAIN STORM
WHAT DO YOU KNOW?
KEY WORDS & PHRASES
SIMILAR IDEAS
QUEST STRATEGY
GATHER TOOLS

2. SEARCH FOR INFORMATION
LIBRARY CATALOG
KENTUCKY VIRTUAL LIBRARY
ENCYCLOPEDIA
CONTENTS & INDEX
DICTIONARIES
MAGAZINES

3. TAKE NOTES
PENCIL METHOD
PHOTO COPIES
NOTE CARDS
YEAR DIAGRAM
BIBLIOGRAPHY
SLIVER METHOD

4. USE THE INFORMATION
SCAN FIRST
FIVE FINGER TEST
TRUE OR BOGUS?
COMPARE & CONTRAST
ORGANIZE INFORMATION
YOUR OWN WORDS
FOOTNOTES
YOUR CONCLUSION

5. REPORT
SHARE YOUR INFORMATION

6. EVALUATE
WELL DONE!

GLOSSARY
a list of useful words

RETURN TO ENTRY PORTAL

WHAT IF YOU CAN'T FIND ANYTHING?

ENGINEERING CATEGORY RUBRIC 2015

Scoring:

Very Poor
Average
Outstanding

←-----→

	1 - 3 points	4 - 7 points	8 - 10 points
Engineering Design Process	Question/Problem is missing, not clear, or unanswerable Design Plan is missing, impractical, vague, or incomplete Creation/Experiment is poorly crafted and does not suit the intended purpose or solve the problem, no results reported. Possible Improvements are missing or irrelevant	Question/Problem is somewhat clear, answerable Design Plan is practical and includes details, but may have some flaws Creation/Experiment is crafted relatively well, suits its intended purpose, and is somewhat able to solve the problem. Results are reported. Possible Improvements are explained	Question/Problem is specific, very clear, and answerable Design Plan is practical, creative, and includes many specific details Creation / Experiment is crafted very well, suits its intended purpose, and solves the problem. Results are clearly reported. Possible Improvements are explained in detail.
	1 or 2 points	3 points	4 or 5 points
Display Board	Very messy, titles and words are hard to read , very disorganized , no attention to detail, does not communicate project well	Somewhat neat , titles are words are mostly easy to read and see , somewhat organized , some good visuals , minor attention to detail , satisfactorily communicates project	Very neat , titles and words are easy to see and read , the poster is very organized , outstanding visuals , significant attention to detail , communicates project very well
	1 or 2 points	3 points	4 or 5 points
Creativity, Effort, & Originality	Project shows a low amount of creativity and effort	Project shows a medium amount of creativity and effort	Project shows a very high amount of creativity and effort
	1 or 2 points	3 points	4 or 5 points
Presentation	Student is mostly unable to explain project or answer questions from the judges.	Student is mostly able to explain project or answer questions from the judges, perhaps with some prompting.	Student is able to fully explain project in detail , and thoroughly answer questions from judges.

Total Number of Points Possible = 25 points.

Half scores are permitted (ex: 2.5)

Each project will be scored by 2 separate judges. If you are the last person to judge, please add up the total of both scores.

In the event of a tie, the project will be scored by an additional judge.

EXPERIMENT CATEGORY RUBRIC 2015

Scoring:

