Lesson 3

DEFINE

Science or Engineering?

For the Science & Engineering Fair you can conduct a *Science* investigation or an *Engineering* investigation. The process is slightly different for each:

Science Process:

- Define the Problem
- Find a Purpose
- Write a Hypothesis
- Develop a Procedure
- Analyze Results
- Draw a Conclusion

Engineering Process:

- Define the Problem
- Find a Goal
- Develop design criteria
- Build and test prototype
- Analyze Results
- Draw a Conclusion

You may already know if you have a Science Investigation or an Engineering Investigation. Science Investigations create new knowledge about how things live, operate, or exist. Engineering projects generally involve construction or design of an idea or new product.

A. Do I have a Science Investigation Topic?

Answer these questions if you think you have a Science topic

- What MATERIALS are readily available for conducting experiments on _____ ? (Your topic)
- How does _____ ACT?
- How can you CHANGE the set of materials to affect the action?
- How can you MEASURE or describe the response of _____ to the change?

B. Do I have an Engineering Investigation Topic?

Answer each of these if you think you have an Engineering topic:

- What is the need you are meeting or the problem you want to solve using _____? (Your topic)
- What MATERIALS / EQUIPMENT are readily available for the design and testing of _____ ?
- What construction or testing standards will you set?
- How can you MEASURE the success of the design of _____?

Add this information to your log book.