Science Fair Kickoff Assembly

Monday, January 8, 2018

What is a Science Fair?

Let’s Get Started!

Step 1

Observe and **question** the world around you to determine a topic you want to investigate.


What do you observe?
ICE CREAM
What questions do you have?

Ask a Testable Question

The Science Fair

Experiments = Testable Questions

- Questions that can be answered by collecting data or making observations.
- Often start with *how, what,* or *which.*
- Testable questions are about changing <u>one thing</u> to see the effect on <u>another thing.</u>

<u>Testable Questions</u>

- How does fertilizer affect the growth of bean plants?
- Which type of food will meal worms choose most often?

<u>Not Testable Questions</u>

- What is an electromagnet?
- Why do volcanoes erupt?

No Demonstrations

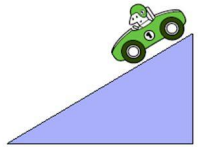
Example of testable question

Will adding coffee grounds to the soil around my rose bush make it grow taller?

This is a good testable question because it can be answered by an experiment with results based on **factual** data (measurements of the rose's height).

Sample Testable Question

How does *the height of the ramp* affect *the speed of a car* going down the ramp?



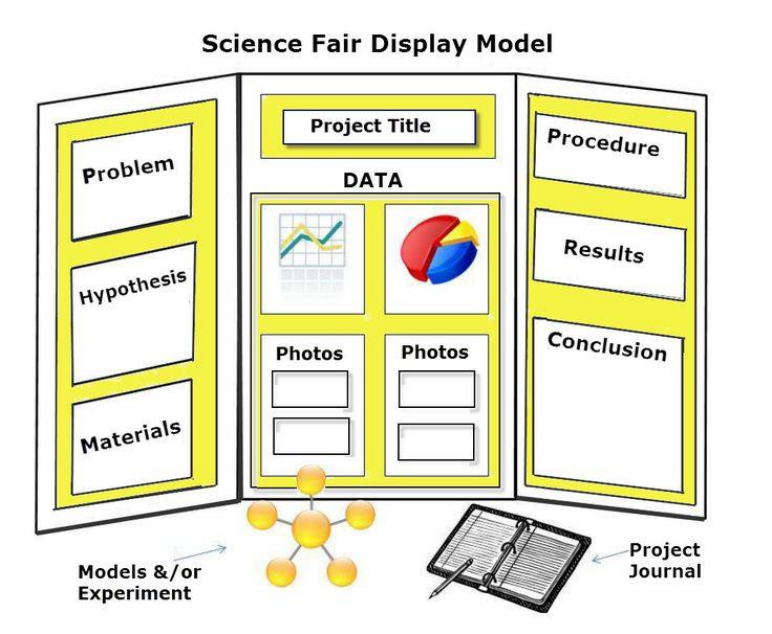
Examples of Testable Questions

A. What amount of water is best to grow tomatoes?

Setup: 3 pots of tomato plant, each pot is watered a different amount

Science Fair Examples

Guidelines



Create a Display Board showcasing your Science Fair project.

All Science Fair projects must include the following:

- Title
- Purpose / Problem (Testable Question)
- Hypothesis (Prediction)
- Materials
- Procedure (Steps)
- Results (Data, Charts, Graphs)
- Conclusion

Timeline

Month	To Do
January	• Choose Topic • Develop Testable Question • Create Purpose
February	• Make Hypothesis • Identify Materials Needed • Develop Procedure • Conduct Experiment (Start)
March	• Conduct Experiment (Finish) • Collect Data • Analyze Results • Create Conclusion • Create Display Board
April	• Judging Projects (Week of April 2nd) • Science Fair Nigt (April 4th)

Resources

Makerspace
Open Lab Hours

Wednesdays after school from 3:30 - 4:00.

Fridays before school from 8:30 - 9:00.

We are looking for at least 25 students to participate in the event. If enough interest is shown, **Informational Science Fair packets** will be sent home containing more specific project ideas, guidelines, timelines, and rubrics for judging to students who have committed.

CIP School Website; “For Families” Tab; “Science Fair” Tab

- After all projects have been judged, during the Science Fair Night the following winners will be announced:
  - One winner per grade level (3-5).
  - One overall **schoolwide winner**!

Interested?

- Talk about the Science Fair with your families. Make sure that you are able and committed to working on this project at home.
- Complete the “Science Fair Interest Survey” given to you by your teacher.
- Start observing the world around you, choose an interesting topic, and think about a testable question you want to investigate or problem you wish to solve.