Very Poor
Average
Outstanding

←-----→

	1 - 3 points	4 - 7 points	8 - 10 points
Scientific Process	<p>Question/Problem is not clear or unanswerable</p> <p>Hypothesis not present or does not address question</p> <p>Procedure does not test hypothesis, is not clear or detailed, and makes very little sense</p> <p>Data is not clear, appears inaccurate, with little to no use of photos, charts, and/or graphs to display data</p> <p>Conclusions are not supported by the data</p>	<p>Question/Problem is somewhat clear, answerable</p> <p>Hypothesis is conceivable and somewhat addresses the question</p> <p>Procedure tests the hypothesis, is somewhat detailed, but might not be very clear or easy to repeat</p> <p>Data is somewhat clear, appears mostly accurate, with average use of photos, charts, and/or graphs to display data</p> <p>Conclusions are mostly supported by the data</p>	<p>Question/Problem is specific, very clear, and answerable</p> <p>Hypothesis is conceivable and addresses the question very clearly</p> <p>Procedure legitimately tests the hypothesis, is detailed, clear, and easy to understand and repeat</p> <p>Data is very clear, appears accurate, with excellent use of photos, charts, and/or graphs to display data</p> <p>Conclusions are thorough and clearly supported by the data</p>
	1 or 2 points	3 points	4 or 5 points
Display Board	<p>Very messy, titles and words are hard to read, very disorganized, no attention to detail, does not communicate project well</p>	<p>Somewhat neat, titles are words are mostly easy to read and see, somewhat organized, some good visuals, minor attention to detail, satisfactorily communicates project</p>	<p>Very neat, titles and words are easy to see and read, the poster is very organized, outstanding visuals, significant attention to detail, communicates project very well</p>
	1 or 2 points	3 points	4 or 5 points
Creativity, Effort, & Originality	<p>Project shows a low amount of creativity and effort</p>	<p>Project shows a medium amount of creativity and effort</p>	<p>Project shows a very high amount of creativity and effort</p>
	1 or 2 points	3 points	4 or 5 points
Presentation	<p>Student is mostly unable to explain project or answer questions from the judges.</p>	<p>Student is mostly able to explain project or answer questions from the judges, perhaps with some prompting.</p>	<p>Student is able to fully explain project in detail, and thoroughly answer questions from judges.</p>

Total Number of Points Possible = 25 points.

Half scores are permitted (ex: 2.5)

Each project will be scored by 2 separate judges. If you are the last person to judge, please add up the total of both scores.

In the event of a tie, the project will be scored by an additional judge.

RESEARCH CATEGORY RUBRIC 2015

Scoring:



	1 - 3 points	4 - 7 points	8 - 10 points
Research Process	<p>Research Topic is not clear or is vague. Only includes 1-3 Research Questions with Answers that are vague, incomplete, or incorrect. Research Questions and Answers are unclear, missing, or irrelevant to topic. Citations are not included.</p>	<p>Research Topic is clear. Includes 3-5 Research Questions with Answers that are complete and correct, with adequate supporting details. Research Questions and Answers are clear and relevant to the topic. Citations are included.</p>	<p>Research Topic is specific and clear. Includes 5-7 Research Questions with Answers that are complete and correct, with many supporting details. Research Questions and Answers are very clear and relevant to the topic. Citations are included.</p>
	1 or 2 points	3 points	4 or 5 points
Display Board	<p>Very messy, titles and words are hard to read, very disorganized, no attention to detail, does not communicate project well</p>	<p>Somewhat neat, titles and words are mostly easy to read and see, somewhat organized, some good visuals, minor attention to detail, satisfactorily communicates project</p>	<p>Very neat, titles and words are easy to see and read, the poster is very organized, outstanding visuals, significant attention to detail, communicates project very well</p>
	1 or 2 points	3 points	4 or 5 points
Creativity, Effort, & Originality	<p>Project shows a low amount of creativity and effort</p>	<p>Project shows a medium amount of creativity and effort</p>	<p>Project shows a very high amount of creativity and effort</p>
	1 or 2 points	3 points	4 or 5 points
Presentation	<p>Student is mostly unable to explain project or answer questions from the judges.</p>	<p>Student is mostly able to explain project or answer questions from the judges, perhaps with some prompting.</p>	<p>Student is able to fully explain project in detail, and thoroughly answer questions from judges.</p>

Total Number of Points Possible = 25 points.

Half scores are permitted (ex: 2.5)

Each project will be scored by 2 separate judges. If you are the last person to judge, please add up the total of both scores.

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