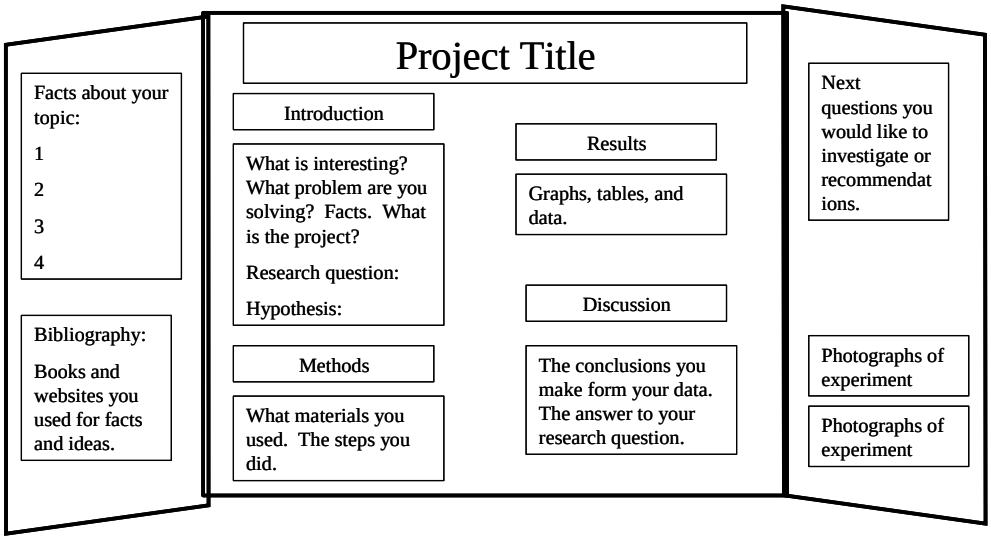
This handout has ideas for creating a science project poster display. The picture below is just an example. You can make it special and change the details to match your own project. Add your own creativity! The most important elements are:

- Introduction and Research Question / Hypothesis
- Methods and Materials
- Results
- Discussion



Add your own special touches:

- Take pictures of your experiment, photocopy pictures or print pictures, draw pictures, collect samples to display. These can be added anywhere on your posterboard.
- Mount each whitepaper on a piece of colored paper before gluing to the posterboard (like mounting photographs)
- Make the title fun. Use shapes besides squares. Ask questions such as 'Have you ever wondered if…"

On the next pages are details and ideas for the 4 parts of a scientific report or posterboard.

Introduction Paragraph:

What is your project about? Why did you choose this project? What is interesting about it? What background information might someone else need to know to understand what you did? Often, background information comes from library or Internet research that you did in order to choose or develop your project. This is probably the first section that you will write. You might include pictures, a story about how you became interested in the project, and/or some fun facts. If you're in 3rd – 5th grade, you should list the references you consulted to find out each piece of information such as the specific website or the particular book. At the end of your introduction, you should state the specific question you are trying to answer.

- First sentence: Grab your reader's attention with a general statement about your topic.

- 2nd – 5th sentences: Facts about your topic. Use your library research, background knowledge.

- Last sentence: State your research project,

You should also include your research question and a hypothesis about what you think will happen. Older students should be able to state why they think their hypothesis is true.

Example by a 5th grader from Seattle: If you look around at the ground the next time you are at a park, you may notice that there are lots of different colors of soil. Some are brown and some are tan and some are black. Some soils have a lot of rock mixed in and others have lots of sand. Different kids of plants seem to prefer different soil types. Grasses seem to grown best on very sandy soil and mosses grow in moist soil. In this study, I will examine whether different types of soils hold more water. This could affect the type of plants that grow on the soil.

Research Question: Is there a difference between the amounts of water that sand, garden soil, or peat moss can hold?

My hypothesis is that there will be a difference because this will explain plant patterns I have observed.

Methods and Materials:
What did you do? Explain the details carefully enough that someone else could repeat your project. Describe what materials or equipment were necessary. This section can read like a recipe. You mind find it easiest to number the steps. There are lots of fun things to add to the methods section. If your project is specific to a particular area, explain where you did the project and include a map. Include samples of any supplies or equipment you used. You can also include pictures of you working on the project.

Older grades should also be able to state what things they will keep the same (control for, hold constant). For example, if they are comparing paper towel strength across several brands of paper towels, they might want to make sure that all paper towels are the same size, all are dry, etc.

Results:
This section explains exactly what you found out. (Save any ideas about why you found your results or what they mean for the discussion). Results nearly always include some data, which can be displayed as a table or a graph, or both. You can make the graph on the computer or by hand. Think carefully about your graph(s) so that it displays the information correctly. Point out any data that don't fit the general pattern. Older students can calculate averages and talk about how variable their results were.

Discussion:
Here you interpret your data. What does it mean for your research question or hypothesis? What recommendations can you make? What other questions would you like to study? What do you wish you had done differently? How do your data compare to data you have found in a book or to what you expected? Often you will want to go back to the library or Internet to figure out why your project turned out as it did. Report anything you discover that could help others understand your project.

Interactive Activity:
You might want to other people do something as part of your project. Add the instructions at the end of your display. For example, if your

project is about how heart rates change after jumping, you might ask people to jump, measure their heart rate, and record it on a graph. Or you might want people to touch or try part of your exhibit. Give specific instructions so that people know what they should and should not touch.